This month's cover ...
shows pipeline construction in Russia, a key element of the country's future oil export plans (see article on p11).

OPEC bulletin

Vol XXXIV, No 5 ISSN 0474-6279 September/October 2003

OPEC cuts production by 900,000 b/d (p4)

Russia to boost oil exports (p11)

UN lifts sanctions on Libya (p60)

Fund supports Children's Town in Zambia (p68)

2 *Editorial Information*

3 *Commentary*
A shared responsibility

4 *Conference Notes*
OPEC cuts production by 900,000 b/d at 127th Meeting

8 *Forum*
Short- and long-term oil price trends in the aftermath of the conflict in Iraq

Post-Soviet oil exports: are the Russians really coming? *(p11)*

24 *Newsline*
High-level Saudi delegation visits Moscow to sign energy pact with Russian Federation
Oil and gas news from OPEC *(p26)*

36 *Market Review*
Covering July/August

60 *Member Country Focus*
Sanctions are lifted on Libya as compensation deal is reached over Lockerbie bombing
Development and economic news from OPEC *(p61)*

67 *Secretariat Notes*

68 *OPEC Fund News*

74 *Noticeboard*

Publishers

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

Membership and aims

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

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

Contributions

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

Secretariat officials

Secretary General
Dr Alvaro Silva-Calderón

Director, Research Division
Dr Adnan Shihab-Eldin

Head, Data Services Department
Dr Muhammad A Al Tayyeb

Head, Administration & Human Resources Department
Senussi J Senussi

Head, Energy Studies Department
Mohamed Hamel

Head, PR & Information Department
Dr Omar Farouk Ibrahim

Head, Petroleum Market Analysis Department
Mohammad Alipour-Jeddi

Legal Officer
Dolores Dobarro

Head, Office of the Secretary General
Karin Chacin

Editorial policy

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

Editorial staff

Editor-in-Chief
Dr Omar Farouk Ibrahim
Editor
Graham Patterson
Deputy Editor
Lizette Kilian
Philippa Webb-Muegge (maternity leave)
Production
Diana Lavnick
Design
Elfi Plakolm

Contributors to this issue

Professor Eugene Khartukov, Dr Ellen Starostina, Audrey Haylins, Umar Aminu

Web site: www.opec.org

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

Indexed and abstracted in PAIS International

Printed in Austria by Ueberreuter Print and Digimedia

Advertisements

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

A shared responsibility

The oil market is likely to face the challenge of oversupply in 2004 — making OPEC/non-OPEC co-operation more vital than ever

In its constant quest for oil market stability, OPEC has always emphasized the vital importance of co-operation between all parties involved in the oil industry, especially between the Organization and non-OPEC oil-producing nations. Such co-operation has proved essential both in recovering from damaging price slumps (such as that which occurred in 1998 and early 1999), and in preventing them from happening in the first place, as was the case in the months following September 11, 2001, when a strong downward price trend was halted and then reversed by joint OPEC/non-OPEC efforts to restore stability to the market.

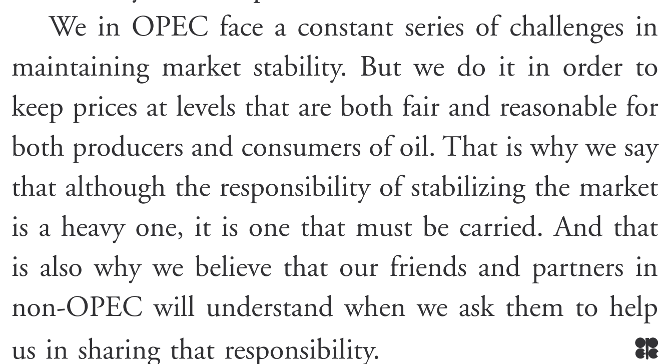
Now, as we enter the final months of the year 2003 and look ahead to 2004, OPEC — and indeed the oil market as a whole — finds itself facing a new challenge. The various supply problems that affected the market earlier this year are behind us. Now, factors such as Iraqi oil coming back on stream, the continuing strong upward trend in non-OPEC output, and relatively moderate demand growth levels, all mean that if vigilance is not exercised, the market could soon be over-supplied, putting downward pressure on prices. A major concern in 2004 could be low oil prices, not high ones.

What this means is that, in order to prevent a repeat of the price slump of 1998–99, co-operation between OPEC and non-OPEC is likely to assume even greater importance. Although a clear downward price trend has not yet emerged, all the signs are that the market is going to be more than well-supplied with oil in the coming months, and it would be no surprise if this did in fact happen. Co-operation between all players in the international oil industry will therefore very probably be a key element in preventing a price collapse next year.

One of these key industry players is, of course, Russia. Like the OPEC Member Countries, Russia is a major oil producer and exporter which is heavily reliant on oil revenues and therefore has an overriding interest in market stability. In this issue of the *OPEC Bulletin*, noted Russian academics Professor Eugene Khartukov and Dr Ellen Starostina take a look at present and future Russian oil production and exports, and examine the prospects for co-operation with OPEC, while the recent strengthening of ties between Russia and Saudi Arabia is also highlighted.

In a related move demonstrating the increasing links between Russia and OPEC, the Organization's Secretary General, Dr Alvaro Silva-Calderón, is scheduled to visit Moscow in early November for discussions on stabilizing the market with senior Russian officials. This is, of course, just one in a series of meetings that have been held in recent years with the aim of boosting understanding between the two sides, and we very much hope this trend will continue.

We in OPEC face a constant series of challenges in maintaining market stability. But we do it in order to keep prices at levels that are both fair and reasonable for both producers and consumers of oil. That is why we say that although the responsibility of stabilizing the market is a heavy one, it is one that must be carried. And that is also why we believe that our friends and partners in non-OPEC will understand when we ask them to help us in sharing that responsibility.



OPEC decides to reduce production by 900,000 b/d at 127th Meeting of the Conference in Vienna

The President of the Conference and Qatari Second Deputy Prime Minister and Energy & Industry Minister, HE Abdullah bin Hamad Al Attiyah (centre), addresses the Conference, flanked by OPEC Secretary General, HE Dr Alvaro Silva-Calderón (right), and the Chairman of the Board of Governors for 2003, HE Saif Bin Ahmed Al-Ghafly of the United Arab Emirates (left).

OPEC decided to cut production by 900,000 barrels/day with effect from November 1, 2003 when it met in Vienna, Austria, on September 24.

The closing communiqué from the 127th Meeting of the Conference noted that "whilst the global economy appears to be improving, only normal, seasonal growth in demand is expected for the fourth quarter, and the market continues to be well-supplied.

"In view of the continued rise in non-OPEC supplies and the ongoing recovery in Iraqi production, stocks have been replenished and are rapidly reaching normal seasonal levels, with the supply/demand balance for the fourth quarter 2003 and first quarter 2004 indicating a contra-seasonal stock build-up. This could have a destabilizing effect on the market which requires a reduction of supplies from all producers to ensure stability.

"The Conference noted its decisions in January and April 2003 to adjust the production ceiling prior to the supply disruption from Iraq. Noting, also, the gradual return of this Founding Member to the market, and in order to ensure balance to the market, the Conference decided to return to the ceiling of 24.5 million b/d and the agreed production levels, with effect from November 1, 2003."

At the closing press conference, the OPEC Conference President, Qatari Second Deputy Prime Minister and Minister of Energy & Industry, HE Abdullah bin

Iran's Minister of Petroleum, HE Bijan Namdar Zangeneh (left) in conversation with Venezuela's Minister of Energy and Mines, HE Rafael Ramirez.

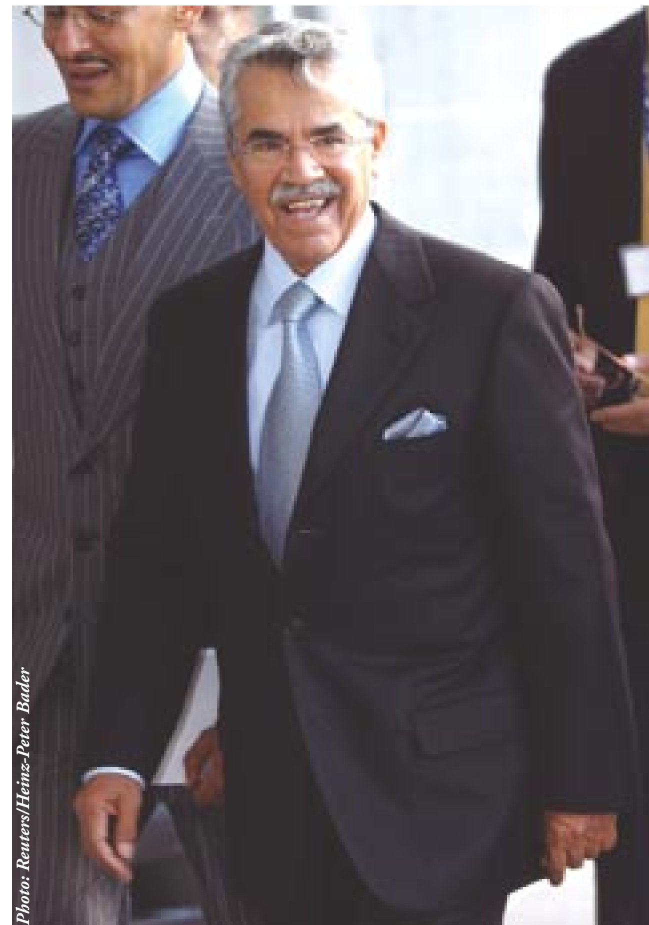


Photo: Reuters/Heinz-Peter Bader

Saudi Arabia's Minister of Petroleum and Mineral Resources, HE Ali I Naimi, arrives for the Meeting.

Hamad Al Attiyah, was asked why the Organization had decided to cut supply by 900,000 b/d. Al Attiyah said that the higher production ceiling of 25.4m b/d had been set because OPEC had identified a need for more oil on the market, due to the supply disruptions in Iraq, as well as interruptions from Nigeria and Venezuela. Now that these disruptions were over, there was no longer any need for the extra 900,000 b/d and hence OPEC was reverting to the earlier ceiling of 24.5m b/d.

OPEC production quotas as of November 1, 2003 *(1,000 b/d)*

	Previous quota	new quota
Algeria	811	782
Indonesia	1,317	1,270
IR Iran	3,729	3,597
Kuwait	2,038	1,966
Libya	1,360	1,312
Nigeria	2,092	2,018
Qatar	658	635
Saudi Arabia	8,256	7,963
UAE	2,217	2,138
Venezuela	2,923	2,819
Total	**25,400**	**24,500**

Asked whether OPEC would reconsider its decision to cut output if Iraqi oil did not return to the market as rapidly as anticipated, Al Attiyah said that OPEC would have a chance to consider this on December 4, when the Organization had scheduled an Extraordinary Meeting. However, he gave no timeframe for a possible return of Iraq to OPEC's quota structure.

On the question of co-operation between Russia and OPEC, Al Attiyah not-

Kuwait's Minister of Energy, HE Sheikh Ahmad Fahad Al-Ahmad Al-Sabah (left), greets Iraq's Minister of Oil, HE Dr Ibrahim Bahr Alolom.

Libya's Secretary of the People's Committee of the NOC, HE Dr Abdulhafid Mahmoud Zlitni (right), talks to Indonesia's Minister of Energy and Mineral Resources, HE Dr Purnomo Yusgiantoro.

Algeria's Minister of Energy & Mines, HE Dr Chakib Khelil, talks to the media.

ed that he had earlier that day received a phone call from Russian Energy Minister Igor Yusufov, who confirmed that Russia would support OPEC's efforts to stabilize the market. Russia was one of several non-OPEC nations which attended the Conference, the others being Angola, Egypt, Mexico, Oman and Syria.

Al Attiyah noted that a number of non-OPEC nations had done "a great job" in assisting OPEC to stabilize the market in recent years, and that if it should become necessary to ask them to co-operate again, he was confident that they would do so. This was a theme echoed by the final communiqué, which noted that "the Conference expressed its expectation that non-OPEC oil producers will take concrete measures to restrain their production increases, thereby actively sharing, with the Organization, the burden of maintaining price and market stability in 2004 and thereafter."

Asked about the selection of a new Secretary General for the Organization, Al Attiyah noted that there was at present

The UAE's Minister of Petroleum and Mineral Resources, HE Obaid bin Saif Al-Nasseri, answers journalists' questions.

no unanimity among the Member Countries on this issue, and it would be discussed at the next Meeting in December.

The Conference also elected Indonesian Minister of Energy & Mineral Resources, Dr Purnomo Yusgiantoro, as President of the Conference, and Kuwaiti Minister of Energy, HE Sheikh Ahmad Fahad Al-Ahmad Al-Sabah, as Alternate President, for one year with effect from January 1, 2004.

Venezuela's OPEC Governor, Elie Habalian Dumat, was elected Chairman of the Board of Governors for the year 2004, while Algeria's Governor, Mohamed Meziane, was elected Alternate Chairman for the same period.

Nigeria's Presidential Adviser on Petroleum & Energy, HE Dr Rilwanu Lukman, faces the press.

Short- and long-term oil price trends in the aftermath of the conflict in Iraq

OPEC's strong resource base means it is well-placed to continue supplying clean energy well into the twenty-first century, notes the Organization's Secretary General, Dr Alvaro Silva-Calderón, in this article.*

OPEC, and in particular the Middle East, has had a long and fruitful relationship in the energy sector with Japan, which is the world's second-largest importer of crude oil and consumer of refined products and the third-largest importer of natural gas.

Petroleum accounts for around three-fifths of Japan's primary energy, with crude oil alone having a market share of almost 50 per cent. More than 85 per cent of Japan's crude comes from OPEC's Member Countries, as well as a significant amount of its imported refined products. Around one-sixth of OPEC's crude oil exports are destined for Japan. OPEC countries are also major suppliers of liquefied natural gas there.

Our Middle East Members are responsible for nearly all the OPEC petroleum that goes to Japan, although significant quantities also come from Indonesia, which, of course, is physically closer than the other OPEC countries.

The OPEC-Japan relationship is an extremely important one. For many years, there has been close contact and fruitful dialogue on energy issues between the OPEC Secretariat and the Japanese Embassy in Vienna, headed by the Ambassador himself. Indeed, it was with the generous assistance of staff from the Embassy that, last September, we held an OPEC Conference in Japan's second-biggest city, Osaka, with the consent of the Government of Japan, the Prefecture of Osaka and the City of Osaka.

This was timed to occur in the run-up to the Eighth International Energy Forum, which was also held in that city and whose central premise is the enhancement of dialogue between energy producers and consumers. A meeting of the Gas Exporting Countries Forum, in which OPEC Members are well-represented, was similarly arranged for that week in Osaka. As well as the direct benefit our Organization derived from the meetings themselves, we took the opportunity to build upon the excellent relations that already exist between OPEC and Japan.

At an official dinner held during that week, Japan's Minister for Foreign Affairs, Yoriko Kawaguchi, commented on the relationship, saying that Japan and OPEC countries were faced with common challenges of how to achieve sustainable development using limited energy resources and that there was a need to have closer contact and enhance dialogue in order to effectively address these challenges.

It is clear from all of this that Japan, which produces more than four-fifths of its refined products domestically, relies so heavily upon imported crude oil that even a small change in market conditions can have a significant effect on its domestic economy — an economy which has been experiencing many difficulties over the past decade.

> *"The oil market thrives on stability, transparency and equity and this can best be achieved in an atmosphere of dialogue and co-operation."*

Therefore, Japan, more than almost any other country on the planet, requires order and consistency in its crude oil supply, with stable, reasonable prices, as it seeks to end this protracted economic downturn and enter a new era of sustained growth and prosperity.

This fits in very much with OPEC's way of thinking. We have been around, as an Organization, for a long time — more than four decades — and have first-hand experience of the way the oil market operates in conditions that range from sus-

* *Based on **Dr Silva-Calderón's** address to the 28th annual conference of the Japan Co-operation Centre for the Middle East, Vienna, Austria, August 21, 2003.*

AP Photo/Ronald Zak

tained periods of calm to sudden, sharp volatile episodes.

We concluded a long time ago that the market thrives on stability, consistency, transparency and equity and that this can best be achieved in an atmosphere of dialogue and co-operation, involving all the major parties in the market. This was one of the reasons why we were so keen to go to Osaka last year, because the constant theme throughout the meetings there was the need to exchange views and share understanding of topical energy issues, so that we could be better equipped to handle new situations as they arose, to the benefit of the world community at large.

These meetings took place shortly after the World Summit on Sustainable Development in Johannesburg, which had heightened global awareness of the important role the provision of modern energy services can play in the early twenty-first century, particularly in helping to ease the dire plight of the impoverished nations. Thus, when we examine the short- and long-term oil price trends in the aftermath of the events in Iraq, we do so in a manner that views oil issues and energy issues in a broader human context.

The short-term oil price trends are with us now. Since the end of the war in Iraq, there has been a steady strengthening of crude oil prices, from around the middle of the range of OPEC's price band of $22–28/barrel for our Reference Basket to the top end of it and above. This has been partly due to uncertainty about the state of the Iraqi oil industry and the rate at which its oil will flow back onto world markets. But there have also been other factors at play, such as continuing disruptions in some other oil-producing countries, the perception of low stocks worldwide and high natural gas prices in the USA. On top of all this are speculative pressures, which, as usual, have the effect of exaggerating impulses on the market.

At the OPEC Conference in Vienna in July, we decided to maintain the current production level of 25.4 million b/d for the OPEC-10 (ie, our Member Countries excluding Iraq). This was after examining the demand and supply prospects for the remainder of the year and noting that the market was stable and well-supplied with crude and that prices were within the OPEC band.

Monitoring market movements

However, the staff at our Secretariat are constantly monitoring market movements, in line with our commitment to achieving and maintaining order and stability. The price band was introduced in the year 2000, with this in mind. If prices settle outside the limits of the band for a prescribed period — 20 consecutive days above $28/b and ten consecutive days below $22/b — then we will take the appropriate measures to restore them to within the desired range. The mechanism, in other words, combines the need for flexibility with the need for a realistic target. Since its introduction, it has won wide acceptance among producers and consumers alike and, accordingly, has met with a high degree of success.

Because the price band mechanism has now become an established tool of OPEC policy, the clear implication is that it will influence longer-term oil price trends. However, we do not wish to sound com-

placent about this, since the dynamics of the oil market may require us to revise the range of the band or the way the mechanism operates some time in the future.

The degree to which developments in Iraq may affect the oil market in the years ahead is difficult to tell at the present time. We are as much in the dark about the pattern of events there as any other outside party. We hope, however, that there is an orderly transfer of power — real power — to the Iraqi people themselves in the near future, so that they can quickly become masters of their own destiny. Iraq has a proud OPEC heritage, which I am sure its people are eager to continue.

OPEC was formed in Baghdad in September 1960 and Iraq, as one of its five Founder Members, has played a major role in its subsequent struggles to become an established and respected intergovernmental Organization. As the country seeks to rebuild its oil industry and become a front-line player on the world energy stage once again, there is little doubt that, if left to its own devices, it will wish to do this from within the OPEC family.

“Energy markets are too important to be left to the free market alone.”

We hope that this happens sooner rather than later. This would be in the market’s overriding interest, to ensure that a stable pricing structure is in place if producers are to meet the big rise in oil demand that has been forecast for the opening decades of the twenty-first century. Our Members will have a big role to play in this. The reference case from the OPEC World Energy Model (OWEM) predicts that world oil demand will rise from 76m b/d in 2000 to 89m b/d in 2010 and 107m b/d in 2020.

It sees a marginal drop in oil’s share of the energy mix during this 20-year period, from 40.1 per cent in 2000 to 38.4 per cent. World energy demand will grow by an annual average of around two per cent up to 2020, with the rise in developing countries being at three-to-four times the rate of that of industrialised countries.

With non-OPEC oil production likely to reach a plateau, OPEC’s Member Countries will be expected to satisfy most of the projected new demand, due to these countries’ strong resource base of low-cost, abundant reserves. OWEM’s projections see OPEC producing 36m b/d of crude in 2010, which constitutes 40 per cent of global supply, rising to 52m b/d in 2020, a share of almost 49 per cent.

OPEC is also well-endowed with gas reserves, and these will serve to good effect as the use of gas almost doubles over the next 20 years, according to our projections. Gas’s share of the energy mix will rise from just over 23 per cent in 2000 to 28 per cent in 2020, overtaking that of solids, which will fall to 25 per cent. This is because gas has a more favourable environmental profile among the fossil fuels, and is a reliable and highly efficient source of power generation. It is now relatively low in cost to produce, although still expensive to transport to consumers. In all, about two-thirds of the world’s commercial energy is expected to come from petroleum in 2020.

With regard to the understandable calls for the development of renewable sources of energy, notably at last year’s World Summit on Sustainable Development, the fact remains that the technology for this is still in its infancy. As was recognised by the Summit, the setting-up of an infrastructure for renewable energy is still too expensive to have a fixed goal attributed to it, at the risk of real, workable solutions. Therefore, while the technology is being developed, all other available, suitable resources must be accessed, enhanced and utilised.

Petroleum is already well-placed to provide such energy. Advances in petroleum technology continue to make oil and gas cleaner fuels, and this is accompanied by improved infrastructure and transport, particularly for gas. The successful development of carbon dioxide sequestration technology will ensure that the use of fossil fuels is entirely compatible with sustainable growth and that they will continue to serve the needs of mankind for decades to come. OPEC can, therefore, make a major contribution to an evolving energy system, which is closely tied to the demands of sustainable development.

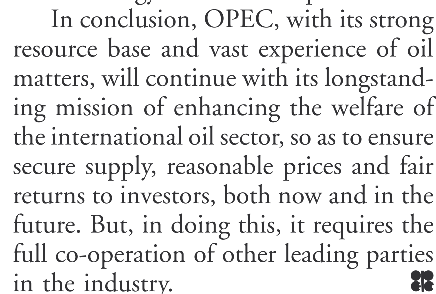
However, a vast amount of investment is required for this. This relates to not just the upstream sector, but also to the downstream sector and transportation, as well as to the development and application of technology.

Our projections estimate spending of nearly $100 billion by 2010 and $209bn by 2020 for our Member Countries alone, in order to sustain their existing production capacities, as well as cater for the projected large rise in demand. For the high-cost, non-OPEC producers, investment forecasts are much higher — at around $600bn by 2010 and over $860bn ten years later.

When looking more closely into investment, we find ourselves facing many areas of uncertainty, including changing regulations, fiscal regimes, strategic and political factors, evolving life-styles, natural disasters and, of course, human error. There is the need for stability and harmony in the long term, as well as clarity and consistency about future levels of demand.

Meeting the challenges presented by all these factors requires transparency, consultation, meticulous planning, careful scheduling and an underlying sense of equity. This involves all the major energy producers and consumers, energy companies, financial institutions and other interested parties. Energy markets are too important to be left to the free market alone, and developing countries need solutions by governments that will guarantee that poor communities can also receive energy at affordable prices.

In conclusion, OPEC, with its strong resource base and vast experience of oil matters, will continue with its longstanding mission of enhancing the welfare of the international oil sector, so as to ensure secure supply, reasonable prices and fair returns to investors, both now and in the future. But, in doing this, it requires the full co-operation of other leading parties in the industry.



Post-Soviet oil exports: are the Russians really coming?

The terrorist attacks of September 11, 2001, have thrown a sharper focus on Russia's potential role as an alternative source of large-scale oil supplies, which are seen in some quarters as more 'politically acceptable' than those from the Middle East. But does this widespread Western perception in fact reflect reality? Can Russia really take market share from Middle East oil exporters, or is this just wishful thinking by ignorant politicians? As surprising as it may seem, the answers to these pertinent questions can be found at the crossroads of Russian oil pipelines, maintain Professor Eugene Khartukov and Dr Ellen Starostina from the Moscow-based Center for Petroleum Business Studies in this article.*

Before assessing Russia's new global role in displacing (or supplementing) oil exports, let us first of all clarify what we really mean by 'Russian exports'. Some think about Russian crude leaving the country (regardless of its final destination), others have in mind total (Russian plus non-Russian) oil flows outside the former Soviet Union (including transit of Kazakh, Azeri and Turkmen crudes to non-FSU destinations), while still others talk exclusively about exports of Russian crude oil to the mysterious 'far abroad'[1]. There is a significant difference, which is worth examining in more detail.

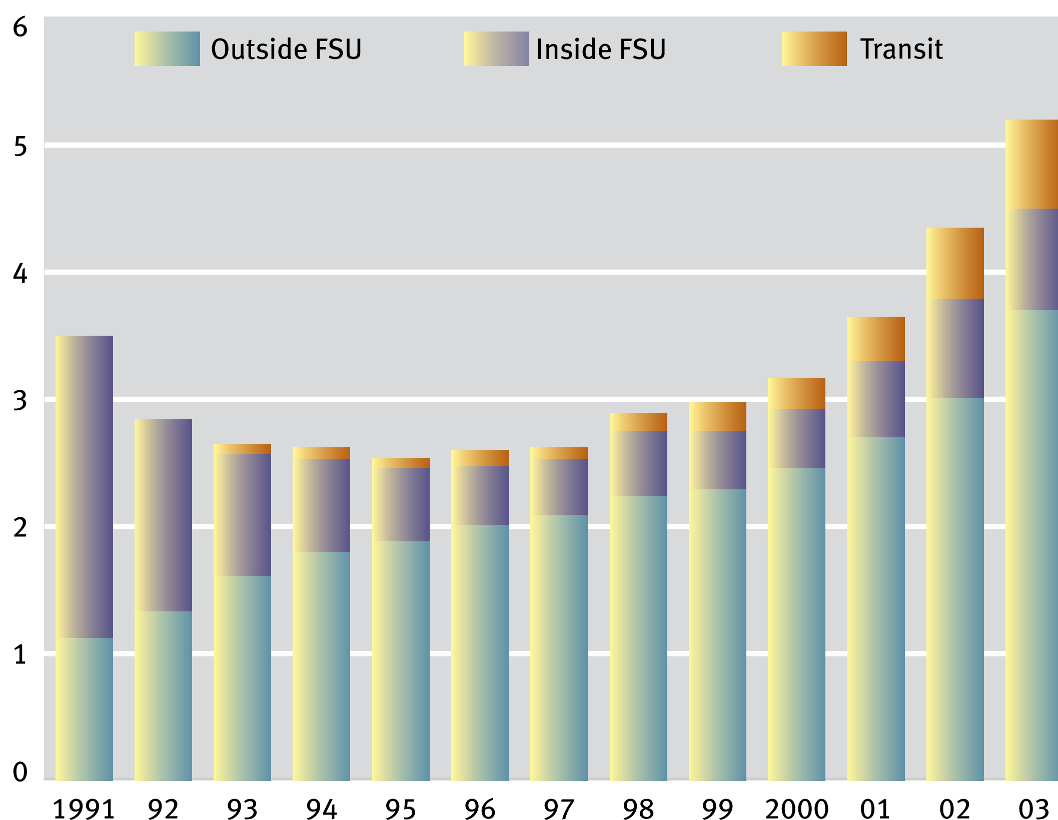
Enigmatic oil exports

In the heyday of Soviet oil exports (that is, in the late 1980s), the 'unbreakable union of Soviet republics'[2] exported up to 2.9 million barrels/day of crude, mostly of a special blend known as 'Urals' (as it was mixed in the Volga-Urals region) or as 'Soviet export blend' (with an API of around 32° and 1.8 per cent sulphur). Urals flowed through the Druzhba (which means 'friendship') pipeline to Eastern Europe, as well as via the Soviet oil ports on the Black Sea (Novorossiysk, Odessa and Tuapse) and on the Baltic Sea (Ventspils). Some other minor crude oil streams ran to foreign destinations by rail, mainly to China and via seaports in the Russian Far East.

After the breakup of the USSR in late 1990, Russia lost sovereign control over pipeline outlets to Poland, Slovakia and Hungary as well as over the Ukrainian port of Odessa and Latvia's Ventspils. However, the Russian oil pipeline mo-

* *Based on **Professor Khartukov's** presentation to the Joint OPEC/MGIMO Workshop, OPEC Secretariat, Vienna, Austria, July 2, 2003.*

Figure 1: Russia's crude oil exports, 1991–2003 *(m b/d)*



Note: Figures for 2003 are forecasts.
Source: GAPMER/PetroMarket Research Group (based on various official data), September 2003.

nopoly Transneft retained control of the crude oil flows through all those outlets, as the export pipelines were fed chiefly by Urals (now known as Rebco, which stands for 'Russian export blend crude oil').

After a while, other ex-Soviet republics (such as Kazakhstan, Azerbaijan and Belarus) started to use the Transneft-controlled pipelines to export their own crudes and to build new pipelines (eg, the Caspian Pipeline Consortium line from Kazakhstan to the Black Sea) and terminals (like Butinge on Lithuania's Baltic Sea coast) to facilitate their own oil exports or to serve those from Russia. As a result, the formerly indivisible Soviet exports of crude oil (all going to outside the ex-USSR) were broken into three main streams:

a. Russian crude exports to outside the FSU;
b. Russian crude supplies inside the FSU (mostly to Ukraine, Belarus and Kazakhstan);
c. non-Russian crude flows (chiefly from Central Asia, Azerbaijan and Belarus) through the Transneft-controlled network to non-FSU destinations, as well as to other ex-Soviet republics.

Although Transneft distinguishes between its oil shipments within and outside the Commonwealth of Independent States (CIS), with the Baltic ex-Soviet republics being regarded as 'outside' or 'far abroad' destinations, Western observers are more accustomed to reckoning how much crude is exported by Russia (and other ex-Soviet countries) beyond the borders of the FSU.

Reflecting overseas demand

Initially, after the breakup of the USSR, Russia's crude exports to non-FSU destinations were severely impeded by the market-related terms of the new sales contracts, which the former Soviet satellites in Eastern Europe now had to accept. However, the much weaker (in fact virtually insolvent) ex-Soviet economies were affected to a far greater extent, and could now afford only a modest fraction of their former imports of Russian crude (see **Figure 1**). Consequently, total exports of Russian crude oil shrank from 3.5m b/d in 1991 to less than 2.5m b/d in 1995, while Russia's supplies to other ex-Soviet republics nosedived from 2.4m b/d to 600,000 b/d, falling even further later. This slump had nothing to do with the so-called 'depletion' of Russia's oil reserves — it was simply that the Russian oil (at market prices) had lost its formerly subsidized ex-Soviet buyers.

Demand for Russian crude from the better-off hard-currency buyers outside the FSU, which was initially somewhat depressed, has being steadily recovering and has now exceeded its previous record level of 2.9m b/d (set in 1988).

Table 1: Russia's oil balance — 2000–03 *(m b/d)*

	2000	2001	2002	2003[1]
Supply	**6.63**	**7.13**	**7.80**	**8.63**
Production	6.50	7.01	7.66	8.50
Crude oil	6.26	6.75	7.37	8.20
Field condensate	0.24	0.26	0.29	0.31
Imports	0.13	0.12	0.14	0.13
Crude oil	0.05	0.04	0.03	0.01
Field condensate	0.09	0.08	0.11	0.12
Demand	**6.60**	**7.12**	**7.77**	**8.60**
Inland demand	3.65	3.78	3.92	4.04
Refinery throughput	3.48	3.60	3.73	3.82
Direct use and losses	0.17	0.17	0.19	0.22
Exports	2.95	3.34	3.84	4.55
Crude oil	2.92	3.30	3.78	4.49
Outside FSU	2.46	2.70	3.01	3.64
Inside FSU	0.46	0.60	0.78	0.85
Stable condensate	0.03	0.04	0.06	0.07
Outside FSU	0.03	0.04	0.06	0.06
Inside FSU	0.00	0.00	0.00	0.01
Balance[2]	**0.01**	**0.01**	**0.03**	**0.03**
Stock changes	0.01	0.00	0.01	*na*
In Transneft system	0.01	–0.01	0.01	*na*
At refineries	0.00	0.01	0.01	*na*
Memo: non-FSU transit[3]	**0.24**	**0.35**	**0.61**	**0.73**
Kazakhstan	0.22	0.29	0.53	0.67
via Transneft system	0.22	0.27	0.30	0.30
via CPC	0.00	0.02	0.24	0.36
Azerbaijan	0.01	0.05	0.06	0.06
Turkmenistan	0.00	0.00	0.01	0.00
Belarus	0.01	0.01	0.01	0.01

1. Forecast (mean values).
2. Including unaccounted-for items.
3. Excluding re-exports and transit to FSU destinations.
Source: PetroMarket Research Group, September 2003.
na not available.

However, in the late 1980s it related to all Soviet exports, which now should be compared with non-FSU supplies from and via Russia — that is, with regard to crude oil transit by other ex-Soviet states, which is likely to reach 730,000 b/d this year (see **Table 1**).

There is no doubt that Russian exports could have grown even faster than this, as the domestic oil market has been suffering from persistent over-supply since 1993. Were it not for the existing export bottlenecks, Russian oil companies could have boosted their exports (and hence hard currency earnings) to even higher levels.

The desire for exports

It is noteworthy that nowadays Russia's annual oil balance (including oil production) stems from the country's unquenchable lust for oil export revenues. These oil exports constitute the only reliable source of the cash that is badly needed by Russian oil companies to pay wages, taxes and bank loans.

Moreover, although oil related hard-currency revenues are not as important in Russia as they are in most OPEC countries, they still provide a shot in the arm for the unstable national economy. Dur-

State pipeline monopoly Transneft is trying to keep pace with growing oil production.

ing the last few years, exports of crude oil, together with oil product sales, accounted for around one third of the country's export revenues. Even more important, the oil sector makes up about 15 per cent of Russia's GDP, while oil-related taxes account for as much as one quarter of the federal budget receipts. In other words, Moscow cannot afford to sacrifice even a fraction of those revenues for the sake of supporting world oil prices.

Whatever the circumstances, therefore, Russia will export as much oil as it can. However, the country's ability to export its crude oil is currently limited by the available export facilities. By 2002, the major export capacity (ie, pipelines and sea ports) potentially available for Russian crude had exceeded 4m b/d. Last year, the Russians used only 2.5m b/d of this potential, with some spare capacity conceded to Kazakhstan, Azerbaijan and Belarus under intergovernmental agreements. Still, with more and more export facilities being gradually commissioned in the years to come, Russia will have more capacity available to export its crude.

Nowadays, there are hardly any major infrastructure projects in the Russian oil sector which are not directly aimed at increasing oil exports. Despite officially-declared export cuts, the country keeps on boosting its crude supplies by rapidly debottlenecking existing export outlets and building new ones — in the West, Far North and Far East. The most important oil export projects are associated with the further development of the Druzhba and Baltic pipeline systems, as well as with new construction schemes for the Murmansk oil hub and the Angarsk pipeline(s).

Druzhba's second wind

The Druzhba pipeline remains the main export artery for Russian crude, capable of handling up to 1.3m b/d. Its northern branch, with a capacity of about 900,000 b/d, feeds Poland and Germany, while the southern branch, with a capacity of 400,000 b/d, facilitates exports to Hungary, Slovakia, the Czech Republic and the former Yugoslavia. However, due to the fall in oil demand in Eastern Europe, the pipeline is now substantially underused. Last year, the Druzhba's average capacity utilization rate was around 80 per cent, with its southern leg carrying only 75 per cent of its nameplate throughput. The use of the Druzhba's southern capacity should be enhanced when the 35-inch **Adria** pipeline, starting from the port of Omisalj in Croatia, is reversed to ship Russian crude to the Adriatic.

This scheme, which was proposed by Yukos and backed by Tyumen Oil (TNK), aims at a capacity of 100,000 b/d in 2004 and up to 300,000 b/d by 2010. The first phase of the project (reversal) looks quite cheap (between $20–30m), while the planned expansion to 300,000 b/d is more expensive, requiring up to $320m of estimated capital investment. Originally, the Croatian pipeline operator Janaf was supposed to complete reversing its section of the Adria pipeline by the end of this year. However, the company cannot start work before it has received approval from Croatia's environment ministry, which is worried about the effect of ballast water disposal on marine life in the Adriatic. As a result, the 100,000 b/d phase of

Above: Russia's Yukos plans to expand oil exports through the Lithuanian port of Butinge.

the Druzhba-Adria scheme is not now expected to become operational before the end of 2004. In addition to this, the implementation of various safety and environmental requirements is likely to add around $60m to the project's estimated cost. Furthermore, the project may also be delayed by the recent disagreement between Transneft and its Ukrainian counterpart UkrTransNafta, which insists on concluding direct contracts with Russian oil producers for shipping their crude along the Druzhba-Adria route.

In August 2001, the Druzhba's Ukrainian section was linked by the **Odessa-Brody** pipeline to a new oil terminal at **Pivdenne** (or Yuzhny), some 25 miles north-east of Odessa. The 420-mile 40-inch line, with its current capacity of 180,000 b/d, can be expanded up to 500,000 b/d (and further to 900,000 b/d) and extended by 190 miles to the Polish refinery at Plock. The **Brody-Plock** extension would require 2-3 years to build and cost around $300–500m — in addition to the $160m-plus already invested in Odessa-Brody. The plan is vigorously supported by Kiev, as well as by Warsaw, Berlin and the European Union — none of which, however, are keen to provide the necessary funds. In any case, the extension can materialize only when (and if) UkrTransNafta, which runs the still idle Odessa-Brody line, finds the desperately sought-after oil supplies from the Caspian, to ship crude from the Black Sea to Plock and further via the Pomeranian pipeline to the Baltic port of **Gdansk**.

This July, two years after the ill-fated Odessa-Brody link was built, the first signs of actual interest in using it were shown by Kazakhstan's state oil and gas holding company KazMunaiGaz (KMG), which has pledged to conduct a feasibility study on the possibility of extending the line to Plock with the aim of shipping up to 160,000 b/d of Kazakh crude via Pivdenne to the north.

In the meantime, several Russian oil majors (including Lukoil, Yukos, and recently TNK) are seeking to persuade the Ukrainian government to save the unfortunate project by reversing the Odessa-Brody line in order to pump Russian crude through the Pivdenne terminal for sea-borne exports. The Russian oil companies, actively backed by Moscow officials, would like to use a part of the current 240,000 b/d excess capacity in the Druzhba pipeline system to ship their crude southward across Ukrainian territory. Their desire for additional oil exports seems to justify a relatively high tariff for the line fixed at $4.30/ton (60 cents/b) plus an additional fee from the Belarus border to Brody of $2.30/t (30¢/b).

Since the start of 2003, a short (32-mile) southern fragment of the pipeline between Michurinsk and the 840,000 b/d Pivdenne terminal has been used in reverse by TNK and recently by Gazprom-linked trader TransNafta and Bashneft (a large oil producer from the Russian republic of Bashkortostan). In late August, under

The roads we take: will it be Odessa-Brody or Brody-Odessa?

incessant pressure from Moscow, which has curtailed its crude exports via Odessa, Kiev agreed to allow Russian companies to use the Pivdenne outlet for up to 80,000 b/d of their crude, starting from the fourth quarter of this year. Most analysts believe this could signify the looming end of Kiev's desperate resistance against the reversal of the Odessa-Brody pipeline. However, the Ukrainian cabinet has delayed any decision until mid-January, when an independent feasibility study on the reversal is to be completed.

This export route via Pivdenne has also attracted Kazakh exporters who, however, have laid a smokescreen around their vital interests by talking about the Plock extension (see above). In late July, KMG succeeded in convincing UkrTransNafta of the need to lay a parallel 32-mile **Michurinsk**-Pivdenne line for shipping Kazakh and Russian crudes. Kazakhstan has also offered to build a new berth at the terminal to handle its crudes. According to KMG, this would keep the Odessa-Brody line free for its original mission — to pump oil northward. But the question still is, whose oil would it pump?

Meanwhile, the Polish pipeline operator PERN plans to invest around $200m to increase the flow of Russian crude to the Naftoport oil export terminal in Gdansk. Currently, the terminal is running at only a fraction of its capacity because of constraints imposed by the Druzhba pipeline. Most of the money will be spent on construction of a new line along the northern branch of the Druzhba pipeline from the Belarus border to Plock, which is connected with Gdansk by the Pomeranian pipeline. The 145-mile **Adamowo-Plock** line, which would boost the capacity of the Druzhba's northern leg from the current 880,000 b/d to nearly 1.3m b/d, could be completed by 2006.

Another possibility for Russian exports is to make partial use of the **IKL** pipeline, which connects Germany's Ingolstadt refinery with the Czech refineries at Kralupy and Litvinov. IKL's operator MERO has proposed using half of the pipeline's 200,000 b/d capacity in reverse, to pump up to 100,000 b/d of Russian crude to western Germany, instead of using the line to feed the Czech refineries with Mediterranean crudes. Russia's Yukos is interested in the proposed scheme, but has yet to persuade the Czech and German refiners to switch over.

After acquiring a 49 per cent stake in Slovak pipeline operator Transpetrol in late 2001, Yukos expressed its interest in building a **Bratislava-Schwechat** pipeline. The 30-mile line would connect the 115,000 b/d Bratislava refinery in Slovakia with Austrian firm OMV's 180,000 b/d Schwechat refinery near Vienna, which is currently supplied via pipeline from the Italian port of Trieste. This August, Yukos and OMV agreed to set up a joint firm to build the pipeline, which would have an initial capacity of 72,000 b/d, potentially rising to 100,000 b/d. To keep the $30m line busy, the Russian major also pledged to supply the OMV refinery with up to 100,000 b/d of Urals crude for an initial period of 10 years, starting at 40,000 b/d in January 2006. OMV was expected to own 24 per cent of the new firm, with the remaining 76 per cent going to Yukos. However, the latter's share is now likely to be lowered to accommodate Transneft, which has been invited to join the venture.

Table 2: Comparative ex-field shipping costs: Murmansk vs other outlets

Destination	Source and route	$/ton	$/b[1]
US East Coast[2]	Caspian (via Baku-Ceyhan)	31.9	4.31
	West Siberia (via CPC)	29.9	4.04
	West Siberia (via Druzhba-Adria)	29.5	3.99
	West Siberia (via Murmansk)	**24.7**	**3.34**
	Mideast Gulf (via Cape)	19.5	2.64
N W Europe[3]	**West Siberia (via Murmansk)**	**18–20**	**2.4–2.7**
	West Siberia (via Primorsk)[4]	< 18	< 2.4

1. *At a flat conversion ratio of 7.4 b/ton.*
2. *Based on the Murmansk project presentation.*
3. *Based on PetroFinance/CPBS data.*
4. *Reflects summer freight.*

The Russian pipeline monopoly was known to be interested in the Bratislava-Schwechat link and has been proposing to extend it further to Virye in Croatia, where it would join the Adria pipeline. However, now that the Druzhba-Adria project has taken off, the proposed $200m **Schwechat-Virye** extension looks redundant.

Baltic expansion

On the Baltic front, the Latvian port of **Ventspils** remained the main outlet for Russian (and Soviet) crude destined for North European markets until recently, when it was embargoed by Transneft, seeking to buy a controlling stake in the port cheaply. If Transneft succeeds in its efforts (with a sell-or-die ultimatum expiring by next May), the current 320,000 b/d capacity of the now idle outlet could be expanded to 360,000 b/d.

As an alternative to the independent Ventspils, in late 2001, Transneft built its own Baltic oil terminal at **Primorsk**, on the Gulf of Finland, north-west of St Petersburg. Its original capacity of 240,000 b/d was increased to 360,000 b/d in early July. This now fully used facility is slated to expand further to 600,000 b/d by the start of 2004 and 840,000 b/d by next May, at the latest. Ultimately, Primorsk's capacity could reach 1.2m b/d, although this depends on market conditions, especially as regards future oil exports from Iraq. The first phase of this Baltic Pipeline System (BPS), including a new 40-inch, 240,000 b/d pipeline from the Kirishi refinery to Primorsk, cost Transneft some $600m ($140m more than initially planned). The ongoing second phase, which will boost the capacity of the BPS to 840,000 b/d, envisages the construction of a longer 40-inch, 600,000 b/d line from Palkino (near Yaroslavl), and is estimated to cost $1.2-1.4 billion.

If the fairly heavy ice conditions at Primorsk undermine the economics of using this capacious export outlet, Transneft also has a standby plan to build a 160,000 b/d pipeline from Primorsk to the more easily accessible Finnish port of **Porvoo**.

With the recent takeover of Lithuania's Mazeikiu Nafta by Russia's Yukos, the Lithuanian port of **Butinge**, which was built in mid-1999 — not least in order to feed the crude-starved Mazeikiu refinery — has also become available for Russian oil exports. Moreover, the Lithuanian government has recently proposed expanding the port's nameplate capacity from the current 160,000 b/d to around 250,000 b/d, and Yukos has responded with a plan to finance its expansion to 280,000 b/d.

Murmansk plans

In the Far North, all the proposed oil-export projects gravitate towards a passage to the Atlantic, kept ice-free thanks to the warming effect of the Gulf Stream. In particular, Russian gas giant Gazprom envisages a 300,000 b/d oil terminal at **Pechenga**, north-west of Murmansk, to serve the Prirazlomnoye oil field in the Barents Sea. Another scheme, **Northern Gateway**, with a proposed capacity of up to 500,000 b/d, is designed to facilitate oil exports from the Kharyaga, Northern Territories and other upstream projects in the Nenets Autonomous District. Separately, Lukoil's oil terminal at **Varandey** (the first private oil-export facility in Russia), also aimed at reloading crude from the major's most northern fields onto larger, ocean-class tankers at Murmansk, is to be expanded from its current 30,000 b/d to 48,000 b/d next year and 200,000–300,000 b/d in 2005.

However, these plans have recently been overshadowed by the ambitious **Murmansk** project, proposed last November by Lukoil, Yukos, TNK and Sibneft. The project, which was joined by Surgutneftegaz (SNG) and may be also backed by foreign firms including ConocoPhillips, Marathon Oil and Total, envisages constructing a major pipeline which would transport West Siberian oil to Murmansk, where it would be loaded onto VLCCs at a new oil port. The pipeline would follow one of two proposed routes (either 1,600 or 2,200 miles), and would run from the Tyumen oil fields to the ice-free port.

Originally, the projected capacity of this system was slated to reach 1.2–1.6m b/d by 2008 (with estimated capital needs varying between $5.1–5.7bn), with a possible expansion of up to 2.4m b/d later. However, in late June, the Russian oil majors involved in the project signed a memorandum of understanding (MoU) with Transneft and the Ministry of Energy, boosting the 48-inch line's ultimate capacity to a projected 3.0m b/d. With only 200,000 b/d reserved for third parties, the line's remaining maximum throughput was allocated in the MoU as follows: 1.0m b/d to be filled by Yukos, 660,000 b/d by Lukoil, 500,000 b/d by TNK, 400,000 b/d by Sibneft, and 240,000 b/d by SNG. Provided that the conclusions of a feasibility study are positive, the line will be built and operated by Transneft. Assuming that the study, which has been delegated to the Ministry of Energy, is completed by the end of 2004, the new pipeline, which would be Russia's biggest, is expected to be operational in 2007.

Although it is often claimed (for obvious political reasons) that this mam-

Table 3: Major oil export outlets used by Russia — 2002–2010 *(m b/d)*

Export outlet	2002[1]		2005		2010	
	Capacity	Use	Capacity	Use	Capacity	Use
Eastern Europe (pipelines)	**1.28**	**1.03**	**1.44**	**1.09**	**1.98**	**1.55**
Druzhba	1.28	1.03	1.34	1.00	1.68	1.31
Northern branch	0.88	0.73	0.94	0.80	1.28	1.09
Southern branch[2]	0.40	0.30	0.40	0.20	0.40	0.22
Adria (Croatia)	–	–	0.10	0.09	0.30	0.24
Black Sea (ports/terminals)	**1.95**	**0.95**	**2.60**	**1.53**	**2.95**	**1.66**
Novorossiysk	0.85	0.78	1.15	1.05	1.20	1.10
Tuapse	0.18	0.10	0.18	0.16	0.18	0.16
South Ozereyevka (CPC)	0.48	0.01	0.83	0.08	1.13	0.16
Odessa (Ukraine)	0.26	0.06	0.26	0.08	0.26	0.08
Pivdenne (Ukraine)	0.18	–	0.18	0.16	0.18	0.16
Baltic Sea (ports)	**0.72**	**0.48**	**1.36**	**0.98**	**1.64**	**1.23**
Primorsk	0.24	0.22	0.84	0.70	0.84	0.70
Ventspils (Latvia)	0.32	0.15	0.36	0.16	0.36	0.16
Butinge (Lithuania)	0.16	0.11	0.16	0.12	0.28	0.23
Porvoo (Finland)	–	–	–	–	0.16	0.14
Barents Sea (ports/terminals)	**0.02**	**0.01**	**0.20**	**0.18**	**1.00**	**0.80**
Far East	**0.08**	**0.04**	**0.72**	**0.63**	**1.04**	**0.94**
De Kastri (port)	0.04	0.02	0.12	0.11	0.24	0.22
Sakhalin-2 (terminal)	0.04	0.02	0.20	0.16	0.20	0.18
Angarsk-China (pipeline)	–	–	0.40	0.36	0.60	0.54
Central Asia (Kazakhstan-China line)	**–**	**–**	**–**	**–**	**0.60**	**0.20**
Total	**4.05**	**2.51**	**6.32**	**4.41**	**9.21**	**6.38**

1. *Actual.*
2. *Excluding capacity used for additional deliveries via the Adria and Odessa-Brody pipelines.*

Source: Center for Petroleum Business Studies/PetroMarket Research Group, July 2003.

moth project is the best way of exporting Russian crude to the USA, it should be pointed out that it could also facilitate less expensive oil exports to the closer European markets (see **Table 2**).

Angarsk alternatives

Future oil exports from Eastern Siberia are planned in two different (and in fact conflicting) ways. Both the options are based on a pipeline starting from **Angarsk** (near the city of Irkutsk) but would end up either in north-east **China** (Yukos' proposal) or near the Russian Pacific port of **Nakhodka**, at Perevoznaya Bay (Transneft's suggestion). The Yukos-backed scheme takes the risky approach of locking oil from eastern Russia inside the Chinese market, but could be amply supplied by the region's projected oil production (which is estimated to hit some 600,000 b/d by 2010). Transneft's plan, which the Japanese are actively lobbying in support of (offering Moscow some $5 billion in low-interest loans), enjoys the geopolitical advantage of diversifying exports, but also has a serious weak point — the lack of available supplies in the region to support a larger oil pipeline, with a minimum required capacity of 1.0m b/d. Another consideration is money: Yukos' 1,420-mile, 40-inch pipeline would cost the Russian major $2.2bn (with China's CNPC paying another $700m), while the required investment in Transneft's 2,410-mile, 48-inch alternative (wholly funded by the Russians) is officially estimated at $5.8bn. It is noteworthy that if and when the Angarsk-Nakhodka pipeline is built, it would be one of the longest in the world — nearly three times the length of the Trans-Alaskan Pipeline — and would traverse terrain nearly as harsh. For this reason, many analysts do not trust the official cost estimates and argue that $8.0bn is a more realistic capital requirement for the state-run monopoly's project.

Last May, the Russian cabinet made a compromise (although 'not yet final') decision to give the green light to Yukos' plan to build the Angarsk-Daqing pipe-

Table 4: Russian oil companies' production plans[1] — 2003–12 *(m b/d)*

Company	2002[2]	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
YukosSibneft	1.92	2.28	2.55	2.77	2.98	3.17	3.34	3.50	3.66	3.74	3.83
Lukoil	1.52	1.61	1.71	1.77	1.83	1.86	1.90	1.94	2.01	2.03	2.05
TNK-BP	1.09	1.19	1.29	1.35	1.40	1.46	1.54	1.61	1.66	1.69	1.72
Surgutneftegaz	0.99	1.06	1.15	1.21	1.27	1.32	1.37	1.43	1.47	1.51	1.52
Tatneft	0.49	0.48	0.46	0.45	0.44	0.43	0.42	0.40	0.39	0.38	0.38
Slavneft	0.30	0.32	0.34	0.36	0.39	0.40	0.42	0.44	0.45	0.47	0.48
Rosneft	0.29	0.31	0.33	0.35	0.37	0.40	0.44	0.47	0.50	0.53	0.54
Bashneft	0.24	0.24	0.24	0.24	0.23	0.22	0.21	0.20	0.19	0.19	0.18
Others	0.71	0.72	0.73	0.75	0.77	0.78	0.80	0.82	0.83	0.85	0.86
Total	**7.56**	**8.21**	**8.81**	**9.25**	**9.66**	**10.05**	**10.44**	**10.81**	**11.17**	**11.40**	**11.56**

1. Incl field condensate; excl offshore and overseas production; converted from original metric tons at a flat ratio of 7.34 b/ton.
2. According to revised statistics, actual production amounted to 7.66m b/d.
Source: Tyumen Oil Co (TNK) based on companies' data, May 2003.

line, which would be supplemented by a leg to Nakhodka when (and if) East Siberian and Yakutian oil supplies are sufficient to fill both the branches.

Although this decision was presented as a kind of 'judgement of Solomon', it seems to have in fact buried Transneft's Japanese export project for the foreseeable future. Furthermore, the surviving scheme was cemented in late May by a 26-year supply deal between Yukos and the China National Petroleum Corporation (CNPC), which provided for total pipeline deliveries of up to 700m t (more than 5.2bn b) of Russian crude, starting at 20m t/y (400,000 b/d) in 2005–09 and increasing to 30m t/y (600,000 b/d) in 2010–30.

Nonetheless, the Russian government's reaction to the deal was extremely cool, as Moscow started a pre-election campaign against Yukos' boss Mikhail Khodorkovsky, whom the Kremlin perceives as being too politically ambitious. The final decision on the pipeline's route, which was originally expected to be sealed during a visit by Russian Prime Minister Mikhail Kasyanov to Beijing in late September, has been indefinitely postponed. Whatever the decision, it is unlikely that Russian oil will start to be pumped to China (as envisaged earlier) in 2005, as under the original plan, construction was supposed to begin before the end of this year.

Meanwhile, Tokyo hopes that Moscow will finally change its mind on the Angarsk pipeline's route in favor of Nakhodka by the time of Kasyanov's visit to Japan, scheduled for December.

Export-driven output

While some of the above projects are still on the drawing board, others (like the Adria pipeline reversal and the Primorsk expansion) are set to bear fruit within a year. All in all, the ongoing and envisaged projects will boost the existing export capacity of *major* outlets (wholly or partly available for Russian crude) from some 4.0m b/d last year to over 6.3m b/d by 2005 and 9.2m b/d by 2010 (see **Table 3**). Understandably, not all the incremental capacity will be used by Russia, which will refrain from using foreign facilities and share its own with Kazakhstan and other Central Asian exporters. Hence, we project that Russia will be able to increase its crude oil exports via major outlets from 2.5m b/d last year to 4.4m b/d by 2005 and nearly 6.4m b/d by 2010.

By adding *minor* export facilities (rail, river and small sea terminals), which are estimated to provide another 600,000–800,000 b/d, one can get a fairly reliable rule-of-thumb forecast of Russia's *total* crude oil exports outside the FSU of 5.0–5.2m b/d by 2005 and 7.0–7.2m b/d by 2010. Adding inland demand for crude oil (ie, refinery intake, direct use and losses) at a projected (and fairly stable) rate of 4.0m b/d, plus net exports inside the FSU (including transit via Ukraine) at a probable rate of 800,000–900,000 b/d, leads us to the conclusion that Russia's crude oil output (including field condensate) is likely to reach 9.8–10.0m b/d in 2005 and 11.8–12.1m b/d in 2010.

This almost incredible conclusion has been implicitly supported by recent output projections from several Russian oil majors (including Yukos, Lukoil and TNK). In particular, speaking at the 2nd International Pipeline Forum in Moscow in late May, TNK's then President Simon Kukes (now Chairman of the Board at Yukos) outlined a comprehensive overview of Russian companies' production plans, targeting a total of about 10.1m b/d in 2007 and nearly 11.6m b/d in 2012, even without taking into account Russia's offshore production, which is estimated to contribute 600,000–800,000 b/d in the medium term (see **Table 4**).

Admittedly, the above projections look reliable only if world oil prices are fairly stable in real terms, with the OPEC Reference Basket price staying above $20/b. If the oil price nosedives to $15–18/b, we believe that the less attractive upstream and midstream economics will probably lower both Russia's oil output and its non-FSU exports by around 500,000 b/d in 2005 and by some 1.0m b/d in 2010. Still, Kukes gave assurances that all the reviewed plans were based on a price of

Table 5: Russia's aggregate liquid hydrocarbons balance — 2000–03 *(m b/d)*

	2000	2001	2002	2003[1]
Supply	**6.73**	**7.24**	**7.89**	**8.72**
Primary production	**6.57**	**7.09**	**7.73**	**8.58**
Crude oil	6.26	6.75	7.37	8.20
Field condensate	0.24	0.26	0.29	0.31
Other NGLs	0.07	0.08	0.07	0.08
Gross imports	**0.15**	**0.14**	**0.16**	**0.15**
Crude oil	0.05	0.04	0.03	0.01
Field condensate	0.09	0.08	0.11	0.12
Other NGLs	0.002	0.002	0.002	0.002
Oil products	0.02	0.02	0.02	0.02
Refinery gain	**0.000**	**–0.001**	**–0.001**	**–0.001**
Demand	**6.71**	**7.23**	**7.87**	**8.72**
Inland demand	**2.49**	**2.57**	**2.47**	**2.61**
Commercial consumption[2]	2.28	2.36	2.24	2.34
Refined products[3]	2.16	2.22	2.09	2.20
Crude oil (direct use)	0.02	0.02	0.03	0.04
NGLs[4]	0.10	0.12	0.12	0.11
Refinery fuel	0.06	0.07	0.07	0.07
Losses	0.15	0.15	0.16	0.19
Gross exports	**4.22**	**4.65**	**5.40**	**6.12**
Crude oil	2.92	3.30	3.78	4.49
Stable condensate	0.03	0.04	0.06	0.07
Other NGLs	0.03	0.03	0.03	0.04
Oil products	1.23	1.29	1.53	1.53
Stock changes	**0.01**	**0.01**	**0.02**	**0.00**
Crude oil	0.01	0.00	0.01	*na*
Oil products	0.00	0.01	0.01	*na*
Memo: net exports	**4.06**	**4.51**	**5.24**	**5.97**
Outside FSU	3.68	3.98	4.54	5.21
Inside FSU	0.38	0.53	0.70	0.76

1. Forecast (mean values).
2. Including unaccounted-for items.
3. Including liquefied refinery gases (LRG).
4. Including gas gasoline and LPG from gas-processing and petrochemical plants.
Source: PetroMarket Research Group, September 2003.

na not available.

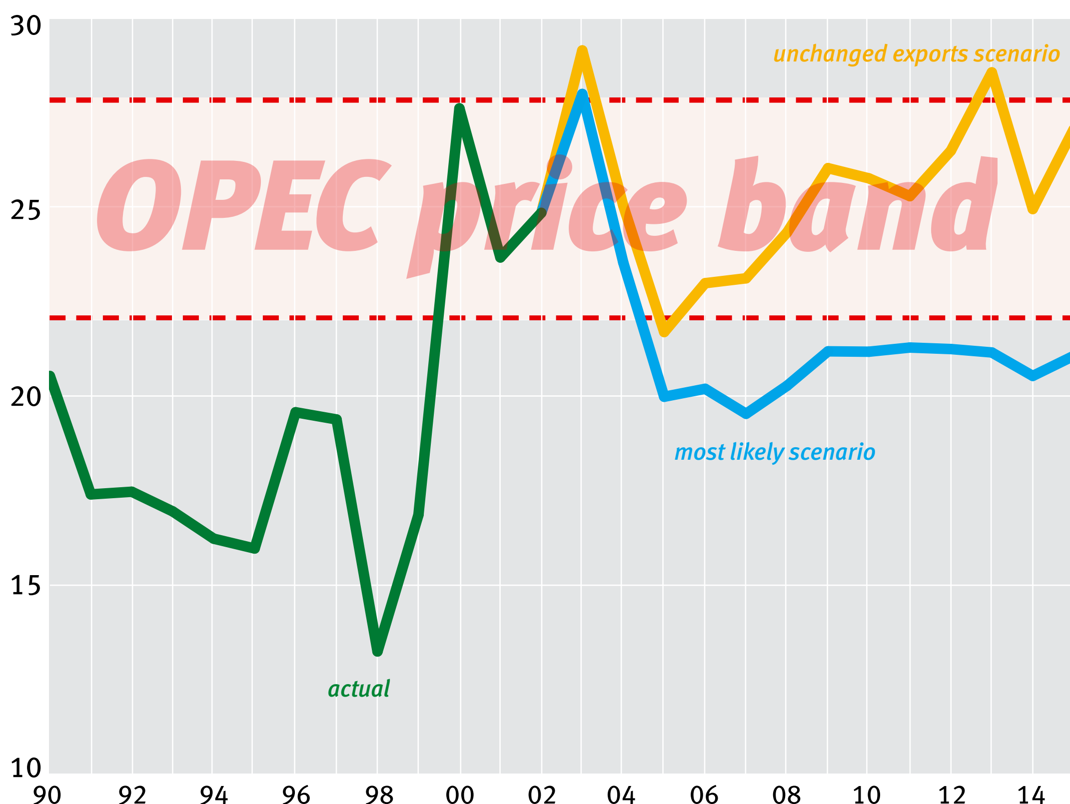
$16-18/b for Brent and at least 15 per cent internal rate of return (IRR) for related oil projects.

At any rate, until the country's oil resources are *really* depleted[3], it seems certain that Russia's oil production growth will be determined by the available export capacity. Russian oil companies will export (and, hence, produce) as much crude as they can profitably sell. In turn, Moscow's political elite — whether lobbied, corrupted or objectively interested in promoting the nation's oil business — will do whatever is needed to keep the big oil show on the road … provided, of course, that the 'big boys' mind their own business and do not publicly challenge the Kremlin or the Russian White House.

Global market impact

In the meantime, the global oil market will experience ever-growing pressure from Russia's oil supplies, coupled with increasing exports from the Caspian. Al-

Figure 2: Impact of FSU oil supplies on OPEC real oil prices, 2003–15 *($/b)*



Note: Additional assumptions for both scenarios include OECD real GDP growth of 2.5 per cent/year, and OECD coal import prices (in 2000 dollars) of $39/ton in 2003–2010, rising to $40/t by 2015 (in line with the IEA's World Energy Outlook 2002).
Source: GAPMER/Center for Petroleum Business Studies, September 2003.

though the level of oil supplies from Kazakhstan, Azerbaijan, Turkmenistan and Uzbekistan has been highly exaggerated by Central Asia's totalitarian leaders, they are nevertheless typically estimated by Western experts to rise from 1.1m b/d last year to 1.7m b/d in 2005, and further to 2.9m b/d by 2010, before leveling off at some 3.0m b/d by 2015[4]. Our most likely scenario is based on more conservative projections of Caspian (Central Asia and Trans-Caucasus) non-FSU net oil exports of 1.4m b/d in 2005, 2.4m b/d in 2010, and 2.3m b/d in 2015. These fairly moderate numbers are intended to reflect the inevitably growing resistance of OPEC-10 producers, the rising exports of Iraqi oil and the ever-increasing competition from Russia's booming oil supplies.

Besides, when assessing potential FSU supplies (and especially Russia's oil exports to non-FSU destinations), we should disengage ourselves from the country's *crude oil* balance and instead — in order to make it compatible with the global oil balance — take into account *all* the liquid hydrocarbons exported from Russia outside the FSU. These oil exports include not only crude oil, but also refined oil products, as well as stable condensate and other saleable NGLs. Taking into account these non-crude supplies, Russia's net exports of liquid hydrocarbons to non-FSU destinations exceeded 4.5m b/d in 2002 and are projected by the Moscow-based PetroMarket consultancy to rise to 5.2m b/d this year (see **Table 5**).

Bearing these considerations in mind, we predict that aggregate FSU net oil exports will most likely rise from last year's 5.6m b/d to 7.6m b/d in 2005 and 9.4m b/d in 2010, before settling at 9.3m b/d by 2015. In other words, incremental oil supplies from the FSU are projected to amount to 2.0m b/d in 2005, 3.8m b/d in 2010 and 3.7m b/d in 2015 (see **Table 6**).

Using the above projections as alternative scenario assumptions for our multi-regression simulation model of the world oil market gives us a fairly clear estimate of the global impact of those incremental oil supplies (see **Figure 2**). According to the model's simulations, the impact of the new FSU oil supplies will start to be felt after 2005, with every incremental 1.0m b/d of ex-Soviet exports shaving nearly $1.50/b off the OPEC Reference Basket price in real terms (in 2000 dollars).

Alternatively, running the model in a fixed-price mode leads us to another uncomfortable finding: in order to maintain its Basket price at around the targeted $25/b (in real terms), OPEC would have to curtail its crude oil output from 25.1m b/d last year to 21.4m b/d by 2010 and

Table 6: Assumed scenarios of FSU net oil exports — 2005–15 *(m b/d)*

Scenario/origin	2005	2010	2015
A. Most likely exports	**7.6**	**9.4**	**9.3**
Russia	6.2	7.0	7.0
The Caspian	1.4	2.4	2.3
B. Unchanged (2002) exports	**5.6**	**5.6**	**5.6**
Russia	4.5	4.5	4.5
The Caspian	1.1	1.1	1.1
Difference [A–B]	**2.0**	**3.8**	**3.7**

Source: Center for Petroleum Business Studies, September 2003.

20m b/d by 2015. This is hardly an acceptable solution and a rather improbable outlook. It does mean, though, that either the sought-after $25/b target price is unsustainable (at least, in real terms) or our assumptions and projections are completely wrong.

Mismatched dialogue

Although, for obvious reasons, some OPEC officials tend to equate the Organization's targeted price range of $22-28/b with Russia's official price preference of $20-25/b for Urals[5], it is no secret that most of Russian oil majors feel sufficiently comfortable with prices in the range of $15-18/b, and have repeatedly claimed that they can withstand a possible drop of world oil prices to as low as $10/b.

Admittedly, the interests of Russian state-budget watchers and major producers of Russian crude often differ (if not to say contradict each other). After all, who produces and exports Russian oil, and who fills the budget with the sorely-needed tax receipts? The question is, of course, rhetorical, since the answer is self-evident. Can one therefore assume that the Russian government controls the country's oil production and/or exports? Unfortunately, this is hardly the case.

As a result of the hasty and all-out oil privatization of 1996–97, Moscow has lost the complete control that it formerly exercised over the oil sector, which is now virtually privatized. The only remaining state-controlled oil company, Rosneft, is producing a mere 330,000 b/d, or less than a paltry four per cent of the country's current output of 8.8m b/d.

To make the things worse, owing to vigorous resistance by the privatized oil majors, the federal government has failed to create a national oil company, which could *de facto* fulfill the oil-related international obligations of the Russian state. Not surprisingly, despite the officially-declared export cuts that were pledged by Moscow in late 2001, some Russian oil majors (like Yukos and Sibneft) in fact announced substantial (20–30 per cent) increases in their oil production for 2002 and stuck firmly to their plans.

"Moscow has benefited from OPEC's market management and price restoration success without making the production sacrifices it had pledged," noted *Petroleum Intelligence Weekly,* commenting on the recent visit of Saudi Arabia's Crown Prince Abdullah to Moscow[6].

Nevertheless, when co-operation is needed, OPEC officials continue to negotiate market stabilization measures with the Russian government, and have to rely upon its pledges, despite the obvious fact that Moscow cannot afford any loss in petrodollar revenues, nor does it have enough power to compel the country's privatized oil industry to adhere to those official obligations. It is understandable that OPEC and the Russian Ministry of Energy have not succeeded in finding a common language on the desirability of cuts in oil supplies. Sometimes it almost seems easier to persuade the US Department of Energy to raise that country's oil consumption instead!

A national oil company?

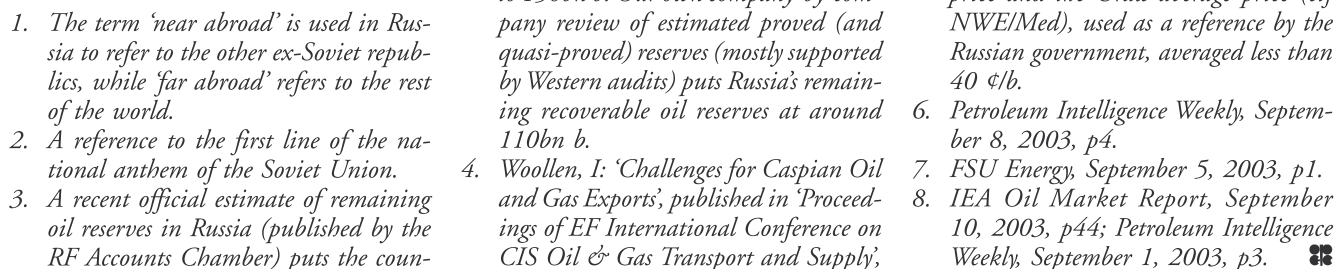
Fortunately, Moscow still has quite an efficient method of leverage, which it uses every time the oil majors are urged to pay more taxes or to meet some other non-commercial goals (like over-supplying domestic refineries, fuelling sowing and harvest campaigns, providing the military and insolvent users in remote regions). The government has wisely kept control over inland and export crude oil flows through the oil pipeline monopoly Transneft — one of the few remaining strategic utilities that can be used to regulate the mostly privatized economy. It is no surprise that Moscow has firmly rejected any plans to further privatize Transneft, keeping 75 per cent of its shares in state hands. Moreover, the government continues to resist conceding even a part of its all-embracing control over oil pipelines (especially export routes) to private oil companies, which are eager to build their own independent export infrastructure, as described above. This forces the Russian oil majors to bow to Transneft every time they need to increase their exports, and imparts to Transneft the much-needed but missing function of a powerful partner in the ongoing OPEC-Russia dialogue.

Seen in this light, upgrading Transneft's status to that of a national oil company (which the country is presently lacking) would not only reinforce state control over the Russian oil sector, but would also provide a solid basis for further intergovernmental negotiations on stabilizing the world oil market.

The recent visit of a very high-level Saudi delegation to Moscow has underlined the importance of developing a constructive dialogue between the world's two largest oil producers and exporters. For the time being, the prevailing high oil prices have mitigated the urgency of a co-ordinated market policy. "We are happy that demand for crude oil grows faster than our ability to supply it," stated the Russian Minister of Energy, Igor Yusufov, when meeting with his Saudi counterpart, Ali I Naimi[7].

However, the next test of Moscow's willingness and ability to cooperate will probably come next year, when the call on OPEC crude is expected to drop by another 800,000 b/d[8]. And if OPEC seeks a responsible and constructive response, then when its officials next visit Moscow, they should consider talking directly to Transneft's President, Semyon Vainshtok, and, by doing so, start a promising, far-

reaching (and state-backed) dialogue with Russia's oil producers.



Footnotes

1. *The term 'near abroad' is used in Russia to refer to the other ex-Soviet republics, while 'far abroad' refers to the rest of the world.*
2. *A reference to the first line of the national anthem of the Soviet Union.*
3. *A recent official estimate of remaining oil reserves in Russia (published by the RF Accounts Chamber) puts the country's explored (A+B+C_1) reserves of crude and condensate at 25.2bn tons (or about 185bn b), while unofficial estimates of current proved reserves vary from 60bn to 150bn b. Our own company-by-company review of estimated proved (and quasi-proved) reserves (mostly supported by Western audits) puts Russia's remaining recoverable oil reserves at around 110bn b.*
4. *Woollen, I: 'Challenges for Caspian Oil and Gas Exports', published in 'Proceedings of EF International Conference on CIS Oil & Gas Transport and Supply', April 23–24, 2003, Moscow, Russia.*
5. *As a matter of fact, for the last five years (1998–2002) a yearly differential between the higher OPEC Basket price and the Urals average price (cif NWE/Med), used as a reference by the Russian government, averaged less than 40 ¢/b.*
6. *Petroleum Intelligence Weekly, September 8, 2003, p4.*
7. *FSU Energy, September 5, 2003, p1.*
8. *IEA Oil Market Report, September 10, 2003, p44; Petroleum Intelligence Weekly, September 1, 2003, p3.*

The port of Murmansk needs more space for larger tankers.

About the authors

Eugene Khartukov is General Director of Center for Petroleum Business Studies (CPBS), Moscow; Vice President (for Eurasia) of Petro-Logistics, Geneva; Head of World Energy Analysis & Forecasting Group (GAPMER); Director (for International Affairs) of PetroMarket Research Group, Moscow; and Professor of Management and Marketing at Moscow State University of International Relations (MGIMO).

Ellen Starostina is Head of PetroFinance Consultancy (PFG) and Director for Finances of Center for Petroleum Business Studies (CPBS), Moscow; and an international consultant on oil finances and taxation to trading companies, commercial banks, and law firms.

Acknowledgements

The authors express their gratitude for useful insights, critical comments and invaluable information provided by Yakov Ruderman (PetroMarket Research Group), Aleksey Aleksandrov (the Russian Federation Ministry of Energy), Mikhail Tigashov (TransNafta), Sabr Yessimbekov (KazTransOil) and Tamara Varava (UkrTransNafta).

OPECNA

OPEC NEWS AGENCY

News and features from the

OPEC Member Countries

Extensive OPEC conference coverage

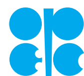
Daily and weekly OPEC Basket prices

World oil price movements

Highlights of the Monthly Oil Market Report

Keep abreast of developments in OPEC and its Member Countries by subscribing to OPECNA. Our three daily transmissions are available by e-mail, fax or post. For further details, including subscription rates, please contact:

OPEC News Agency



OPEC
PR & Information Department
Obere Donaustrasse 93
A-1020 Vienna, Austria
Tel: (+43 1) 21112 376
Fax: (+43 1) 214 9827
E-mail: opecna@opec.org

High-level Saudi delegation visits Moscow to sign energy pact with Russian Federation

by Graham Patterson

Vienna — A high-level delegation from the Kingdom of Saudi Arabia visited the Russian Federation in early September to sign a number of deals, including a five-year oil and natural gas co-operation agreement that Russia's Energy Minister said could lead to investment of up to $25 billion.

The Saudi delegation was led by Crown Prince Abdullah and also included the Minister of Petroleum and Mineral Resources, Ali I Naimi, and the Minister of Finance, Ibrahim Al-Assaf.

They met with top Russian officials including President Vladimir Putin, Prime Minister Mikhail Kasyanov and Minister of Energy, Igor Yusufov. It was the first visit by a Saudi leader to Moscow in over 70 years.

"This day will go down in history as it opens a new era in Saudi-Russian relations," Crown Prince Abdullah was quoted as saying by a Russian newspaper, *The Moscow Times*.

The text of the agreement, posted on the Russian government's website, noted

Photo: Reuters/Sergei Karpukhin

that the two countries "intend to strengthen bilateral co-operation aimed at the stabilization of world energy markets."

Russia and Saudi Arabia will also work on "improving dialogue between countries that produce hydrocarbons and countries that consume hydrocarbons," with the aim of "the stabilization of world markets and the flourishing of the world economy", according to the agreement.

Speaking on Russian television, President Putin told Crown Prince Abdullah: "We have always seen the Arab world, and the Moslem world, as one of our closest partners and allies.

"We are sure, your Highness, that the visit by you and your colleagues will serve as a new and powerful boost in the development of bilateral relations," said Putin.

Responding, Crown Prince Abdullah told Putin that the Saudi people had great respect for Russia and its President, according to the Russian news agency Interfax.

Praising Russia's efforts in support of OPEC, Crown Prince Abdullah said: "Russia has been playing a positive role in supporting OPEC's initiatives aimed at realizing fair oil prices and achieving stability in the oil market.

"I hope the oil and gas agreement between the oil ministries in the two countries will facilitate the establishing of joint specialized companies for carrying out future projects to be agreed by oil firms in both countries," he added.

On the issue of co-operation between the two nations, the Crown Prince said: "Saudi Arabia and Russia should co-operate, not compete, in order to maintain balance in the world oil market. We prefer to consider Russia as a partner, not as a competitor, in the oil sector and other fields."

Interfax also quoted Energy Minister Yusufov as saying: "We expect that a number of agreements will be signed as a result of the Crown Prince's visit."

Saudi projects that would interest Russian companies, according to Yusufov, included the development of gas fields, construction of pipelines, water desalination plants and power stations. These projects could be worth between \$20–25bn, said the Russian Minister.

One deal was already signed prior to the Saudi visit to Moscow. Russian pipeline construction firm Stroytransgaz has announced that it is to set up a joint venture with Saudi Oger, which will bid for the provision of services to state oil firm Saudi Aramco.

The visit also saw the signing of a memorandum of understanding between the Council of Saudi Chambers of Commerce and Industry and its Russian counterpart, as well as accords for co-operation in sports, and science and technology.

Left: Saudi Crown Prince Abdullah, accompanied by a Russian Foreign Ministry official, inspects a Guard of Honour on arrival in Moscow.

Photo: Reuters/Viktor Korotayev

Right: Crown Prince Abdullah with Russian President Putin as they meet in Moscow.

New Iraqi Oil Minister

stresses commitment to OPEC and outlines plans for development of oil industry

Dr Ibrahim Bahr Alolom, Iraq's new Minister of Oil, listens to a journalist's question during the press conference on Wednesday, September 24, 2003 at the OPEC headquarters in Vienna.

Vienna — Iraq's new Minister of Oil, Dr Ibrahim Bahr Alolom, attending his first OPEC Conference since being appointed to the post earlier in September, has stressed that his country remains a Full Member of OPEC and is totally committed to supporting its policies to stabilize the oil market.

Speaking at a press conference before the start of the 127th OPEC Conference on September 24, the Minister said that Iraq was going through a difficult and critical phase in its history, encompassing not just the US-led war, but the post-conflict sabotage of oil facilities and production.

Despite these difficulties, Iraqi oil output had already reached approximately two-thirds of its pre-war level, which Alolom said was "a great achievement by any standard." Full production was expected to be reached early next year and exports were rising.

Iraq, he went on, needed a tremendous amount of work to rehabilitate its oil infrastructure and solve the persistent security problems. Nonetheless, said the Minister, "We have hope and faith that the people of Iraq will pass through these turbulent waters to reach a free and democratic Iraq."

Alolom put Iraq's current oil production at around 1.8 million barrels/day, of which around 200,000-250,000 b/d was being re-injected. The level should reach 2.0m b/d by December and 2.8m b/d by March next year.

Exports were currently around 900,000 b/d, and were seen rising to 1.5m b/d by the end of 2003 and further to 1.8m b/d by next March, said the Minister. The question of Iraq being allocated an OPEC

This section draws on the output of the OPEC News Agency (OPECNA), which transmits three daily bulletins of news, analysis and features from OPEC Member Countries and emerging economies. For those who are interested in oil, energy and economic development issues, more details on OPECNA can be found in the advert on p23.

production quota would be left until some time in the future, but the country would abide by any quota agreed by the Organization's Members, he noted.

Looking ahead, the country was planning to double its oil production to 3.5-4.0m b/d by 2005 and further to 6.0m b/d by 2010, added Alolom. Iraq's oil wealth would be used for the benefit of the country and the Iraqi people, he said.

Asked what was being done to tackle the constant attacks on the vital Kirkuk-Ceyhan oil pipeline, the Minister said that measures were being put in place to address the security problems, but he declined to elaborate. Exports would continue "by all available means", he added.

On the possible privatization of the oil industry, Alolom said that there were currently no plans for privatization, although it could be a good idea for the downstream sector.

"We intend to rapidly develop our huge oil resources with the help of the international oil industry," said the Minister, adding that any proposals received from the oil majors would be carefully studied on a competitive basis to ensure that they were in line with the interests of the Iraqi people.

This also applied to all contracts signed between international oil majors and the ousted regime of Saddam Hussein, which would be reviewed on a case-by-case basis, noted Alolom.

Foreign investment in other sectors was also welcome, he said, and a law had just been passed the previous week allowing 100 per cent foreign ownership of Iraqi enterprises in all sectors, except natural resources. By-laws, however, imposed certain conditions, such as stipulating that 80 per cent of the work force must be Iraqi, and investors were advised to study these laws carefully before taking any decisions.

Alolom was sworn in earlier in September, along with the other members of Iraq's first post-war cabinet. Born in Najaf, Iraq, in 1954, the new Minister studied petroleum engineering at the University of New Mexico, USA, and the University of Baghdad.

After graduating, his professional career began at the Rumaila oil field in Iraq, where he worked as a petroleum engineer before moving to work in various other countries including the USA and the UK. Alolom is married with three children.

Kuwait merges two ministries to form new Ministry of Energy

Kuwait — Kuwait has announced the creation of a new Ministry of Energy, formed by the merger of two existing ministries, the Ministry of Oil and the Ministry of Water & Electricity.

Sheikh Ahmed Fahad Al-Ahmad Al-Sabah, the Minister of Information who has also been Acting Minister of Oil since

In brief

US marginal wells more important

New York — A major portion of the increase in United States domestic onshore natural gas production in 2002 came from some of the smallest producing wells, according to figures released by the Interstate Oil and Gas Compact Commission. The IOGCC released a preview of its annual survey of marginal oil and natural gas wells at a meeting of the National Governors' Association. "At a time when demand for natural gas is rising, it is clear that we need look no further than our own backyard for the increase in supply our nation needs," said New Mexico Governor and former Energy Secretary Bill Richardson. Marginal or 'stripper' wells are defined as those that produce 60,000 cubic feet/day or less of natural gas.

Norway seeks help to revitalize oil fields

Brussels — The Norwegian oil industry has asked the government for help in revitalizing fallow oil fields, after several years without major discoveries on the continental shelf. The Managing Director of Shell Norway, Johan Vold, said: "We are currently producing more oil and gas than we are discovering on the shelf. Fields are becoming depleted and platforms closed down." In a report submitted to the Norwegian Oil and Energy Ministry, a working group said tax cuts on exploration activities were "urgently needed" and called on the authorities to allow prospecting in new zones. A senior executive at oil and gas group Norsk Hydro, Tore Torvund, commented: "There are considerable petroleum resources on the Norwegian continental shelf, but exploration for these resources is currently inadequate and smaller discoveries are not being developed."

Thailand plans to slash energy costs

Bangkok — The Thai government has announced an ambitious plan to save 3.1 trillion baht (about $7.5 billion) in energy costs over the next 15 years by managing energy consumption, using alternative resources, overhauling national transportation, and restructuring the industrial sector's energy needs. Energy Minister Dr Prommin Lertsuridej outlined the wide-ranging strategy at a workshop chaired by Prime Minister Thaksin Shinawatra, who also wants to make Thailand a regional oil-trading hub. Prommin said that strategies to improve energy efficiency would be carried out from 2007 to 2017, with the aim of cutting energy imports, which presently accounted for 12 per cent of total national imports. The government also envisages the development of an electric train network, promoting a shift to a mass transit system from private vehicles.

the resignation of Dr Adel K Al-Sabeeh in 2001, is the new Minister of Energy.

A government decree announcing the formation of the new Ministry of Energy noted that the employees of the Ministries of Oil and Water & Electricity would be transferred to the new body.

"The Minister of Energy will carry out all provisions incumbent on him according to the laws, decrees and administrative decisions of the Ministers of Water & Electricity and Oil. Also transferred to him or the Ministry of Energy is the responsibility for and supervision of all authorities, public institutions and independent departments of the two ministries," said the decree.

It went on to say that the new Minister of Energy would also supervise the state-owned Kuwait Petroleum Corporation and be the Chairman of its board, as well as having a seat on the Supreme Petroleum Council.

Kuwait has also announced the formation of a new government of 15 ministers, headed by Prime Minister Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah. The naming of the new Kuwaiti cabinet came just a day after the Emir split the posts of Crown Prince and Prime Minister for the first time.

In a separate development, the official Qatar News Agency reported that the Emir of Qatar, Sheikh Hamad bin Khalifa Al-Thani, has appointed the Ministers of Foreign Affairs and Energy & Industry as First and Second Deputy Prime Ministers, respectively.

The Minister of Foreign Affairs, Sheikh Hamad bin Jassim bin Jabr Al-Thani, was appointed First Deputy Prime Minister while the Minister of Energy & Industry, Abdullah bin Hamad Al Attiyah, who is also President of the OPEC Conference, was appointed Second Deputy Prime Minister. The two Ministers will maintain their current portfolios.

Saudi Arabia produced some 2.5 billion barrels of crude oil in 2002

Dhahran — Saudi Arabia produced a total of 2.5 billion barrels of crude oil in 2002, which translated into average output of 6.8 million barrels/day, according to a report from state oil firm Saudi Aramco.

The report, quoted by the *Arab News*, stated that Saudi Aramco exported 1.9bn b of oil last year. The Kingdom's crude oil reserves at the end of 2002 stood at 259.4bn b, or roughly one quarter of the global total, maintaining its status as the world's leading oil supplier.

Saudi Arabia once again met its goal of replacing crude oil production in 2002 with fresh reserves, adding three new fields, the report added.

As a fully integrated global energy company, with partnerships around the world, Saudi Aramco backed up the Kingdom's promise to ensure the stability of the international oil market and reliability of supplies to consumers, it noted.

It is now 70 years since Saudi Aramco signed its first contract with Standard Oil of California. Since it struck oil at the famous well no 7, the company has produced a massive 90bn b of crude oil, the report added.

New pipeline to export Iranian gas to Austria could be ready by 2009

Tehran — Construction of a new pipeline to carry Iranian gas through several Eastern European countries to Austria is due to begin in 2005 and be completed by 2009, according to a report in the *Iran Daily*.

Austrian oil and gas firm OMV was one of five companies which last December agreed to conduct a feasibility study on the pipeline to ship gas from Turkey through Bulgaria, Romania and Hungary before reaching its destination in Austria. The European Commission, which is supporting the project, could undertake to pay half the €3.4 million that the study will cost.

The project would enable countries on the pipeline route to build gas-fired power plants in place of existing coal and aging nuclear plants, helping the EU and its prospective new members improve environmental and safety standards.

Even after these off-takes along the route, the line would still be capable of

delivering an annual 20 billion cubic metres of gas to Baumgarten on the Austria-Slovakia border, the sources said.

The consortium has already held talks with the newly-formed Iranian Gas Export Company, a subsidiary of the National Iranian Oil Company, about pricing and volumes, and has completed its first analysis of gas market development in western and central Europe. The feasibility study is expected to be completed at the end of next year, with the building starting in 2005.

"We haven't decided the exact route but we have bilateral agreements with each country on the border crossing points," said one source.

The initial plan is to use existing lines wherever possible and to boost capacity through looping and compression. The project would make use of the existing Russian Balkan route across the Bosphorus, up the Black Sea coasts of Bulgaria and Romania, then veer north-west across the country to Hungary, trace the HAG line and then go to Baumgarten.

Nigeria's Lukman quits as advisor on energy to President Obasanjo

Photo: Reuters/Heinz-Peter Bader

Vienna — Dr Rilwanu Lukman, a longstanding ambassador of OPEC affairs, has resigned from his position as Advisor on Petroleum and Energy to Nigerian President Olusegun Obasanjo.

Lukman, a former Secretary General of OPEC, told OPEC News Agency Editor Umar Aminu of his decision by telephone from London.

"It is true. I have resigned. There is a time to be in, and there is a time to go. And this is the time to go," said Lukman, although he did not give any further details about his decision.

Deeply involved for many years in the affairs of OPEC, he was the Organization's Secretary General from January 1995 until December 2000, and also served as President of the OPEC Conference for eight consecutive terms.

Lukman became Nigerian Minister of Mines, Power and Steel in 1984. Two years later he was appointed Minister of Petroleum Resources. In 1989, he became Minister of Foreign Affairs and 10 years later he moved to the post of Presidential Advisor on Petroleum and Energy.

In brief

Canadian firm makes oil find in Yemen

New York — Calvalley Petroleum of Canada has announced initial results from its Al Roidhat-1 exploration well, on Block 9 in the Republic of Yemen. Al Roidhat-1, the third in a four-well exploration programme, was drilled and cased to a total depth of 1,159 metres and intersected oil-bearing Qishn sands, which are the primary target in central and eastern Yemen, at a depth of 1,025m. Three oil-bearing Qishn sand layers were encountered, containing 11m, 20m and 6m of net oil pay, respectively. Similar Qishn formations in the Sayun-Masila basin produce at rates ranging from 5,000 barrels/day to 15,000 b/d from a single well.

US to offer blocks in Beaufort Sea

New York — The United States Department of the Interior's Minerals Management Service (MMS) has issued the final notice for Beaufort Sea OCS lease sale 186. The notice describes the sale area and requirements for protecting the environment. The Department said it would offer the entire sale area for lease, with the exception of two deferral areas recommended by Alaska Governor Frank Murkowski. The sale area extends from the Canadian border in the east to near Barrow in the west, and includes around 1,794 whole or partial blocks that encompass about 9.4 million acres offshore Alaska's northern coast in the Beaufort Sea. "The Beaufort Sea continues to hold the best near-term potential for offshore petroleum reserves on the Alaska OCS," said MMS Director Johnnie Burton, adding that the sale would "allow companies to explore for the petroleum that is so vital to our nation's security, while protecting the environment."

UK onshore find still being assessed

Brussels — What is being described as a "major oil find" in an unlikely area of southern England is being further assessed, after the initial announcement of the discovery. The company behind the discovery, Pentex Oil UK, estimates that more than 100 million barrels of oil lie below the farmland in the county of Hampshire, although probably less than 10 per cent of the resources can be extracted. The firm hopes to begin producing oil at the site by the end of the year, if further tests prove positive. Pentex Oil's Managing Director, Jeff Graham, said the discovery on farmland at Avington, near Winchester, represented, "probably the most significant onshore discovery in the UK for the past 20 years, which provides a major stimulus to the UK onshore oil and gas business." The first major UK onshore oil field discovery was in 1973, at Wytch Farm, in Dorset.

In brief

Russia over-reliant on oil — World Bank

BRUSSELS — A World Bank report has warned that Russia is still too heavily reliant on "fickle oil prices", despite its impressive recovery after the economic collapse of five years ago. "Russia's economic performance once again exceeded even the most optimistic expectations in the first half of 2003. "But although, looking back in time, the economy is in better shape than at any other time since the beginning of the reform, growth remains vulnerable," the report said. The Bank stressed that much of the recent recovery had been due to strong prices for oil, which is Russia's main export. The World Bank's Chief Economist in Russia, Christof Ruehl, said that the country's gross domestic product grew by 7.2 per cent in the first six months of this year, compared with 4.3 per cent in the same period of 2002.

PetroChina announces rise in 1H profit

SINGAPORE — PetroChina has announced a net profit of 38.62 billion yuan ($4.65bn) for the first half of this year, up by 102 per cent over the same period in 2002. The increase was primarily due to continuous efforts in enhancing management, reducing costs, increasing production, revenue and efficiency, and also because of an increase in prices and sales volumes of its principal products, such as crude oil, gasoline and diesel, said PetroChina in a statement. For the first time, all four business segments were profitable, the company pointed out. "A significant profit increase was achieved in the refining business, while the chemicals business fully turned from loss to profit-making," said PetroChina President, Chen Geng. Profit from exploration and production operations increased by nearly 70 per cent to 50.27bn yuan from the same period in 2002. Oil and gas output amounted to 444.7 million barrels of oil equivalent, representing an increase of 2.11 per cent from the first half of 2002.

New Sudanese well to produce 40,000 b/d

KHARTOUM — Sudan is to start producing oil from a newly discovered well by the beginning of next year, the Sudan Oil Corporation has announced. The Dafra oil well has the capacity to produce 40,000 barrels/day, according to a report issued by the corporation and quoted by the Kuwait News Agency. It noted that other significant oil discoveries in central and southern Sudan had the potential to boost the country's oil output by 200,000 b/d. The Sudanese government is scheduled to sign two new contracts with Malaysian and Pakistani oil companies to produce more oil from various fields. Sudan currently produces around 270,000 b/d of oil.

UAE and Omani gas networks to be linked by new pipeline soon

Dubai — The construction of a new pipeline from Oman linking with the new Dolphin Energy pipeline at Al Ain in the United Arab Emirates (UAE) means that the UAE and Omani gas networks should be connected soon, according to local media reports.

The Chief Executive of Dolphin Energy, Ahmed Ali Al-Sayegh, told an industry conference in Dubai that the pipeline crosses 182 kilometres of desert and mountains, providing gas to the new power and desalination plants of the Union Water and Electricity Company (UWEC) in Fujairah.

Omani gas will flow to Fujairah until gas from Qatar comes on stream in 2006. The Oman Oil Company will deliver the gas at the Oman-UAE border, while Dolphin Energy will then supply it to UWEC's 656-megawatt power generation plant and 100 million gallons/day desalination plant through its new 24-inch pipeline.

"For the first time, gas will flow from one Gulf Co-operation Council state to another as an estimated 120 million cubic feet/day of gas is supplied for three to five years," Sayegh told the 11th Annual Middle East Petroleum and Gas Conference in Dubai.

By 2006, when Dolphin's new pipeline system from Qatar is expected to come onstream, the Qatari natural gas will flow directly to Fujairah via the Abu Dhabi National Oil Company's existing land lines to Al Ain and thereafter to the new Dolphin link. The link will form the foundation for a future regional gas supply network.

Indonesia sees crude oil production staying constant next year

Jakarta — Indonesian crude oil production is expected to average around 1.15 million barrels/day next year, according to a report by the Antara news agency.

Antara quoted the Energy and Mineral Resources Minister, Dr Purnomo Yusgiantoro, as saying that there had been a decline in production capacity in some oil fields, which was the natural result of depleting oil reserves.

In a bid to raise output, currently below the country's 1.3m b/d OPEC quota, the government has called a fresh round of bids for exploration. Indonesian production reached some 1.27m b/d in 2002.

The Director General of Oil and Gas at the Ministry, Iin Arifin Takhyan, said that 15 international oil and gas companies were bidding for eight of the 11 blocks being offered, while four others were seeking concessions to four blocks not in the offer package. The Ministry expects to award production-sharing contracts for the blocks soon.

The 11 blocks comprise offshore Tarakan, in South Kalimantan; offshore South Madura, in East Java; offshore Bulu, in north-east Java; offshore Rembang, north of Central Java; offshore Madura I and II, in East Java; offshore North Bali I and II; onshore Merangin I and II, in South Sumatra; and offshore East Kangean, in East Java.

The other four blocks include Biliton in the Java Sea; Anambas, in East Kalimantan; and another in West Papua province.

In a separate development, state oil firm Pertamina has proposed to US major ExxonMobil that the two sides should solve their dispute over the Cepu oil field by forming a joint venture to develop it.

CVP to take charge of PDVSA's third-party business ventures

Caracas — Venezuela's state oil firm PDVSA has announced that a specialized subsidiary, the Corporación Venezolana del Petróleo (CVP), is to take over the administration of all business ventures that PDVSA conducts with third parties.

CVP will thus be in charge of the administration of all operating agreements, strategic associations, and shared-profit exploration and production contracts between PDVSA and private companies.

Energy and Mines Minister Rafael Ramirez *(pictured below)* made the announcement during an official ceremony inaugurating CVP offices in Caracas, an event attended by the PDVSA board of directors, ministry officials, and representatives from private national and international companies.

The Venezuelan authorities were seeking to strengthen the state's participation in the petroleum business and its presence in the industry through CVP, said Ramirez.

CVP will be dedicated to administering 33 operational agreements, four strategic associations in the Orinoco oil belt, and three shared-profit exploration and production contracts which were the responsibility of third-party business units in PDVSA's Eastern and Western divisions.

"What we have done is to simply transfer responsibilities to a subsidiary that we will strengthen to achieve the objectives that we have laid out, such as reducing PDVSA's production costs and improving its revenue. Therefore, we are also strengthening PDVSA and the Venezuelan state's petroleum policy," said the new President of CVP, Luis Vierma.

Photo: Reuters/Heinz-Peter Bader

In brief

Ecuador pipeline to be opened soon

QUITO — Final tests are being conducted on Ecuador's new heavy crude pipeline, after more than two years of construction, according to government sources. The pipeline will now be officially inaugurated in October. Ecuador's President, Lucio Gutiérrez, has already attended the opening of the valves of the new pipeline, which will have a capacity of up to 450,000 barrels/day. The line extends some 500 km from the Amazon region to the Pacific Ocean marine terminal at Balao, in Emeraldas province. The cost of the construction has been put at $1.4 billion. Initial pumping began with a flow of 50,000 b/d of petroleum.

Omani oil output, exports fall in 1H03

MUSCAT — Omani oil exports dropped by 9.2 per cent in the first half of this year to 140.5 million barrels, compared with 154.8m b in the corresponding period last year, according to official statistics from the country's National Economy Ministry. "Omani crude production also went down, to 150.7m b, during the six months to the end of June, compared with 164.8m b in the same period of 2002," the report said. Average output in the first half of 2003 stood at 833,000 barrels/day, down from 910,000 b/d in the same period last year. Omani crude oil prices, however, surged this year by 21.7 per cent, compared with the first half of 2002. According to the statistics, Japan topped the list of importers of Omani crude with 41.6m b during the first half of 2003, followed by China and Thailand. The country's natural gas production increased to 356.3 million cubic feet in the period under review, compared with 330m cu ft in the first six months of 2002.

Oil majors report surge in 2Q earnings

NEW YORK — Twenty-two major energy companies reported overall net income (excluding unusual items) of $10 billion on revenues of $164bn during the second quarter of 2003, according to the US Energy Information Administration (EIA). The level of net income for the quarter was 96 per cent higher than in the second quarter of 2002, it noted. The overall increase in net income was due primarily to higher crude oil and natural gas prices, said the EIA. Overall, the petroleum line of business registered a 64 per cent increase in net income between the second quarter of last year and this year, as a 49 per cent increase in oil and gas production net income was augmented by a 151 per cent increase in income from refining and marketing. In 2Q03, earnings from chemical operations and worldwide gas and power operations also increased.

In brief

Energy ministers to head blackout enquiry
New York — The United States Secretary of Energy, Spencer Abraham, and the Canadian Minister of Natural Resources, Herb Dhaliwal, are to co-chair a joint US-Canadian task force to investigate the causes of the massive power outage in August that left large parts of the eastern USA and Canada without electricity. "Minister Dhaliwal and I will start working immediately to find out what caused this massive blackout and to keep it from happening again," Abraham said. "Reliable electric power is the lifeblood of the economy for both our countries. And it's more than just a personal convenience, it's essential to the health and safety of our citizens," he added. Federal, state, provincial, and local authorities, as well as private sector electricity providers, will be invited to contribute to the work of the task force.

Oil firms to explore East China Sea
Hong Kong — The China National Offshore Oil Corporation (CNOOC), the China Petrochemical Corporation (Sinopec), Royal Dutch/Shell, and Unocal have finalised an agreement to explore, develop and market natural gas, oil and condensate in the East China Sea. The accord covers three exploration and two development contract areas of the Xihu trough, covering some 22,000 sq km, CNOOC said in a statement. CNOOC and Sinopec each have a 30 per cent interest, with Shell and Unocal each holding a 20 per cent stake. CNOOC will be the operator of the five contract areas with a number of gas discoveries made earlier. The foreign partners would assume 100 per cent risk during the exploration stage, said CNOOC, adding that exploration would be intensified in the largely unexplored areas. The first development under the contracts would be in the Chunxiao development area, which was expected to come on stream in mid-2005.

Drilling starts on Alpha North field
Brussels — Drilling operations have started on the first production well of the Statoil-operated Alpha North satellite in the North Sea's Sleipner West gas and condensate field. Alpha North would be developed with three or four wells and a sub-sea production system, the company said. According to Turid Eikebu Alfsen, Head of the Sleipner Drilling and Well-completion Department, drilling was expected to take about a year. The rig will perform drilling and completion of three wells on the Alpha North structure, which will be tied back to the Sleipner A platform, via an 18-km pipeline to the Sleipner T gas treatment platform. Alpha North reserves are put at 13 bn cu m of gas and 32m b of condensate.

All staff who previously worked for the third-party business units would now be transferred to CVP, said Vierma. The new CVP board consists of Vierma as President, Vice-President Rafael Lander, Western Director Oscar Fanti, Eastern Director Nehil Duque, and two other Directors, Angel Gonzalez and Jose Felix Rivas.

Dividends obtained by PDVSA from production activities through operational agreements and strategic associations would continue going to the state holding company, and not CVP, Vierma added.

"CVP will only be a subsidiary of an administrative and controlling nature. That will guarantee that PDVSA will conserve its financial solidity with the international markets," he said.

Vierma went on to say that PDVSA had already held meetings with its partners in the strategic associations and operational agreements to explain CVP's role.

New chief executives for Indonesia's Pertamina and Algeria's Sonatrach

Jakarta — Indonesia's state oil firm Pertamina has appointed its Downstream Director, Ariffi Nawawi, as the company's new President Director, it was announced in Jakarta in September.

Speaking to journalists in Jakarta about his plans for the company, Nawawi said: "I will continue the programmes that were already being carried out by the former chief, but I will focus on making Pertamina profit-oriented.

"I will make every effort to increase Pertamina's oil production and to expand petrochemical business. Pertamina has refineries and refinery products are the base feedstock for petrochemicals. Pertamina should have no problem in expanding its petrochemical businesses," he was quoted as saying by Reuters.

Nawawi replaces Baihaki Hakim, a former president of US oil company Caltex Pacific Indonesia, who was named Head of Pertamina by Indonesia's former President Abdurrahman Wahid in 2000. No reason was given for the replacement of Hakim, but Pertamina is preparing for eventual privatization.

In a separate development, Algeria has appointed the country's OPEC Governor, Mohamed Meziane, as the new Managing Chairman of state oil and gas firm Sonatrach. He replaces Djamel Eddine Khene, who died in July this year.

Before his appointment as Head of Sonatrach, Meziane was Director of the Hydrocarbons Department at the Energy and Mines Ministry. The Minister, Dr Chakib Khelil, described Meziane as a manager "possessing human qualities, serene, and having great competence and experience, able to stoutly serve the country's hydrocarbons sector."

Meziane is a graduate of the Algiers Engineering School (chemical engineering), and the Algerian Petroleum Institute (refining and petrochemicals). He began his career at Sonatrach in 1967 as an engineer at the Arzew refinery. He left the plant in 1973 to become Director at the Algiers refinery.

In 1978, Meziane was placed in charge of the co-ordination and exploitation of Algeria's refineries, before being appointed Vice-President in charge of petrochemicals, LNG and refining in 1980.

After the restructuring of Sonatrach at the beginning of the 1980s, he occupied various key positions in the Energy Ministry, including Director of Industrial Security, Director of International Exchanges, Head of the Minister's Office, and Director of the Hydrocarbons Department.

Algeria's Ohanet gas fields due onstream in coming weeks

Algiers — Algeria's Ohanet gas and condensate fields are scheduled to enter into production soon, according to a report in the Paris-based publication *Arab Oil and Gas.*

Located in the Illizi basin, in the south-east of Algeria, the four Ohanet gas fields have a combined gas production capacity of around 20 million cubic metres/day.

According to sources from Australian firm BHP Billiton, which is the operator of the project, development work on the scheme is coming to an end, and production should start soon. BHP Bil-

liton, which has a 45 per cent interest in the development, has invested $464m in the scheme.

Initially, BHP held a 60 per cent stake in the project, before it sold 15 per cent of its share to fellow Australian company Woodside Petroleum in 2001. The other foreign partners in the project are the Japan Ohanet Oil and Gas Co and Petrofac Resources of the United States, with 30 per cent and 10 per cent shares, respectively.

The Ohanet contract, worth about $1.0 billion in total, was signed in July 2000 by the Algerian state oil and gas company, Sonatrach, and BHP Billiton. The project entails the development and exploitation of Ohanet's natural gas reserves, with a view to producing liquefied natural gas, liquefied petroleum gas (LPG), and condensate.

Kuwait's northern oil field development vital, says Energy Minister

Kuwait — The Kuwaiti Minister of Energy, Sheikh Ahmad Fahad Al-Ahmad Al-Sabah *(pictured below)*, has reaffirmed that the project to develop the country's northern oil fields is of vital importance to the nation.

Speaking to reporters following a meeting with the parliamentary finance and economic committee, Sheikh Ahmad said all details concerning the scheme would be openly revealed to the committee later, so that a legal and constitutional framework could be mapped out.

Article 152 of the Kuwaiti constitution stipulates that a law has to be drafted for investment in any of the country's state-owned natural resources.

The parliamentary committee was meeting to discuss technical and other details related to boosting output from the northern fields, as well as the issue of assigning international oil companies to work on the project.

Sheikh Ahmad also confirmed that the project would not violate the constitution regarding the participation of foreign companies in the Kuwaiti oil industry.

"The project is necessary for Kuwait's long-term oil strategy, and the government has preferred to refer it to the National Assembly to avoid any doubts relevant to the constitution," the Kuwaiti News Agency quoted him as saying.

Photo: Reuters/Heinz-Peter Bader

In brief

EIA sees firm oil prices during 2003

NEW YORK — The United States Energy Information Administration (EIA) has forecast that crude oil prices will remain firm throughout the rest of 2003. In the latest update of its Short-term energy outlook, the EIA said that prices would remain buoyant despite the expected large increases in non-OPEC oil supplies, largely because of the tight OECD commercial oil stocks. Until OECD commercial inventories were rebuilt above observed five-year lows, which was not expected to occur until autumn, the price of WTI should remain near current levels, then gradually slide to $26/barrel during 2004, as Iraqi oil exports returned to near pre-war levels next year, said the EIA.

Firms interested in Norway bids

BRUSSELS — Norway's Ministry of Petroleum and Energy has announced that 14 companies have declared an interest in developing 43 blocks on the Norwegian Continental Shelf. The companies are Norsk Agip, BP, ChevronTexaco, ConocoPhillips, Danish Oil and Natural Gas, ExxonMobil, Gaz de France, Idemitsu Petroleum Norge, Marathon Petroleum Norge, Norsk Hydro, RWE-Dea, Norske Shell, Statoil, and Total. The ministry said it expected to announce which blocks had been chosen for development by the end of 2003, so that awards could take place before the summer next year. "The eighteenth licensing round will give the companies access to frontier acreage, which is important to increase the exploration activity and to achieve our long-term scenario," said Petroleum and Energy Minister Einar Steensnaes. In the country's seventeenth licensing round, 16 companies were nominated for 93 blocks.

Statoil makes oil find in gas well

BRUSSELS — Norway's Statoil has announced the surprise discovery of oil at the Ellida field in the Norwegian Sea, where it was previously thought that there was only gas. "I can confirm that we have discovered oil at the Ellida field. We have tested and taken samples, but it is too early to say anything about the size of the find, " said Statoil spokesman Kristofer Hetland. Statoil, the field operator, was now drilling to a secondary and deeper depth on Ellida and would probably complete the well within three weeks, Hetland added. The field lies 60 km north of the huge Ormen Lange gas development. Statoil spudded the first Ellida well in June in 1,200 metres of water with Smedvig's *West Navigator* drilling ship. The Norwegian daily *Aftenposten* reported earlier that the Ellida field could turn out to be the first major oil discovery on the Norwegian continental shelf in over a decade.

In brief

Shell to pay $49 million for gas flaring

New York — The US Minerals Management Service (MMS) has reached a $49 million settlement with Shell Oil over unauthorized flaring or venting of large volumes of natural gas at the firm's Auger platform and other facilities in the Gulf of Mexico. The agreement, the largest in the MMS's history, was reached in co-operation with the Department of the Interior's Office of the Inspector General, the US Attorney's Office for the Western District of Louisiana, and the Department of Justice. "A settlement of this size sends a clear message to industry that the MMS is serious about compliance with its regulations," said MMS Director Johnnie Burton. "The MMS continues to ensure the American people receive the royalties that are due from the production of their natural gas, and works to conserve our nation's resources and to ensure safe and pollution-free offshore operations," he added.

Chad-Cameroon project produces first oil

Abuja — First oil has been produced from the Chad-Cameroon oil development and pipeline project, in which US major ChevronTexaco has a 25 per cent interest. Chevron Nigeria said in a statement: "With this significant milestone achieved, pipeline fill activities under the project have begun towards a production of approximately 225,000 barrels/day by year-end 2003." Completed one year ahead of schedule, the pipeline will transport landlocked oil 1,056 km from the Kome, Miandoum and Kome oil fields, near Doba in southern Chad, through eastern Cameroon and on to an export terminal at Kribi, on the Gulf of Guinea. There the oil will be shipped from a floating storage and offloading vessel, located 11 km offshore, for export to world markets.

48 firms interested in Philippines oil blocks

Manila — The Philippines' Department of Energy has announced that 48 local and international oil and gas companies have shown interest in the 46 new blocks being offered in the country. The blocks will be put out to tender out soon through the newly- devised public contracting round. The blocks are in basins estimated to hold 200-250 million barrels of oil equivalent, said the Department. The prospects cover 222,914 sq km in shallow to ultra-deep waters located near proven petroleum structures in north-west Palawan and in vast frontier basins in Southeast Asia and east Palawan, Sulu Sea and Reed Bank. Applicants have seven months starting in August to evaluate the petroleum potential of the 46 blocks from data being made available by the Department.

The Head of the parliamentary committee, Abdulwahab Al-Haroun, said that Sheikh Ahmad had shown readiness to provide the committee with all the necessary data concerning a specific time schedule for the project. He added that the committee would continue meetings following the summer recess.

Asked whether a law would be passed for each of the project's agreements, Al-Haroun said the government had undertaken to carry out the scheme without violating the relevant constitutional articles.

Qatar and ExxonMobil award contracts for QatarGas II expansion

Dallas — Qatar has awarded the main front-end engineering and design (FEED) phase contracts for its QatarGas II liquefied natural gas expansion project to the Chiyoda Corporation of Japan for the onshore facilities and to M W Kellogg for the receiving terminal.

The offshore FEED contract would be awarded later this year, according to the Qatari Minister of Energy & Industry and Chairman of state oil firm Qatar Petroleum (QP), Abdullah bin Hamad Al Attiyah.

Qatargas II is a joint venture between QP (70 per cent) and Exxon Mobil (30 per cent). It will include the development of new blocks in Qatar's giant North field; onshore liquefaction trains, each capable of producing about 7.8 million tonnes/year of LNG; a fleet of large LNG carriers, and regasification terminal facilities.

The LNG onshore facilities will be constructed at the existing QatarGas LNG plant, which has been operating since 1996 and where three trains are currently producing around 8m t/y of LNG. Gas from the new QatarGas II trains will be targeted for sale in the United Kingdom and northern Europe.

"QatarGas II is a key element in Qatar's long-term plan of increasing North field monetization and LNG exports to over 45m t/y by 2010," Al Attiyah said.

ExxonMobil Director and Executive Vice-President, Harry J Longwell, commented: "ExxonMobil is pleased with the progress which has been made by both parties on this world-class LNG venture. I would like to extend my appreciation to the joint team for their dedication and hard work exerted in reaching this milestone."

Since signing a preliminary agreement in June 2002, the companies have completed feasibility studies and pre-FEED work for all project elements.

In a separate development, Qatar's other major LNG company, RasGas, has announced that its LNG production in 2002 totalled 6.0m t, an increase of 10 per cent over the previous year.

RasGas also made progress on its expansion activities with 78 per cent of the construction of train three production facilities achieved by the end of the year. The company fulfilled all delivery requirements to its primary customer Kogas of South Korea, shipping 77 cargoes of LNG.

The firm's marketing committee aggressively promoted the company's excess production capacity, which subsequently resulted in 28 LNG cargoes delivered on the spot market.

Shell Nigeria announces record oil production at offshore EA field

Abuja — Royal Dutch/Shell's Nigeria subsidiary, the Shell Petroleum Development Company (SPDC), has announced that it has achieved output of over 100,000 barrels/day at its offshore EA oil field, the highest since it came onstream in December last year.

According to the latest edition of the *Shell Bulletin*, a total of 13 tankers had left the field's floating production, storage and offloading vessel, *Sea Eagle*, laden with some 9.2 million b of oil. The first tanker, *MV Eagle Vermont*, lifted 791,000 b in March.

The magazine said that the new production level was the result of several optimization measures which had been put in place by the EA team. The field produced its 10 millionth barrel of oil on July 18, just as 30 wells had been completed, out of a planned 35 for the first phase of the drilling programme.

The field's wells have a combined out-

put potential of 129,000 b/d of oil, which is seen rising to 150,000 b/d from 35 wells by the end of phase one of the project.

The Chief Petroleum Engineer working on the EA field, Pat Muoghalu, said: "More than anything else, teamwork is at the heart of the achievements at EA.

"All of us, from the petroleum engineer to the well engineer and community liaison officer, see ourselves as members of one family and working towards one goal," he added.

New projects will boost Iran's oil production capacity, says Zangeneh

Tehran — Iran's oil production capacity is due to expand by March next year, as more new projects come onstream, according to Petroleum Minister Bijan Namdar Zangeneh *(pictured below)*.

"The current crude production capacity is about 4.2 million b/d. This will further increase in the current Iranian year (March 2003–04) with the completion of several projects," he was quoted as saying by the Iranian News Agency.

Separately, the *Middle East Economic Survey* newsletter reported that Iran's crude supply hit 4.0m b/d for a second consecutive month in July. It said the higher volume was achieved by selling oil from storage tanks stockpiled in the lead-up to the US-led war on Iraq.

Elaborating on his Ministry's strategy to prevent a decline in exports, in the wake of a rise in domestic energy consumption, Zangeneh said that apart from plans to substantially increase the country's oil production capacity, the ministry had also drawn up plans to control the rising trend of domestic energy consumption.

"We plan to achieve this by replacing oil with natural gas as the main source of energy, by establishing compressed natural gas, or condensed natural gas stations, while negotiations are under way with car manufacturers for making it binding on them to produce double-fuelled cars, compatible with European standards," he said.

Photo: Heinz-Peter Bader

Iranian gasoline consumption rose by 11.5m litres/day in the first five months of the current Iranian year (starting on March 21) to reach 55m lt/d.

Denying reports that foreign oil firms were nervous about investing in Iran, Zangeneh said: "Negotiations are still under way for the joint implementation of several plans which had been put up for tender, though we haven't reached any final contract yet."

In brief

Russian oil output hits fresh high

Brussels — Russian oil output hit a new high in July, although pipeline exports fell slightly. According to data released by the Russian Energy Ministry, July oil exports via the state pipeline monopoly Transneft fell by 50,000 barrels/day to 3.48 million b/d, but oil output rose to 8.50m b/d, up from 8.38m b/d in June. European traders said Russian export capacity, the second-largest in the world after Saudi Arabia, was being utilized to the maximum and would stay at these levels until the end of the year. "I can't see another significant boost before Transneft upgrades Primorsk (on the Gulf of Finland) by another 240,000 b/d by the end of 2003," said one trader. Russian oil output rose by 11 per cent in July, compared with the same month last year, while exports increased by 13 per cent year-on-year. Russian oil production has risen by nearly 50 per cent over the last five years. Transneft carries more than three-quarters of Russia's total oil exports.

ChevronTexaco signs Gorgon LNG deal

Perth — US major ChevronTexaco has signed a deal with the Gorgon joint venture in Australia for the supply of liquefied natural gas for distribution to markets on the West Coast of North America. Under terms of the deal, a Chevron Texaco affiliate will enter into confidential negotiations with the Gorgon JV, which could lead to the supply of at least two million tonnes/year of LNG annually over a 20-year period, beginning in 2008. The Gorgon gas field, located offshore Western Australia, has certified proven hydrocarbon reserves of 12.9 trillion cubic feet, with total natural gas resources in the greater Gorgon area exceeding 40tr cu ft. As well as ChevronTexaco, which is also the operator, the other Gorgon participants include Royal Dutch/Shell and ExxonMobil. ChevronTexaco is currently seeking approvals to permit the construction and operation of an LNG receiving terminal and regasification facility offshore Baja California which would be capable of receiving Gorgon LNG.

Statoil finds more oil offshore Angola

Brussels — Norwegian energy group Statoil has announced that more oil had been found in Angola's block 15, operated by US major ExxonMobil. "Drilled in 1,295 metres of water to a depth of 3,140m, the discovery well is estimated by the operator to be capable of flowing just over 5,000 barrels/day," Statoil said in a statement. ExxonMobil has estimated that the discoveries in block 15, made over the past five years, add up to more than four billion barrels of recoverable oil, the statement added.

July/ August

This section is based on the OPEC Monthly Oil Market Report prepared by the Research Division of the Secretariat — published mid-month and containing up-to-date analysis, additional information, graphs and tables. The publication may be downloaded in PDF format from our Web site (www.opec.org), provided OPEC is credited as the source for any usage.

Crude oil price movements

July

The OPEC Reference Basket[1] rose for the third consecutive month, accumulating more than $2/barrel from the post-war low seen in April. The Basket gained another 69¢/b, or 2.6 per cent, in July over the previous month to average $27.43/b. In comparison to the first seven months of last year, the January–July cumulative Basket price for 2003 showed a rise of $5.34/b, or 23.58 per cent, with the year-to-date average coming just one cent short of the $28/b upper limit of the price band (see **Table A**).

The Basket began the month on a sound footing, peaked at $27.96/b in the week of July 17, and then made a turn in the week of July 24 to fall to $27.50/b, which was followed by a further loss for the last week of the month. The Basket recovered at the beginning of August, surging $1.46/b, or 5.35 per cent, to average $28.72/b in the week ending August 7. This was followed by another 6¢/b gain during the second week for an average of $28.78/b. All of the seven Basket components ended the month higher, with Dubai leading the gains, followed closely by Arab Light and the light sweet Nigerian Bonny Light. Saharan Blend, Tia Juana Light and Isthmus posted smaller recoveries, with Minas gaining only 14¢/b.

Atlantic benchmark crudes strengthened further in July, with West Texas Intermediate (WTI) spot prices surging above the $32/b level, while its European counterpart, dated Brent, lingered around $29.5/b. Oil markets started the month bullish on concern that a nationwide workers' strike in Nigeria could disrupt output and on the shutting in of operations on the LOOP (Louisiana Offshore Oil Port) menaced by the approaching tropical storm Bill. Markets slipped following a compromise solution to the general strike in Nigeria and the tropical storm's dissipation. A second tropical storm, this time named Claudette, and several refinery glitches in the USA pushed prices above the $32/b mark. Claudette proved more disruptive than her predecessor, leading to the shut-down of more than 330,000 b/d, for a total loss of approximately 1.4 million barrels. Preliminary statistics for July showed OPEC-10 production to have remained largely unchanged at 25.75m b/d from the 25.64m b/d recorded in June, only 350,000 b/d above the 25.4m b/d actual agreed target. The satisfactory compliance level, combined with the fact that oil markets remained stable and well-supplied at prices within the agreed range, prompted the 126th (Extraordinary) Meeting of the Conference convened in Vienna on July 31 to keep current production levels unchanged until its next Meeting scheduled for September 24. Nonetheless, Iraq remains the real wildcard on the short- and medium-term oil market outlook. Previous estimates of Iraq's post-war production recovery have proved to be overly optimistic. The data indicates that Iraq managed to produce only 360,000 b/d in May, 490,000 b/d in June and somewhere between 600,000 to 700,000 b/d in July, while exporting 315,000 b/d in June (from pre-war inventories) and only 260,000 to 450,000 b/d in July. The latest estimates call for a much less speedy recovery. If the security situation is controlled and looting is stopped, then the pre-war production level of 2.8m b/d could be reached by the 2Q04, while 1.5m b/d and 2.0m b/d are possible in October and December of the current year. Gasoline demand in the USA has underperformed with respect to the year 2002, while American Petroleum Institute (API) figures show stocks remain at a low 5.6m b, or 2.5 per cent below the same period last year. Finally, the onset of the high demand 3Q and 4Q, combined with low inventories in the three major consuming centres (the USA, EU and Japan), seems to have kept speculators on the edge. According to the Commodity Futures Trading Commission's (CFTC) Commitments of Traders Report, speculators continue to build their long positions in WTI futures, which indicates an assumption that prices will rise, while piling up long positions in unleaded gasoline futures to historical highs. This might have added a few dollars to the price of crude and several cents

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

	Jul 03	Aug 03	Year-to-date average 2002	Year-to-date average 2003
Reference Basket	**27.43**	**28.63**	**23.03**	**28.07**
Arabian Light	27.24	28.36	23.36	27.47
Dubai	26.66	27.66	22.92	26.58
Bonny Light	28.39	29.79	23.92	28.71
Saharan Blend	27.91	29.59	23.57	28.63
Minas	27.33	28.38	23.48	29.47
Tia Juana Light	26.71	27.52	21.11	27.30
Isthmus	27.79	29.08	22.86	28.32
Other crudes				
Brent	28.34	29.78	23.86	28.78
WTI	30.61	31.60	24.81	31.40
Differentials				
WTI/Brent	2.27	1.82	0.95	2.62
Brent/Dubai	1.68	2.12	0.94	2.20

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

to the price of gasoline that could vanish at any time.

US and European markets

A shortage of supply and high refinery utilization to meet local product demand in the WTI price-setting mid-continent (PADD2) has maintained benchmark WTI's quotations at an unusually high level and attracted a wave of cargoes to the US East and Gulf coasts. However, as weeks will pass before this oil reaches its inland destinations, dislocation might not start to ease until August. Meanwhile, the premium of light-sweet crudes to heavy sour grades began to shrink at mid-month as sour crude demand was driven up by strong fuel oil consumption and OPEC's production cuts were starting to filter through the supply chain. Demand for high sulphur crudes was further enhanced by diminishing availability of Russian Urals and the lack of clarity and assurance on Iraqi Basrah exports. Likewise, high natural gas prices, stuck at almost twice last year's level, prompted a switch to fuel oil which caused a price rise of as much as 12 per cent so far this year. In Europe, healthy refining margins, stronger Urals prices and increased arbitrage demand to the USA underpinned the need for sweet North Sea cargoes. Firm fuel oil demand has pushed heavy crude oil prices in the Mediterranean to record levels against light grades. The unusually long and hot European summer has severely curtailed the use of hydro and nuclear power for electricity generation.

Far East market

Asia Pacific demand remained sluggish during most of July as key regional buyers have cut runs on the back of unworkable refining margins, brought forward maintenance programmes and switched back to nuclear reactors for electricity generation.

Chinese refiners implemented run cuts, while Indian refineries underwent maintenance. Likewise, Japanese demand continued its consistent decline as the country's biggest utility restarted a third nuclear reactor and was scheduled to have eight reactors operational by the beginning of August. Towards the month end, when trading for September deliveries began, demand for distillate-rich grades such as Oman and Tapis recovered as refiners prepared for the coming distillate season.

August

The OPEC Reference Basket rose for the fourth consecutive month, recovering $3.29/b from the year's low point in April at $25.34/b. The Basket surged by $1.20/b, or 4.4 per cent, in August to average $28.63/b. Compared to the first eight months of 2002, the January–August cumulative Basket price for this year showed a gain of $5.04 /b, or 22 per cent, with the year-to-date average already exceeding the upper limit of the price band mechanism at $28.07/b. After the rise in late August, the Basket plummeted over the two subsequent weeks, initially losing $1.26/b in the week ending September 4 before falling a further $1.19/b to average $26.44/b in the second week of September (see **Table A**).

The Basket started the month on a strong note, gaining $1.40/b to average $28.66/b in the week ending August 7, before advancing another 6¢/b in the following week to average $28.72/b. The Basket then retreated in the third week losing 49¢/b, or 1.7 per cent, to average $28.23/b for the week, still above the upper limit of the price band mechanism. It recovered the upside momentum during the last week of August, advancing 66¢/b, or 2.34 per cent, to average $28.89/b. All seven Basket components ended higher, with Saharan Blend leading the gains, followed by light-sweet Nigerian Bonny Light and Isthmus. Arab Light, Minas and Dubai posted smaller gains, with Tia Juana Light registering the month's smallest recovery.

Demand for motor gasoline in the USA, which dipped in May and early June, made a significant recovery in the first week of August, underpinning crude oil prices and creating a mini gasoline crisis. According to the EIA's latest figures, gasoline demand soared to 9.3–9.6m b/d in recent weeks. Relatively low gasoline stocks in the USA, at 196.9m b, or just six per cent on a y-o-y basis, are not enough to justify the inflated $1.12/g price. Given the steep 15¢/g backwardation between the New York Mercantile Exchange (NYMEX) September front contract and the October contract seen in late August, one can expect the strong gasoline prices to undergo a correction. The late summer gasoline spike lifted prices for the US benchmark, WTI, well above $32/b and widened the spread versus its North Sea counterpart, attracting a flow of cargoes to the West Coast. The gasoline demand boom was not restricted to the USA. In Asia-Pacific, refinery problems have prompted Indonesia to double its usual spot requirements, while a scandal in Nippon Oil, the largest Japanese refining company, forced the closure of two refineries while a third refinery was hit by a fire. Judging from the latest news coming from Iraq, production is estimated to average around 1.05m b/d in 3Q of 2003 and 1.6m b/d in the fourth, reaching 1.8–1.9m b/d in December. On the export side, preliminary figures show that shipments averaged approximately 700,000 b/d in August and are expected to rise to 900,000 b/d in the following three months to reach 1m b/d in December. No export volumes are foreseen from the northern fields until the Kirkuk/Ceyhan (Turkey) pipeline is repaired, which should occur in mid-October. In the meantime, around 200,000 b/d of Kirkuk production is being re-injected following degasification. Early in September, the exuberant rise in the gasoline price, which, in turn, had pulled up crude oil prices, suffered a strong correction. On Wednesday September 2, oil prices plunged, with losses ranging from 4–8 per cent. Even more pronounced was the eight per cent fall in gasoline futures following the Labour Day holiday. After the correction, the major benchmark crudes, WTI and Brent, were around $30/b and $28/b, respectively, levels more consistent with actual market fundamentals. The next price setter could be around the corner: distillate, specifically heating oil. This year the cold and prolonged winter made US refiners run their plants at maximum distillate yield to cope with demand. This prevented a switch to gasoline production and started the driving season off with compromise stocks. Now US refiners are faced with a similar situation of having maximized gasoline production until the end of the driving season, which prevented them from producing much-needed heating oil for the approaching autumn and winter quarters. The chance of a severe winter and both planned and unplanned autumn refinery maintenance in the USA could make matters worse.

US and European markets

The US driving season was slow to arrive, but consumption finally materi-

alized in August with apparent demand topping 9.5m b/d at mid-month. The gasoline boom made refiners particularly thirsty for gasoline-rich crudes and despite import levels exceeding 10m b/d in the past few weeks, refiners were unable to build up either crude or product stocks. Crude inventories closed the month at 284.9m b, falling to 278.2m b in the first week of September, or 20.1m b below the same period of last year. The strong rebound in gasoline demand helped create the conditions for a price spike in the gasoline futures market which raised WTI prices above $32/b and widened the premium to Brent, Forcados and Oseberg (BFO), thus attracting a steady flow of crude to the US East and Gulf coasts. The huge power cuts across the US eastern region and Canada on August 14 affected several refineries, exacerbating concern over low product stock levels and creating the conditions for volatile trading. Strong fuel oil demand caused by a shortage of hydropower during the prolonged summer in Europe underpinned demand for heavier sour grades. The particularly long summer has caused river levels to drop, making the transport of products by barges difficult, creating dislocations and leaving inland stocks at compromised levels. EU product stocks at the end of August were 18.8m b below the same period last year while distillate stocks were 21.6m b lower.

Far East market

A two-tiered market developed in Asia during August. Heavier sour grades, such as Oman, dipped to discounts to their official selling price (OSP) on limited demand and the prospects of increasing competition from rising exports of Basrah Light as Iraq's production and exports recovered. Abu Dhabi's light sour, kerosene-rich Murban traded at strong premiums to its OSP, reflecting rising demand ahead of the winter season in north-east Asia. Growing demand for distillates ahead of the heating season underpinned distillate-rich regional grades and widened the spread to rival West African crudes. This, combined with low freight rates and a narrower bfo to the Dubai premium, induced the eastward movement of Bonny Light and several other grades. As a result, it is estimated that approximately 800,000 b/d of Brent-related Atlantic basin crudes were sold to the Asia-Pacific market in September. Towards the end of the month, when trading for October allocations began, buyers snapped up October-loading cargoes of distillate-rich Middle Eastern grades, causing premiums to soar. Prices received a further boost as October and November supplies of Abu Dhabi's Upper Zakum were lower due to maintenance.

Table B: Selected refined product prices — $/b

		Jun 03	Jul 03	Aug 03	Change Aug/Jul
US Gulf					
Regular gasoline	*(unleaded)*	34.96	37.36	41.48	+4.12
Gasoil	*(0.2% S)*	31.07	32.22	33.57	+1.35
Fuel oil	*(3.0% S)*	22.35	25.64	25.95	+0.31
Rotterdam					
Premium gasoline	*(unleaded)*	33.15	35.36	38.04	+2.68
Gasoil	*(0.2% S)*	30.57	31.08	32.47	+1.39
Fuel oil	*(3.5% S)*	21.57	24.15	23.72	–0.43
Singapore					
Premium gasoline	*(unleaded)*	31.59	34.59	37.30	+2.71
Gasoil	*(0.5% S)*	29.33	29.57	33.27	+3.70
Fuel oil	*(380 cst)*	24.51	26.18	24.92	–1.26

Product markets and refinery operations

July

Supported by strong regional fundamentals in all three main global markets, most product price rises were more pronounced than the increases in their underlying crude counterparts in July. As a result, refining margins improved, with the US Gulf centre leading gains. However, this did little to refinery throughput, which remained almost unchanged in the USA and Europe (see **Table B**).

US Gulf market

Average monthly product prices in the US Gulf continued to soar further in July, shrugging off a marginal loss in their underlying crude counterpart, WTI. Product price rises were led by a 15 per cent surge in high-sulphur fuel oil (HSFO), followed by a seven per cent gain in regular gasoline and then a four per cent price increase in gasoil. Nonetheless, the four-week moving average published by the Energy Information Agency (EIA) shows strong gasoline demand for July at nearly 9.2m b/d, representing a 2.7 per cent increase on June's level and a 100,000 b/d jump on the year before. Meanwhile, US gasoline output was enhanced to meet rising demand, with gasoline yield registering 54.7 per cent, or roughly 8.7m b/d on average, and imports remaining a robust 900,000 b/d. This increased gasoline output hindered distillate production. US distillate demand in the same period was close to 3.6m b/d, or almost three per cent above the previous year, but this was still four per cent below last month's level. Lower demand caused distillate stocks to rise sharply, exceeding 9m b on a monthly basis. High sulphur distillate (ie, heating oil) inventories still showed a deficit of around 30 per cent from the preceding year's level. Despite falling demand, HSFO supply remained tight, stemming from two driving forces, the diversion of Latin American fuel oil cargoes to more lucrative world markets and an increased fuel oil intake by refiners looking to boost gasoline and distillate products.

The large increase in product prices, in particular gasoline which comprises the main US refined product, was the underlying factor for the sharp rise in refining margins in July in the US Gulf Coast (see **Table B**).

Despite improving economics, average

Table C: Refinery operations in selected OECD countries

	Refinery throughput (m b/d)			Refinery utilization (%)[1]		
	Jun 03	Jul 03	Aug 03	Jun 03	Jul 03	Aug 03
USA	15.93	15.86	15.90	95.8	95.4	95.7
France	1.69	1.59	1.44	88.8	83.5	75.4
Germany	2.11	1.92	2.21	92.8	84.6	97.7
Italy	1.70	1.86 R	1.84	74.0	80.8 R	79.8
UK	1.51	1.51	1.53	84.4	84.3	85.6
Eur-16	11.82 R	11.82 R	11.87	86.1	86.1 R	86.5
Japan	3.73 R	3.96 R	3.88	78.3	83.2 R	81.4

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

US refinery throughput dipped slightly to 15.86m b/d in July. The equivalent utilization rate was 95.4 per cent, representing a minor increase above the corresponding period last year (see **Table C**).

Rotterdam market

Average July product prices in Rotterdam in July continued last month's upward trend, although displaying differing incremental magnitudes amid a three per cent increase in the monthly average of the marker crude, Brent. As in the main US product markets, HSFO faired best, increasing its monthly average a considerable 12 per cent, while gasoline rose seven per cent, and gasoil was up two per cent (see **Table B**). Nonetheless, European product markets were primarily shaped by mixed regional factors. Gasoline, for instance, remained firm as a string of refinery closures on scheduled maintenance in north and south Europe tightened supplies and offset lower activity in transatlantic arbitrages. Lacklustre trading dominated the European distillate market in north-west Europe, brought about by a drop-off in German end-user purchases. However, the gasoil price did firm again in the Mediterranean towards the final part of the month, which offered price support in the north-west European markets. HSFO was in tight supply in north-west Europe, owing in a large part to thin Russian supply, as a sharp rise in the price of Urals crude prompted Russian companies to boost exports at the expense of HSFO. This coincided with robust seasonal bunker demand in the Mediterranean and the continuing trend of shipping very large crude carriers (VLCCS) laden with fuel oil to Asian markets. The exceptionally hot summer across Europe, particularly severe in the southern parts of the continent, translated into strong utility demand for its sister product, low-sulphur fuel oil (LSFO) to meet rising European cooling requirements, as low water levels in major European rivers reduced electricity generation from other sources such as hydro and nuclear reactors.

Although the main European refined product, gasoil, displayed a lower incremental monthly magnitude compared to its underlying marker crude Brent, soaring prices at the opposite ends of the barrel — in gasoline and fuel oil — pushed refinery margins moderately into positive territory.

Average refinery throughput in Eur-16 countries nudged up to 11.85m b/d, indicating a 86.3 per cent utilization rate, which was one percentage point below the previous year (see **Table C**).

Singapore market

For the second consecutive month, gasoline led the monthly product price rises in July, soaring nine per cent, well above a seven per cent rise in the HSFO value and the slight one per cent increase in its gasoil counterpart (see **Table B**). This achievement was somewhat diminished by the five per cent rise in the monthly average of the marker crude, Dubai. The gasoline market continued to be characterized by rising demand from the largest regional importer, Indonesia, which bought around 1.6m b to cover supply shortfalls caused by refinery maintenance, and from ongoing robust purchases by Middle Eastern Gulf countries. At the same time, regional supply was expected to decrease, as Taiwan's Chinese Petroleum Corporation will scale back its exports for August. A persistent weakness in Asia's gasoil prices, owing to lacklustre regional demand, throughout May and June, paved the way for moving large volumes of low sulphur distillate cargoes westwards, prompted by profitable price differentials between Europe and Singapore. Moreover, stock-piling of gasoil in anticipation of the end of a two-month fishing ban in the South China Sea caused the market to be less well supplied than in recent months. After hefty fuel oil buying in the previous month, Chinese purchases receded in July, reacting to rising domestic inventories and the prevailing strength of fuel oil values. This coincided with the persistent arrival of fuel oil cargoes, which led to a build of fuel oil stocks in Singapore to around 10m b/d by the end of the month.

A continuous surge in gasoline and fuel oil prices outpaced the increase in the Dubai price in July, which led to a rise in refining profit margins in Singapore.

Following the completion of the maintenance season, average refinery throughput rose to 3.91m b/d in July. The utilization rate hovered at around 82 per cent, implying a rise of almost one per cent from the preceding year's level (see **Table C**).

August

Record-high gasoline demand during the last month of the US driving season bolstered regional gasoline prices in the USA and the rest of the world in August. As a result, refining margins were healthy, with the US Gulf continuing to lead the way. Refinery throughput, however, crept up only slightly in the USA and Europe (see **Table B**).

US Gulf market

Gasoline led product price rises in the USA in August. The monthly average price of gasoline surged 15 per cent in the US East Coast and 11 per cent in the US Gulf Coast, thereby overwhelming a five per cent increase in its underlying crude counterpart, WTI. However, the average monthly gasoil price saw only a limited increase of four per cent, and the price

of HSFO nudged up a slight one per cent in these same markets compared to their counterparts from the month before. The EIA's four-week average, which represents the bulk of US refinery and product activities in August, showed continued gains in gasoline demand, reaching 9.43m b/d, its highest level ever and a three per cent increase above the levels of both the previous month and the year before. During the same time, gasoline refinery output increased nearly one per cent to 8.88m b/d, while gasoline imports fell eight per cent to 860,000 b/d. The gasoline supply shortage was exacerbated by the power failure that hit the eastern and Midwest regions of the USA and Canada, which caused several refinery outages, and an additional refinery glitch and major pipeline outage in the US West Coast region. Consequently, gasoline stocks experienced a further substantial draw of almost 10m b to settle near 192m b. In contrast, US distillate stocks enjoyed a further build of 5m b in August, as the modest distillate demand of 3.6m b/d was not enough to outpace the almost 3.7m b/d refinery distillate output. Fuel oil demand rose 23 per cent primarily on decent Mexican demand and prevailing cracking of feedstocks into gasoline and distillate products.

Average WTI refining margins in August in the US Gulf enjoyed healthy profits of more than $3/b, owing largely to the sharp rise in gasoline prices.

Despite enormous refining earnings, the average US refinery throughput crept slightly higher by 47,000 b/d to register 15.90m b/d in August, reflecting the many refinery outages. The corresponding refinery utilization rate was 95.7 per cent, 1.3 percentage points above last year's runs (see **Table C**).

Rotterdam market

Average monthly product prices moved in different directions in August. Gasoline rose eight per cent while gasoil hit four per cent, both outperforming the three per cent increase in their marker crude, Brent. The average HSFO price, however, dropped two per cent for the same period. Nevertheless, gasoline and distillate fundamentals stayed close to last month's trends. The European gasoline market, which has been characterized by tight supply since June this year, enjoyed higher activity in arbitrage trading on rising demand in newly-emerged destinations such as Middle Eastern countries and West Africa, on top of increased shipments across the Atlantic. On the other hand, distillate trade remained thin, exacerbated by the low Rhine river water level, which slowed barge movements from Rotterdam to inland European countries at a time of increased Russian distillate exports. This caused a distillate supply glut in the Rotterdam area, which exerted downward pressure on spot prices. The double effect of plentiful Russian supply and lower eastbound activity to the Asian market turned the fuel oil market in Europe from tight to plentiful.

Brent's refining margins rose moderately in positive territory in August, supported by strong prices for distillates, Europe's main refined product, together with soaring gasoline prices. Consequently, margins outpaced falling fuel oil values and the modest increase in the Brent price.

Refinery throughput in the Eur-16 hovered at 11.87m b/d in August, a marginal increase of 50,000 b/d over the preceding month's level. However, the refinery utilization rate was 86.5 per cent, indicating a 0.7 percentage point drop from the year-ago level (see **Table C**).

Singapore market

After modest increases in recent months, the average gasoil price enjoyed a significant gain of 13 per cent in August, thereby outperforming the eight per cent surge in its counterpart gasoline and the four per cent increase in the marker crude value, Dubai. The corresponding HSFO price tumbled by five per cent for the same period. A hefty gasoline and gasoil purchase by Indonesia's Pertamina supported spot prices for these products in the first two weeks of the month. However, as August progressed, the gasoline price retreated on news of a processing deal between Indonesia's Pertamina and the Singapore Petroleum Corporation to cover the 128,000 b/d production loss at the Balongan refinery due to the planned turnaround.

Distillate supply tightened further following two unscheduled refinery outages in South Korea, which had already scaled back exports, while regional demand held modestly strong. The HSFO market remained bearish on the continued absence of the largest regional buyer, China, at a time of increased foreign fuel oil cargoes (see **Table B**).

The widening crack spreads of the light and middle ends of the barrel eclipsed both Dubai's rising price and falling fuel oil values, thus pushing Dubai's refining margin to exceed $1/b in August.

Refinery throughput in Japan fell 83,000 b/d to average 3.88m b/d in August, reflecting in part the unexpected shut-down of two refineries of Japan's largest refiner, Nippon Oil, for an unspecified period. The equivalent utilization rate was 81.4 per cent, showing a 1.4 per cent drop from last year's attainable rate (see **Table C**).

The oil futures market

July

Since moving into the net-long arena in the first week of June, non-commercials have been building up their long positions consistently, with the sole exception being the week of June 17. Clearly speculators have a bullish perception of the market and are convinced that future prices will be higher, which will bring them a profit when they dispose of their long contracts. Speculators' optimistic market sentiment might be based on the apparent tightness in the third leg of the market, stocks, in contrast to the other two, supply and demand, which seem to be in balance. The fact that Iraq's recovery has come at a slower pace than anticipated might be the source of this optimistic price outlook. Another factor is the impending high demand for the oil and product markets in 4Q and 1Q, which comes at a time when crude and distillate stocks are below normal and demand for gasoline has resuscitated in the last weeks, making it difficult for refiners to switch to maximum distillate mode to replenish dwindling stocks.

The CFTC's Commitments of Traders report for the week of July 8 showed non-commercials increasing their long positions by some 9,000 contracts, with the net-long position reaching more than 30,000 lots, the highest level since October 2002. Besides the issues outlined above, a pair of tropical storms threatened the US Gulf of Mexico's production area and the nationwide workers' strike in Nigeria encouraged speculators' exuberance. The

bullish mode extended the following week when non-commercials increased their long positions by 19,333 lots, but at the same time added 11,934 lots to their shorts, resulting in a net long position of some 38,000 lots. Meanwhile, August WTI futures broke well above the $31.5 /b mark. The reason for this continuous strength was the low PADD 2 (US Midwest) stock level. In the week of July 22, non-commercials took profits, selling around 12,000 long contracts, bringing the net-long down by 14,504 to 23,372 lots. The Commitments of Traders Report for the week ending July 29 showed that speculators hiked their net-long positions in crude oil futures to 35,106 lots, driven by the tight gasoline market and several refinery outages.

Non-commercials hiked their long positions again during the first week of August by an astonishing 32,663 lots, while open interest rose by 44,771 lots to 554,737. Obviously no longer as convinced of a bright future as before, speculators shed some of their long positions while at the same time increasing their shorts in the week of August 12, a move that might signal the prelude to a change in sentiment. Despite this temporary adjustment in investor sentiment, which could trigger a correction of $2–3/b, a further price fall will not materialize until more fundamental issues are resolved.

August

Non-commercials (speculators) went into August with a very bullish perception of the market, hiking their net long positions to a new record of 132,720 contracts, according to the CFTC's Commitments of Traders Report for the week of August 5. During the week, funds increased their long positions by 32,663, while shorts rose 7,744 contracts with the net-long positions standing at 60,000 lots. This exuberant behaviour on the part of non-commercials was underpinned by supportive factors from the fundamental side, namely low inventory levels of crude and products mainly in the US markets. Meanwhile, the WTI front month contract surged above $32/b to reach an intra-day high of $32.49/b on August 5 to close at $32.22/b.

No longer as convinced as before that crude prices could sustain such a high level, non- commercials started to steadily unwind their long positions. Net-longs for the week of August 12 fell by 9,414 lots to 50,611 with the open interest rising 7,787 lots to 562,524. WTI futures remained strong, oscillating within the $31–32.85/b range during the August 6–12 period, supported by the problems in Nigeria and Iraq.

The Commitments of Traders Report released on Friday, August 22, showed speculators heavily disposing of their long positions in NYMEX crude. Non-commercials trimmed their long positions by 34,657 lots, or 27 per cent, while at the same time reducing their shorts. It is important to point out that speculators held on to their long positions in gasoline futures that week, indicating that expectations were bullish on strong late summer gasoline demand and prices.

In the following week non-commercials reversed the trend of the previous two weeks, increasing their longs by 12,644 lots while shorts fell by 946 with net-longs rising 13,590 lots to 42,008. The move was supported by developments in gasoline futures, which saw the largest-ever single-day increase in front-month gasoline futures. In the week ending September 2, non-commercials heavily disposed of their long positions while increasing shorts at the same time. The gasoline-induced big drop in WTI futures shaved more than $2/b off the front month contract.

In the following week beginning September 9, any remaining bullish thoughts were erased from speculators' minds. Funds continued to heavily dispose of their long positions leaving net-longs at an almost flat position of 869 lots. Meanwhile, WTI futures plummeted to mid-$28/b with indications that lower levels lay ahead. A big correction in gasoline prices following the Labour Day weekend also dramatically changed speculators' perception of the market.

The tanker market

July

OPEC area spot-chartering regained the previous month's losses, rising by 4.75m b/d to stand at 15.20m b/d in July. This hefty figure could be overestimated as, according to secondary sources, OPEC crude oil production in July did not show that much increment compared with the June level. Chartering on the Middle East eastbound long-haul route contributed mostly to the increase, surging by 1.41m b/d to 5.37m b/d, or 1.03m b/d higher than the year-ago level. Chartering on the westbound long-haul route also added to this increment, edging up 480,000 b/d to 2.16m b/d, a drop of 770,000 b/d below the level observed last year. OPEC's share of global chartering rose 10.97 per cent to 59.76 per cent, of which eastbound long-haul chartering represented a share of 35.33 per cent and westbound long-haul chartering a share of 14.21 per cent. Both rates demonstrated a slide compared to last month's totals and taken together accounted for less than half of total OPEC spot chartering, more specifically 49.54 per cent, which was 4.72 per cent below last month.

Non-OPEC spot chartering declined 930,000 b/d to 10.23m b/d in July, equivalent to a 40.23 per cent share of global chartering. Consequently, global spot fixtures moved up by 3.82m b/d to 25.43m b/d, mainly due to the overestimate on OPEC chartering. This was 2.49m b/d higher than the year before. Estimated sailings from the OPEC area in July fell 3.08m b/d to 22.29m b/d. Middle East sailings were down 1.11m b/d to 16.32m b/d, but still captured a 73.22 per cent share of OPEC area sailings, an increase of 4.53 per cent. Arrivals in the US Gulf Coast, the US East Coast and the Caribbean were estimated to decline by 910,000 b/d to 10.67m b/d. Euromed and Japan arrivals moved in the same direction, dropping 380,000 b/d to 4.28m b/d and 390,000 b/d to 3.71m b/d, respectively. The sole exception was NW Europe arrivals which registered a slight increase of 80,000 b/d to 7.04m b/d.

The crude oil tanker market was mostly quiet in July, mainly due to the season's downward trend with refiners reducing their purchases at a time of shut-downs and oil terminal maintenance. Ample tonnage supply was also a bearish factor in July as fewer traders were active because of summer holidays. Consequently, freight rates on all main routes suffered large losses, especially Aframax vessels which shed points on the prevailing inactivity. Aframax freight rates on the Mediterranean to NW Europe route and within the

Mediterranean basin plunged by 55 and 51 points, respectively to a monthly average of Worldscale 138 and W140. Rates on the Caribbean/US Gulf Coast route fell by 65 points to W137, despite a late month improvement that pulled rates up on increasing activities but not enough to offset the miniscule rates at the start of the month. Accumulating unfixed tonnage also resulted in big losses in the Suezmax sector, particularly on the West Africa/US Gulf Coast route, where rates touched the lowest level this year due to scant trading at the beginning of the month, for a monthly average of W81, a loss of 50 points from the month before. Suezmax freight rates from NW Europe to the US East Coast charted a similar course, falling 37 points to W86.

From Indonesia to the US West Coast, Aframax freight rates managed, with the support of steady business, to linger around last month's average, dropping a mere six points to stand at W124. Although mixed overall VLCC freight rates showed considerable losses on the Middle East eastbound long-haul route, which fell 23 points to W52 due to lack of activity, leaving more than 70 VLCCS idle at the start of the month. Trade improved in the last two weeks of the month with VLCC availability decreasing to about 50 VLCCS. On the Middle East westbound long-haul route, VLCC freight rates showed better results as Iraqi exports from the Al Bakr terminal helped owners seek comparatively high rates, which limited the drop to 23 points to stand at W52.

The product tanker market reversed its downward direction to show significant improvement on most of the main routes, particularly in the east. Medium-range tanker freight rates from the Middle East to the Far East rose 24 points to W213 supported by higher activity. Tight tonnage availability pushed rates up on the Singapore/East route, increasing by 33 points to W279.

Within the Mediterranean and from there to NW Europe, rates also edged up because of improved demand, rising by 15 and 29 points to W210 and W236, respectively. Freight rates for cargoes from the Caribbean to the US Gulf Coast rose 16 points to W209 due to increasing exports, especially from Venezuela to the US market. The exception was on the NW Europe to the US East Coast route where rates remained close to the previous month's level with only a slight decline of three points to W186.

August

OPEC area spot-chartering declined 2.86m b/d to stand at 11.88m b/d in August. As mentioned in the last report, the chartering figure for July was overestimated as OPEC oil production declined during that month. This was reflected in the downward revision of 460,000 b/d to 14.74m b/d in the July figure, down from 15.20m b/d. Lower spot-fixtures for August do not represent the slight rise in OPEC oil production this month, as reported by secondary sources, which observed an increase of about 440,000 b/d from the previous month. Decreased activity on the Middle East eastbound long-haul route amounted to almost 40 per cent of the month's decline, while fixtures on the Middle East westbound route dropped roughly 17 per cent. OPEC's share of global chartering moved up slightly by one per cent to about 61 per cent.

Eastbound and westbound long-haul chartering represented nearly the same shares as in the previous month, at 35 per cent and 14 per cent, respectively. Non-OPEC spot-fixtures also decreased by 2.41m b/d to 7.45m b/d in August, which was equivalent to a 39 per cent share in global fixtures, a drop of one per cent from a month ago. Global spot-chartering fell a considerable 5.27m b/d to 19.33m b/d, or marginally below last year's level. This could turn out to be a very conservative estimate, one that will have to be revised upward in the future given the higher OPEC oil production for the month. Estimated sailings from the OPEC area in August rose 1.05m b/d to 24.32m b/d.

Sailings out of the Middle East contributed marginally to this rise, increasing 110,000 b/d to 16.40m b/d, which placed their share of OPEC area sailings at about 67 per cent, down six per cent from the month before. Arrivals in the US Gulf, East and the Caribbean and in NW Europe showed increases of 1.42m b/d to 12.05m b/d and 240,000 b/d to 7.23m b/d, respectively, while arrivals in the Euromed and Japan declined 230,000 b/d to 3.96m b/d and 510,000 b/d to 3.39m b/d, respectively.

Crude oil freight rates did not show any improvement on most of the main routes due to the seasonably weak activities. In August, freight rates remained nearly at the previous month's averages, except for the Aframax rates from the Mediterranean to the NW Europe, which dropped a massive 52 points to W86 on the back of a huge accumulation of available tonnage, combined with very low activity.

However, the monthly average of Aframax freight rates within the Mediterranean did not follow the same trend, registering an increase of six points to W146. This was attributed to higher rates at the beginning of the month, which declined steadily as the month wore on. Aframax tankers from Indonesia to the US West Coast also showed gains, rising four points to a monthly average of W128 on steady activity, while on the Caribbean to the US East Coast route they shed a marginal three points to W134. VLCC freight rates managed to remain close to the previous month's level on higher end-month activity, as chartering for October cargoes started earlier than usual, due to the upcoming regional holidays. Rates dropped by two points on both the Middle East eastbound long-haul route and the westbound long-haul route to reach W50 and W46, respectively.

Suezmax freight rates followed VLCCs' pattern as early month gains, combined with a late month improvement to keep rates close to the previous month's level, down a point to W80 on the West Africa/US Gulf route and two points to W84 on the NW Europe to the US East and Gulf Coast route.

Relatively good trade managed to fuel product freight rates, especially at the beginning of August. Most tanker sizes along most routes enjoyed some increases, except for tankers carrying 25–30,000 deadweight tonnes (dwt) along the Singapore/East route, which fell by 20 points to W259 due to thin activity in the second half of the month. Medium-range tankers carrying 30-50,000 dwt along the Middle East to the East route showed an increase of 37 points to W250, benefiting from healthy demand as some regional refineries were still shut down due to scheduled maintenance.

Along the Caribbean/US Gulf route, rates rose a significant 22 points to W231 as strong US demand continued to push

rates higher. Another route showing a tremendous increase was NW Europe to the US East and Gulf coasts, which gained 43 points to W299 as higher US product prices attracted cargoes across the Atlantic. Modest gains were also seen within the Mediterranean and from there to NW Europe, rising three points to W213 and 12 points to W248, respectively.

World oil demand

July

Historical data

Due to upward revisions in actual Middle East and Africa consumption, total world oil demand for 2002 has been revised up by 180,000 b/d to 76.96m b/d, compared to the 76.78 m b/d given in the last report.

Estimates for 2003

World

The average 2003 world consumption forecast has been revised up by 300,000 b/d due to a 180,000 b/d upward revision in the 2002 historical data and a 120,000 b/d increase in the year's incremental demand (the difference between the 2002 and the 2003 averages), mostly stemming from upward revisions to the 2Q, 3Q and 4Q averages. Expected higher economic growth in the OECD Pacific, the Middle East, the former Soviet Union (FSU) and China is the reason behind this increase to the 2003 demand increment. Forecasts for the yearly average and the yearly increment now stand at 78.09m b/d and 1.13m b/d, respectively, compared with the 77.79m b/d and 1.01m b/d given in the last report.

On a regional basis, following a minor fall of 70,000 b/d in 2002, the demand for 2003 is forecast to rise a healthy 550,000 b/d in the OECD. The former CPEs' consumption is forecast to grow considerably by 440,000 b/d, or 4.13 per cent, more than double in volume the 210,000 b/d or 2.21 per cent growth in 2002. In the developing countries, only a moderate 140,000 b/d, or 0.69 per cent, rise in consumption is forecast in 2003, following a similar 150,000 b/d growth in 2002.

To assess 1Q and 4Q03 consumption growth compared to their corresponding 2002 periods, one should bear in mind the exceptional weakness of the latter, down 540,000 b/d and 370,000 b/d, respectively from their corresponding 2001 figures. This partly explains, in addition to other factors, the considerably high quarterly increments in 2003 over 2002.

Compared with 1Q02, world demand is estimated to have grown significantly by 2.97 per cent, or 2.28m b/d, to average 79.04m b/d in 1Q03, due to factors such as much colder than normal weather in most parts of the northern hemisphere, fuel substitution in Japan brought on by nuclear power reactor outages, stockpiling ahead of the anticipated Iraq war and record-high natural gas prices in the USA. Because of improvements in the world economic performance and the continuation of fuel substitution in Japan, 2Q03 consumption is estimated to have risen 0.98 per cent, or 740,000 b/d, when compared to the exceptionally weak 2Q02. The pace of demand growth is expected to moderate further in 3Q to 650,000 b/d or 0.85 per cent. The 4Q, however, is forecast to register a higher 860,000 b/d or 1.09 per cent.

OECD

OECD consumption is forecast at 48.28m b/d, constituting 61.83 per cent of total world demand in 2003. Out of the forecast 1.13m b/d world oil consumption increment in 2003, about 550,000 b/d, or nearly 48.70 per cent, is expected to come from the OECD. Within the group, North America ranks first in forecast demand growth with 250,000 b/d, or close to 45.09 per cent of the group demand increment. OECD Pacific ranks second with 230,000 b/d or 41.36 per cent and Western Europe ranks third with 70,000 b/d, or roughly 13.55 per cent.

The actual 1Q03 data indicates that OECD consumption rose by 1.22m b/d or 2.54 per cent over the corresponding 2002 period, which saw a 800,000 b/d decline. Nearly half of the growth in consumption, or 630,000 b/d, was registered in North America, while OECD Pacific was up 550,000 b/d and the demand in Western Europe increased a marginal 40,000 b/d.

Preliminary data suggests that OECD January–May 2003 oil requirements were higher by 1.01m b/d compared to the corresponding 2002 period. During this period, the leading volume gainer was gasoil/diesel with a 630,000 b/d, or 5.32 per cent, rise in consumption. This is due to fuel switching in the USA and across Europe. The leading percentage gainer was residual fuel oil whose consumption rose by 8.06 per cent, or 240,000 b/d, mostly due to colder than normal weather, Japan's nuclear reactor troubles and high natural gas prices in the USA.

Developing countries

In developing countries, oil demand is forecast to grow by 140,000 b/d, or 0.69 per cent, to 19.82m b/d. The consumption in Latin America is expected to contract marginally by 20,000 b/d to average 4.73m b/d, indicating a relative improvement over the last year when the demand got weaker by 120,000 b/d due to persistent economic and financial problems. Other Asia is forecast to register the highest volume and percentage growth at 100,000 b/d, or 1.35 per cent, followed by the Middle East with 50,000 b/d, or 1.04 per cent, while demand growth in Africa is expected to be negligible.

Other regions

The 2003 demand in the former CPEs is forecast at 9.99m b/d, equivalent to 12.79 per cent of total world consumption. Demand growth is forecast at 440,000 b/d or 4.46 per cent, more than double that in 2002 and close to 39.30 per cent of the total world demand increment. Within the group, China is expected to see demand at 5.31m b/d, which should result in the highest demand growth volume (270,000 b/d) and percentage (5.46 per cent) as well as take up an impressive 24.41 per cent share of the total world increment. The FSU is forecast to experience the second highest demand rise at 160,000 b/d, or 4.13 per cent. Apparent demand in Other Europe is also expected to undergo a minor 10,000 b/d volume rise, representing a 1.64 per cent growth rate.

Forecast for 2004

Our preliminary forecast for the 2004 world oil demand has been made on the basis of the following assumptions:

— A global economic growth rate at 3.8 per cent, up from the 3.1 per cent forecast for 2003.

— A return to normal weather conditions after the colder than normal weather experienced this year.
— The restart of all of Japan's nuclear reactors.
— Lower natural gas prices in the USA.

Based on these assumptions, average 2004 world oil demand is forecast at 79.25m b/d, incorporating a rise of 1.16m b/d, or 1.48 per cent, over the 2003 consumption. This preliminary assessment will doubtless be subject to revisions as more information becomes available on key factors such as the economic growth outlook, crude prices and the weather.

The 2004 demand is forecast to register positive growth in all of the three major groups of countries. OECD and developing countries are each forecast to register a 430,000 b/d demand rise, more than 37 per cent of the total world demand growth, while the former CPEs are forecast to experience a healthy 290,000 b/d increase.

Consumption is expected to grow in every single quarter of 2004 compared with the corresponding quarter in the year 2003. The lowest growth rate of 570,000 b/d, or 0.72 per cent, is forecast in 1Q. 2Q and 3Q are expected to enjoy much higher rises at 1.20m b/d and 1.28m b/d, respectively, while the 4Q should experience the highest growth of 1.58m b/d, or 1.98 per cent.

August

Historical data

Due to minor upward revisions in actual Middle East consumption, total world oil demand for 2002 has been revised up by 20,000 b/d to 76.98m b/d, compared to the 76.96m b/d given in the last report.

Estimates for 2003

World

The average world consumption forecast for 2003 has been revised up slightly by 80,000 b/d due to a 20,000 b/d upward revision in the 2002 historical data and a 60,000 b/d increase in the year's incremental demand. The adjustment to this year's estimates mostly stem from a major 250,000 b/d upward revision to the 2Q average alongside minor upward revisions to the 1Q and 4Q averages, which have been partly offset by a marginal downward revision to the 3Q average. The incorporation of a higher than estimated actual 2Q consumption for OECD and China, together with higher than expected economic growth in the second half of the year, are the reasons behind raising the demand increment for 2003. Compared with the lower 78.09m b/d and 1.13m b/d reported in the last report, the forecast for the yearly average and the yearly increment — the difference between the 2002 and the 2003 averages — now stand at 78.17m b/d and 1.19m b/d, respectively.

On a regional basis, following a minor fall of 70,000 b/d in 2002, demand for 2003 is forecast to rise a healthy 710,000 b/d in the OECD. The former CPEs' consumption is forecast to grow a considerable 390,000 b/d, or 4.14 per cent, almost double the volume of the 210,000 b/d, or 2.21 per cent, growth seen in 2002. In the developing countries, only a moderate 80,000 b/d, or 0.40 per cent, rise in consumption is forecast in 2003, following a much higher growth of 180,000 b/d in 2002.

On a quarterly basis, compared with an exceptionally weak 1Q02, world demand is estimated to have grown a significant 2.96 per cent, or 2.27m b/d, to average 79.07m b/d in 1Q 2003 due to a host of factors, such as the much colder than normal weather in most parts of the northern hemisphere, fuel substitution in Japan brought about by nuclear power reactor maintenance, stockpiling ahead of the anticipated war on Iraq, and record-high natural gas prices in the USA.

Thanks to robust economic growth in China and continued fuel substitution in Japan, 2Q03 consumption is estimated to have risen by 1.28 per cent, or 960,000 b/d, to average 76.20m b/d when compared to the exceptionally weak 2Q02. The pace of demand growth is expected to moderate further in 3Q slowing to 740,000 b/d, or 0.96 per cent. However, 4Q demand is forecast to register slightly higher at 800,000 b/d, or 1.01 per cent.

OECD

OECD consumption is forecast at 48.44m b/d, constituting 62 per cent of total world demand in 2003. Out of the forecast 1.19m b/d world oil consumption increment for 2003, about 710,000 b/d, or nearly 60 per cent, is expected to take place in the OECD. Within the group, OECD Pacific ranks first in forecast demand growth at 320,000 b/d, close to 45 per cent of the group's total demand increment. North America ranks second with 270,000 b/d, equivalent to 37 per cent, while Western Europe ranks third with 120,000 b/d, or nearly 18 per cent.

The actual 2Q data indicates that OECD consumption rose 770,000 b/d, or 1.66 per cent, over the corresponding 2002 period, which saw a 800,000 b/d decline. More than half of consumption growth, 410,000 b/d, was registered in the OECD Pacific, while Western Europe experienced a 310,000 b/d rise and North America increased by a marginal 50,000 b/d.

Actual consumption data suggests that OECD January–June oil requirements were up 1.00m b/d compared to their corresponding 2002 period. The leading volume gainer for this period was gasoil/diesel — also the volume leader for the January–May period given in the last report — which experienced a 610,000 b/d, or 5.25 per cent, rise in consumption, due to fuel switching in the USA and across Europe. The leading percentage gainer was residual fuel oil, which saw a consumption increase of 9.23 per cent, or 270,000 b/d, mostly due to colder than normal weather, Japan's nuclear reactor maintenance, and high natural gas prices in the USA.

Developing countries

In developing countries, oil demand is forecast to grow 80,000 b/d, or 0.40 per cent, to 19.79m b/d. Latin America's consumption is expected to contract by 60,000 b/d, or 1.24 per cent, to average 4.69m b/d, indicating a relative improvement over last year when demand weakened by 120,000 b/d on persistent economic and financial problems. Other Asia is forecast to register the highest volume and percentage growth at 120,000 b/d, and 1.59 per cent, followed by Africa with 20,000 b/d, or 0.69 per cent. The Middle East is expected see negligible demand growth.

Other regions

Apparent demand in the former CPEs for 2003 is forecast at 13 per cent of total world consumption, equivalent to 9.94m b/d. Demand growth is expected at 390,000 b/d, or 4.14 per cent, which represents close to 33 per cent of the total

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

	1Q	2Q	3Q	4Q	Year
2000	3.97	4.13	4.47	4.01	**4.14**
2001	4.30	4.71	4.89	4.47	**4.59**
2002[1]	5.14	5.76	5.85	5.49	**5.56**
2003[2]	5.87	6.75	6.47	5.92	**6.25**
2004[2]	6.42	7.23	6.92	6.38	**6.74**

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

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

	2001	2002	1Q03	2Q03	Jul 03*	Aug 03*	Aug/ Jul 03
Algeria	820	864	1,069	1,128	1,155	1,154	–1
Indonesia	1,214	1,120	1,072	1,027	1,016	1,015	–1
IR Iran	3,665	3,428	3,701	3,722	3,765	3,741	–24
Iraq	2,381	2,006	2,106	288	641	1,081	440
Kuwait	2,021	1,885	2,108	2,250	2,122	2,115	–7
SP Libyan AJ	1,361	1,314	1,394	1,423	1,416	1,421	5
Nigeria	2,097	1,969	2,081	1,989	2,150	2,155	6
Qatar	683	648	743	750	733	734	1
Saudi Arabia	7,939	7,535	8,874	9,033	8,569	8,587	18
UAE	2,163	1,988	2,203	2,294	2,249	2,285	36
Venezuela	2,862	2,586	1,449	2,570	2,557	2,522	–35
Total OPEC	**27,207**	**25,341**	**26,800**	**26,473**	**26,372**	**26,810**	**438**

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

world demand increment and slightly less than double the figure of 2002. Within the group, China's 5.31m b/d demand is forecast to register the highest volume and percentage growth at 280,000 b/d and 5.50 per cent, singly accounting for 23 per cent of the total world increment. The FSU, with an average 3.87m b/d, is expected to experience the second highest demand rise at 100,000 b/d, or 2.61 per cent. Apparent demand in the Other Europe is expected to enjoy an increase of 20,000 b/d, or 2.65 per cent.

Forecast for 2004

Based on the latest revisions, average world oil demand for 2004 is forecast at 79.33m b/d, incorporating a rise of 1.16m b/d, or 1.49 per cent, over 2003 consumption. Compared with the figures from the last report, the volume has been raised by 80,000 b/d, while the increment remains the same due to a similar upward revision in the historical 2002 volume.

All three major groups of countries are forecast to register positive growth in 2004. The OECD is expected to rank first with 440,000 b/d growth, which is equivalent to 38 per cent of the total world demand increment. Developing countries are expected to rank second with 410,000 b/d growth, or 36 per cent of the increase in global demand. The former CPEs should rank third with a substantial 310,000 b/d rise in oil consumption.

Each quarter of 2004 is forecast to register a growth in consumption over its corresponding quarter in 2003. The 1Q is expected to account for the lowest growth rate at 630,000 b/d, or 0.79 per cent, while 2Q and 3Q are forecast to enjoy much higher rises of 1.14m b/d and 1.33m b/d, respectively. The highest growth of the year is expected to take place in 4Q, at 1.53m b/d, or 1.92 per cent.

World oil supply

July

Non-OPEC

Forecast for 2003

The 2003 non-OPEC supply figure was revised down to 48.69m b/d, following a significant 240,000 b/d downward revision to 2Q supply in North America and Western Europe, especially for the USA and UK due to the weather, seasonality and a longer maintenance schedule. Brazil also witnessed some decline due to faster than expected depletion. The quarterly distribution now stands at 48.64m b/d, 48.06m b/d, 48.83m b/d and 49.20m b/d, respectively. The yearly average increase stands at 870,000 b/d, compared with the upwardly revised figure for 2002.

Expectations for 2004

The non-OPEC supply figure for 2004, introduced for the first time in the report, is expected to rise by 1.25m b/d. The major contributors to this rise are FSU, Africa, North America and Latin America. Individual countries contributing to this rise are Brazil up 80,000 b/d, and Canada, which added 120,000 b/d, mainly from syncrudes. Significant additions are also expected to come from Angola (110,000 b/d) and Chad (130,000 b/d), included in Other Africa in the African group. Almost half of this growth will come from rapid production growth in the FSU, which is expected to reach 610,000 b/d.

FSU net oil exports for 2004 are expected at 6.69m b/d, a downward revision from last month's figure. The 2003 figure has been revised down to 6.20m b/d. Figures for 2000–2002 remain unchanged (see **Table D**).

OPEC natural gas liquids

OPEC NGL data for 2004 is expected to be 3.94m b/d, 300,000 b/d higher compared with the downwardly revised figure for 2003. The 2002 figure has also been revised down to 3.68m b/d on recent data released from some Member Countries. Figures for 2000 and 2001 remain unchanged at 3.34m b/d and 3.58m b/d, respectively, compared with last report's figures.

OPEC NGL production, 2000–04

	m b/d
2000	**3.34**
2001	**3.58**
2002	**3.68**
1Q03	3.50
2Q03	3.65
3Q03	3.70
4Q03	3.70
2003	**3.64**
Change 2003/2002	–0.04
2004	**3.94**
Change 2004/2003	0.30

OPEC crude oil production

Available secondary sources indicate that OPEC output for July was 26.39m b/d, 250,000 b/d higher than the revised June figure of 26.13m b/d (see **Table E**).

August

Non-OPEC

Forecast for 2004

The 2003 non-OPEC supply figure was revised down to 48.72m b/d. A significant 110,000 b/d downward revision was made to 2Q supply, mainly in the USA, while 3Q and 4Q have been revised sharply upward on new data released. Significant increases in Mexico, Australia and Russia were partially offset by considerable declines in the UK and Norway. The quarterly distribution now stands at 48.64m b/d, 47.95m b/d, 48.96m b/d and 49.34m b/d, respectively. The yearly average increase stands at 910,000 b/d, compared with the 2002 figure.

Expectations for 2004

Non-OPEC supply for 2004 is expected to rise 1.25m b/d. The major contributors to this expected increase are the FSU, Africa, North America and Latin America. The quarterly distribution now stands at 49.85m b/d, 49.17m b/d, 50.23m b/d and 50.62m b/d, respectively. The yearly average is forecast at 49.97m b/d.

FSU net oil exports for 2004 are expected at 6.74m b/d, while the 2003 figure has been revised up to 6.25m b/d. Figures for 2000–2002 remain unchanged from the last report (see **Table D**).

OPEC natural gas liquids

The OPEC NGL figure for 2004 is expected at 3.98m b/d, 270,000 b/d higher than the revised 2003 figure of 3.71m b/d. The 2002 figure has also been revised up to 3.75m b/d due to recent data released from some Member Countries. Figures for 2000 and 2001 remain unchanged at 3.34m b/d and 3.58m b/d, respectively, compared with the figures in the last report.

OPEC NGL production, 2000–04

	m b/d
2000	**3.34**
2001	**3.58**
2002	**3.75**
1Q03	3.57
2Q03	3.72
3Q03	3.78
4Q03	3.78
2003	**3.71**
Change 2003/2002	–0.04
2004	**3.98**
Change 2004/2003	0.27

OPEC crude oil production

Available secondary sources indicate that OPEC output for August was 26.81m b/d, or 440,000 b/d higher than the revised July figure of 26.37m b/d. **Table E** shows OPEC production as reported by selected secondary sources.

Rig count

July

Non-OPEC

Rig activity rose in July. North America saw a significant rise of 106 rigs, compared with the June figure. In Canada, the rig count swelled by 90 rigs to 398, the USA gained 14 rigs to 1081, and Mexico added two rigs for a total of 89. Western Europe's rig activity increased by four rigs to 85, mainly from activity in the UK. Australia shed one rig, leaving just nine. Latin America lost six rigs to 117, mainly from Argentina and Ecuador.

OPEC

OPEC's rig count was 222 rigs in July, eight higher compared with the June figure. Venezuela led gains adding nine rigs to 44, while Algeria led declines, dropping three rigs to 19.

August

Non-OPEC

Rig activity rose in August. North America saw a rise of 22 rigs, compared with the July figure. Mexico's rig activity rose seven rigs to 96. Western Europe's rig activity declined by two rigs to 83, mainly from Denmark. Rig activity in Australia was up two rigs to 11. Latin America witnessed a decline of seven rigs to 110, mainly from Argentina and Peru.

OPEC

OPEC's rig count was 225 in August, three rigs higher when compared with the July figure. Algeria and Indonesia added two rigs each to 21 and 45, respectively, compared with last month's figures.

Stock movements

July

USA

US commercial onland stocks displayed a further seasonal build during the period June 27–August 1, 2003, increasing 12.1m b at a rate of 390,000 b/d to 936.7m b. The same amount of build occurred in 'Other Oils' stocks, while the increase in distillate stocks was offset by the decline in other components of total commercial oil stocks. Crude oil stocks fell 2m b to 280.2m b at the end of July 2003. However, they had reached an even lower level of 276.3m b in the week ending July 18 on meagre imports before swinging upward in the last two weeks of the month as crude oil imports jumped to a high of 10.29m b/d. At the same time, crude runs registered a decline of 170,000 b/d to 15.49m b/d due to refinery troubles. Despite this draw, the yearly deficit of crude oil stocks was around eight per cent, compared with the 11.5 per cent given in the previous report.

Gasoline stocks continued the downward trend observed over the last two months, decreasing 3.2m b to 201.8m b. This draw was due mainly to strong demand at the peak of the driving season. Indeed, the apparent demand for gasoline in the four-week period ending August 1, 2003, increased 270,000 b/d to reach 9.20m b/d. As a result, the draw widened the y-o-y shortage to 5.9 per cent. The y-o-y deficit in distillate stocks remained strong at 11.0 per cent, despite a seasonal build of 9.4m b to 119.1m b caused by weak demand. These stock movement changes resulted in a draw on total commercial stocks of 95.0m b, or 9.3 per cent, compared to the year-ago level.

The US Strategic Petroleum Reserve (SPR) witnessed a further increase of 5.1m b to 612.4m b during the period June 27–August 1, 2003, in line with the US government's decision to bring its total level up to 700m b by 2005.

During the week ending August 8,

2003, commercial crude oil stocks rose a paltry 200,000 b to 280.4m b, or 7.3 per cent below this time last year. Despite the 320,000 b fall in crude oil imports, a small build in crude oil stocks occurred amid strong import flows of nearly 10m b/d. Gasoline stocks fell 3.7m b to 198.1m b on the back of strong demand and declining imports, stuck at their lowest level since October 2002. Although bullish, the draw on gasoline stocks was diminished by a 1.6m b rise in reformulated gasoline (RFG) inventories, which accounted for nearly one third of total demand.

Gasoline stocks are now 6.6 per cent below the year-ago level. The y-o-y deficit for distillates remains 9.9 per cent, despite a draw of 800,000 b to 119.9m b on inventories, as refiners build stocks ahead of the winter heating season. In total, commercial oil stocks showed a draw of 4.6m b to 932.1m b in the week ending August 9, 2003, a drop of 9.3 per cent from the same time last year. The SPR rose a marginal 200,000 b to 612.6m b.

Western Europe

Total oil stocks in Eur-16 showed a seasonal build of 8.0m b at a rate of 260,000 b/d to 1,054.4m b during the month of July. Crude oil contributed mainly to this build, rising 5.8m b to 450.1m b, while total major products added only 2.1m b to 604m b. The build in crude oil stocks, which took place despite a slight increase of 30,000 b/d to 11.85m b/d in crude runs, was due to higher import volumes from Russia as well as the arrival of some Iraqi cargos. Crude oil inventories were 0.6 per cent above last year's figure at this time. Gasoline stocks edged up 200,000 b to 137.4m b as refiners increased production.

Middle distillate also rose 3.8m b to 329.8m b, offsetting the contra-seasonal draw experienced in June, but not enough to overcome the year-on-year shortage, which remained strong at 5.2 per cent. Fuel oil stocks were the only product to register a draw, dropping 2.7m b to 112.1m b amid hefty exports to Asia and higher temperatures, which boosted demand for power generation. Despite this draw, fuel oil stocks were still 3.6 per cent above the year-ago level. Total oil stocks were 13.0m b or 1.2 per cent less than at this time last year.

Japan

In June, commercial onland oil stocks experienced a further seasonal build, rising 18.3m b to 196.2m b at a rate of 610,000 b/d, a level not seen since November 2001. This significant rise was largely confined to a massive 19.0m b build to 127.4m b in crude oil stocks, mainly on lower refinery runs due to scheduled plant maintenance, assisted by a 9.9 per cent increase in crude oil imports. Major total products showed a moderate draw of 700,000 b to 68.8m b.

Gasoline stocks edged seasonably lower by 400,000 b to 13.9m b on reduced output, while a decrease in imports left the y-o-y shortage at around two per cent. Middle distillate inventories remained unchanged at 33.2m b, although kerosene stocks observed an increase of seven per cent compared with last month's figures as refiners began building stocks for the winter season. Middle distillate stocks were at a comfortable level, around ten per cent less than the level observed at this time last year. Despite a slight decline of 300,000 b to 21.7m b in fuel oil stocks, the y-o-y surplus remained stable at 6.8 per cent. In summary, total oil stocks were 7.37 per cent above the level registered a year ago.

August

USA

US commercial onland stocks lost the previous month's overall gain, decreasing unseasonably by 1.7m b or at a rate of 60,000 b/d to 835.0m b during the period August 1–29, 2003. Crude oil stocks registered a slight draw of 200,000 b to 280.4m b for the same period, after dropping as low as 278.6m b in the week ending August 22. This draw could be attributed to the fact that crude runs increased by 100,000 b/d to 15.6m b/d and that despite a 300,000 b/d rise in crude imports to 10.1m b/d, some extra barrels were diverted to the US SPR. Even with the draw, the y-o-y deficit was around 5.6 per cent, down from the eight per cent given in the last report.

On the product side, gasoline stocks continued their seasonal draw, sliding 9m b to 191.9m b due to strong demand, which was up 2.8 per cent, and a substantial 8.3 per cent fall in imports, to end the driving season with a yearly deficit of 6.4 per cent. At the same time, distillate stocks, which contain heating and diesel oil, registered a build of 5.6m b to 124.7m b, narrowing the yearly deficit to 4.7 per cent from the 11 per cent given in the last report. Although heating oil stocks contributed to the build, increasing 4.9m b, they remained 18.4 per cent below last year's level, just prior to the upcoming winter season. Fuel oil and jet fuel inventories decreased 3.0m b to 30.7m b and a marginal 100,000 b to 38.3m b, respectively. Total oil stocks were around 81m b or eight per cent below last year's figure at this time.

The US SPR continued its upward trend, reaching 617.0m b, or 4.6m b higher than the level observed at the end of July 2003.

During the week ending September 5, total commercial oil stocks in the USA showed a build of 4.6m b to 939.6m b, but were still 71m b, or seven per cent, below the year-ago level. Crude oil inventories fell 4.2m b to 276.2m b, reflecting the 500,000 b/d drop in imports and flat week-on-week refinery inputs. This left the y-o-y deficit at around 5.7 per cent. On the product side, the focus shifted from gasoline to distillates, following the end of the driving season. Gasoline stocks rose by 700,000 b to 192.6m b, or 5.7 per cent lower than this time last year. Distillate stocks saw a build of 3.7m b to 128.4m b, or nearly the same level as last year, despite heating oil inventories being stuck 16.2 per cent lower than the year-ago figure.

During the week ending September 5, the SPR added another 1.5m b to reach a record high of 618.5m b.

Western Europe

Commercial onland stocks in the Eur-16 (EU plus Norway) displayed a seasonal build of 9.30m b or 300,000 b/d to stand at 1,068.6m b, their highest level since April 2003. Most of the build came from distillate stocks ahead of the winter months. Following the massive increase observed last month, crude oil stocks registered a small build of 1.2m b to 452.7m b, still a comfortable 12.1m b over last year's level at this time. This build, which occurred despite a slight rise in crude runs, was due to the restart of crude exports from West Africa. Gasoline stocks stood at 137.3m b, nearly unchanged from July, which left the y-o-y deficit at 1.1 per cent, a much

lower draw than analysts had expected from the peak summer driving season. Middle distillate stocks — which comprise heating oil, diesel and jet fuel — rose by 5.2m b to 339.4m b, but the y-o-y shortage remains strong at around 22 per cent. Low demand was behind this massive build, the largest since April 2003. Fuel oil stocks registered a build of 2.3m b to 114.1m b, or 4.3m b above the same time last year, mainly due to a drop in utility demand from the high level seen in July. The August build reduced the y-o-y deficit to 3.2m b or 0.3 per cent.

Japan

At the end of July 2003, total commercial oil stocks in Japan showed a seasonal build of 3.6m b, or 120,000 b/d, to 199.8m b. The July figure represented a y-o-y hike of 23.5m b or 13.3 per cent. Product stocks were the main contributor to this build, while the draw on crude oil inventories provided a cap. Indeed, crude oil inventories fell 1.4m b to 126.0m b on a decline of crude oil imports of around 500,000 b/d, combined with a 300,000 b/d rise in crude oil runs. Despite this draw, crude oil stocks stood at a comfortable level of 76.8m b, or 15.4 per cent, above a year ago.

Gasoline stocks moved up a slight 700,000 b to 14.5m b, around ten per cent above last year's level at the same time, with both imports and production providing an upward lift. Middle distillate inventories registered a build of 4.1m b to 37.3m b, the bulk of which occurred in kerosene stocks as imports experienced higher growth and domestic sales fell. In addition, Japanese refiners typically boost kerosene stocks at this time of the year in preparation for the rise in demand during winter. Fuel oil stocks remained unchanged, but are 14.3 per cent above the level registered a year ago.

Balance of supply/demand

July

Table I shows the demand balance for 2003, with a downward revision to total non-OPEC supply of 130,000 b/d to 51.32m b/d coupled with an upward revision to the world oil demand of 300,000 b/d to 77.09m b/d. This resulted in an estimated annual difference of around 25.76m b/d, an increase of 420,000 b/d from the last report's figure, with a quarterly distribution of 26.90m b/d, 24.24m b/d, 25.22m b/d and 26.71m b/d, respectively. The balance for 1Q and 2Q has been revised down significantly by 150,000 b/d and 660,000 b/d, respectively to –100,000 b/d and 2.22m b/d.

The demand balance for 2004 in **Table I**, introduced for the first time in the report, shows world oil demand expected at 79.25m b/d. As total non-OPEC supply is forecast at 53.87m b/d, the resulting difference should be around 25.37m b/d, with a quarterly distribution of 25.96m b/d, 23.91m b/d, 24.93m b/d and 26.70m b/d, respectively.

August

Table I shows the demand balance for 2003, with an upward revision to total non-OPEC supply of 110,000 b/d to 52.44m b/d and to world oil demand of 80,000 b/d to 78.17m b/d, resulting in an estimated annual difference of around 25.73m b/d. This represents a drop of 30,000 b/d from the last report's figure, with a quarterly distribution of 26.85m b/d, 24.53m b/d, 25.10m b/d and 26.46m b/d, respectively. The balance for 1Q has been revised up by 50,000 b/d to –50,000 b/d, while 2Q was revised down significantly by 270,000 b/d to 1.94m b/d.

Table I shows the demand balance for 2004, with world oil demand expected at 79.33m b/d and total non-OPEC supply expected at 53.96m b/d, resulting in a difference of around 25.38m b/d, with a quarterly distribution of 26.00m b/d, 24.18m b/d, 24.88m b/d and 26.44m b/d, respectively.

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

	Jun 27, 03	Aug 1, 03	Aug 29, 03	Change Aug/Jul	Aug 29, 02	Sep 5, 03[2]
Crude oil (excl SPR)	**282.1**	**280.2**	**280.4**	**0.20**	**297.0**	**276.2**
Gasoline	205.0	201.8	191.9	–9.90	205.0	192.6
Distillate fuel	109.7	119.1	124.7	5.60	130.9	128.4
Residual fuel oil	34.3	33.7	30.7	–3.00	32.1	32.9
Jet fuel	39.1	38.3	38.2	–0.10	39.3	40.1
Unfinished oils	88.6	85.8	85.2	–0.60	85.5	83.5
Other oils	165.8	177.9	183.9	6.00	226.1	185.9
Total	**924.6**	**936.7**	**935.0**	**–1.70**	**1,015.8**	**939.6**
SPR	607.3	612.4	617.0	4.60	581.9	618.5

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

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

	Jun 03	Jul 03	Aug 03	Change Aug/Jul	Aug 02
Crude oil	**446.0**	**451.5**	**452.7**	**1.2**	**440.6**
Mogas	137.7	137.4	137.3	–0.1	138.9
Naphtha	25.5	25.1	25.1	0.0	21.5
Middle distillates	330.7	333.5	339.4	5.9	361.0
Fuel oils	111.3	111.8	114.1	2.3	109.8
Total products	**605.1**	**607.8**	**615.9**	**8.1**	**631.1**
Overall total	**1,051.1**	**1,059.3**	**1,068.6**	**9.3**	**1,071.7**

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

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

	May 03	Jun 03	Jul 03	Change Jul/Jun	Jul 02
Crude oil	**108.4**	**127.4**	**126.0**	**–1.4**	**109.2**
Gasoline	14.3	13.9	14.5	0.7	13.2
Middle distillates	33.2	33.2	37.3	4.1	34.7
Residual fuel oil	22.0	21.7	21.9	0.2	19.2
Total products	**69.5**	**68.8**	**73.8**	**4.9**	**67.1**
Overall total[2]	**177.9**	**196.2**	**199.8**	**3.6**	**176.3**

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

Table I: World crude oil demand/supply balance

m b/d

	1999	2000	2001	2002	1Q03	2Q03	3Q03	4Q03	2003	1Q04	2Q04	3Q04	4Q04	2004
World demand														
OECD	47.7	47.8	47.8	47.7	49.4	47.1	47.9	49.4	48.4	49.6	47.4	48.5	50.1	48.9
North America	23.8	24.1	24.0	24.2	24.6	24.1	24.5	24.6	24.4	24.7	24.3	24.8	25.0	24.7
Western Europe	15.2	15.1	15.3	15.1	15.2	14.9	15.2	15.5	15.2	15.2	15.0	15.3	15.6	15.3
Pacific	8.7	8.6	8.5	8.5	9.6	8.0	8.2	9.4	8.8	9.6	8.1	8.3	9.5	8.9
Developing countries	18.9	19.2	19.5	19.7	19.5	19.6	20.1	20.0	19.8	19.8	20.0	20.5	20.5	20.2
FSU	4.0	3.8	3.9	3.8	4.0	3.3	3.7	4.4	3.9	4.1	3.5	3.9	4.5	4.0
Other Europe	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
China	4.2	4.7	4.7	5.0	5.4	5.5	5.3	5.1	5.3	5.5	5.6	5.5	5.3	5.5
(a) Total world demand	**75.5**	**76.2**	**76.7**	**77.0**	**79.1**	**76.2**	**77.8**	**79.6**	**78.2**	**79.7**	**77.3**	**79.2**	**81.1**	**79.3**
Non-OPEC supply														
OECD	21.3	21.8	21.8	21.9	22.2	21.3	21.9	22.2	21.9	22.3	21.5	22.0	22.3	22.1
North America	14.1	14.2	14.4	14.5	14.7	14.5	14.9	14.9	14.7	14.9	14.6	15.0	15.0	14.9
Western Europe	6.6	6.7	6.7	6.6	6.7	6.2	6.3	6.6	6.5	6.8	6.3	6.3	6.6	6.5
Pacific	0.7	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7
Developing countries	10.7	10.9	10.9	11.3	11.2	11.2	11.3	11.4	11.3	11.6	11.6	11.8	11.8	11.7
FSU	7.5	7.9	8.5	9.3	9.9	10.1	10.4	10.4	10.2	10.5	10.7	11.0	11.0	10.8
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Processing gains	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.8
Total non-OPEC supply	**44.5**	**45.7**	**46.4**	**47.8**	**48.6**	**47.9**	**49.0**	**49.3**	**48.7**	**49.9**	**49.2**	**50.2**	**50.6**	**50.0**
OPEC NGLS and non-conventionals	3.2	3.3	3.6	3.8	3.6	3.7	3.8	3.8	3.7	3.8	4.0	4.1	4.1	4.0
(b) Total non-OPEC supply and OPEC NGLS	**47.7**	**49.1**	**50.0**	**51.6**	**52.2**	**51.7**	**52.7**	**53.1**	**52.4**	**53.7**	**53.2**	**54.3**	**54.7**	**54.0**
OPEC crude supply and balance														
OPEC crude oil production[1]	26.5	28.0	27.2	25.3	26.8	26.5								
Total supply	74.2	77.0	77.2	76.9	79.0	78.1								
Balance[2]	–1.3	0.8	0.5	–0.1	0.0	1.9								
Stocks														
Closing stock level (outside FCPEs) *m b*														
OECD onland commercial	2446	2530	2621	2467	2408	2520								
OECD SPR[3]	1284	1268	1283	1343	1357	1361								
OECD total	3730	3798	3904	3810	3765	3881								
Other onland	997	1016	1044	1019	1007	1038								
Oil-on-water	808	876	831	811	856	882								
Total stock	**5535**	**5690**	**5779**	**5640**	**5628**	**5801**								
Days of forward consumption in OECD														
Commercial onland stocks	51	53	55	51	51	53								
SPR	27	27	27	28	29	28								
Total	**78**	**79**	**82**	**79**	**80**	**81**								
Memo items														
FSU net exports	3.4	4.1	4.6	5.6	5.9	6.7	6.7	6.0	6.3	6.4	7.2	7.1	6.5	6.8
[(a) — (b)]	**27.8**	**27.1**	**26.7**	**25.4**	**26.9**	**24.5**	**25.1**	**26.5**	**25.7**	**26.0**	**24.2**	**24.9**	**26.4**	**25.4**

1. *Secondary sources.*
2. *Stock change and miscellaneous.*
3. *Korean government stocks are now included in Total OECD.*

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

***Table 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 52, while **Graphs One and Two** (on pages 51 and 53) show the evolution on a weekly basis. **Tables Three to Eight**, and the corresponding graphs on pages 54–59, show the evolution of monthly average spot prices for important products in six major markets. (Data for Tables 1–8 is provided by courtesy of Platt's Energy Services).*

Graph 1:
Evolution of spot prices for selected OPEC crudes
May to August 2003

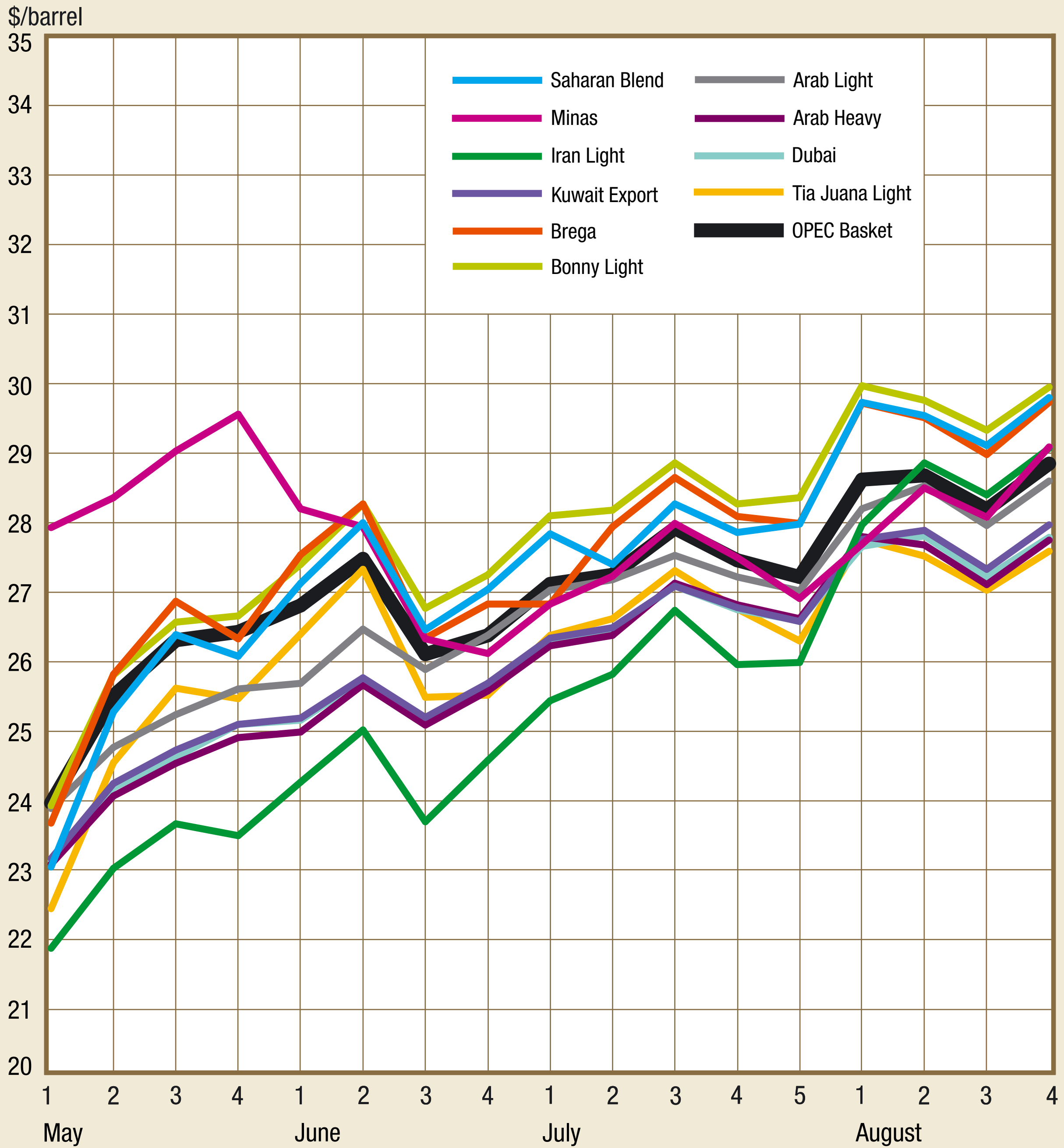


Table 1: OPEC spot crude oil prices, 2003 ($/b)

Member Country/ Crude (API°)	Jan 4Wav	Feb 4Wav	Mar 4Wav	Apr 5Wav	May 4Wav	Jun 4Wav	July 1W	July 2W	July 3W	July 4W	July 5W	July 5Wav	August 1W	August 2W	August 3W	August 4W	August 4Wav
Algeria																	
Saharan Blend *(44.1)*	31.29	32.43	31.21	25.19	25.24	27.20	27.88	27.44	28.31	27.90	28.02	27.91	29.77	29.58	29.15	29.84	29.59
Indonesia																	
Minas *(33.9)*	32.32	31.89	30.70	29.66	28.76	27.19	26.87	27.27	28.03	27.54	26.95	27.33	27.73	28.54	28.12	29.13	28.38
IR Iran																	
Light *(33.9)*	29.13	29.89	27.94	22.85	23.06	24.43	25.48	25.86	26.78	26.00	26.03	26.03	28.01	28.90	28.44	29.11	28.62
Iraq																	
Kirkuk *(36.1)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait																	
Export *(31.4)*	28.08	30.02	27.81	23.78	24.35	25.50	26.38	26.53	27.13	26.82	26.62	26.70	27.80	27.93	27.37	28.01	27.78
SP Libyan AJ																	
Brega *(40.4)*	31.86	32.89	31.21	25.35	25.72	27.29	na	27.98	28.69	28.13	28.03	28.21	29.76	29.55	29.02	29.77	29.53
Nigeria																	
Bonny Light *(36.7)*	30.78	32.33	30.83	25.27	25.78	27.46	28.14	28.22	28.90	28.31	28.40	28.39	30.01	29.80	29.37	29.99	29.79
Saudi Arabia																	
Light *(34.2)*	29.10	31.11	28.98	24.70	24.92	26.15	27.07	27.22	27.57	27.26	27.06	27.24	28.24	28.57	28.00	28.64	28.36
Heavy *(28.0)*	27.78	29.86	27.33	23.50	24.19	25.37	26.27	26.42	27.17	26.86	26.66	26.68	27.84	27.72	27.15	27.79	27.63
UAE																	
Dubai *(32.5)*	28.02	29.94	27.76	23.59	24.31	25.46	26.28	26.49	27.13	26.79	26.63	26.66	27.70	27.85	27.26	27.83	27.66
Venezuela																	
Tia Juana Light[1] *(32.4)*	30.14	31.21	29.04	23.97	24.56	26.23	26.42	26.66	27.35	26.80	26.34	26.71	27.80	27.56	27.07	27.63	27.52
OPEC Basket[2]	30.34	31.54	29.78	25.34	25.60	26.74	27.16	27.29	27.96	27.50	27.26	27.43	28.66	28.72	28.23	28.89	28.63

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

Country/ Crude (API°)	Jan 4Wav	Feb 4Wav	Mar 4Wav	Apr 5Wav	May 4Wav	Jun 4Wav	July 1W	July 2W	July 3W	July 4W	July 5W	July 5Wav	August 1W	August 2W	August 3W	August 4W	August 4Wav
Gulf Area																	
Oman Blend *(34.0)*	28.54	30.31	28.06	24.14	24.53	25.64	26.56	26.65	27.20	26.92	26.68	26.80	27.97	28.08	27.54	28.25	27.96
Mediterranean																	
Suez Mix *(Egypt, 33.0)*	27.67	29.04	27.81	21.87	22.84	24.07	24.90	25.15	26.47	25.99	25.95	25.69	27.80	27.65	27.16	27.75	27.59
North Sea																	
Brent *(UK, 38.0)*	31.31	32.54	30.98	25.07	25.79	27.44	28.16	28.13	28.84	28.28	28.28	28.34	30.01	29.80	29.27	30.02	29.78
Ekofisk *(Norway, 43.0)*	31.43	32.80	31.15	25.17	25.85	27.48	28.21	28.24	28.96	28.35	28.37	28.43	30.01	29.86	29.38	30.05	29.83
Latin America																	
Isthmus *(Mexico, 32.8)*	30.74	31.90	29.96	24.99	25.61	27.48	27.48	27.73	28.45	27.88	27.40	27.79	29.38	29.13	28.61	29.20	29.08
North America																	
WTI *(US, 40.0)*	33.08	35.63	33.88	28.40	28.23	30.71	30.03	30.54	31.30	30.81	30.37	30.61	32.11	31.58	31.10	31.60	31.60
Others																	
Urals *(Russia, 36.1)*	29.56	30.76	28.38	22.48	23.96	25.68	25.72	26.71	27.85	27.26	27.04	26.92	28.90	28.73	28.24	28.81	28.67

1. Tia Juana Light spot price = (TJL netback/Isthmus netback) x Isthmus spot price.
2. OPEC Basket: an average of Saharan Blend, Minas, Bonny Light, Arabian Light, Dubai, Tia Juana Light and Isthmus.
Kirkuk ex Ceyhan; Brent for dated cargoes; Urals cif Mediterranean. All others fob loading port.
Sources: The netback values for TJL price calculations are taken from RVM; Platt's Oilgram Price Report; Reuters; Secretariat's calculations.

Graph 2:
Evolution of spot prices for selected non-OPEC crudes
May to August 2003

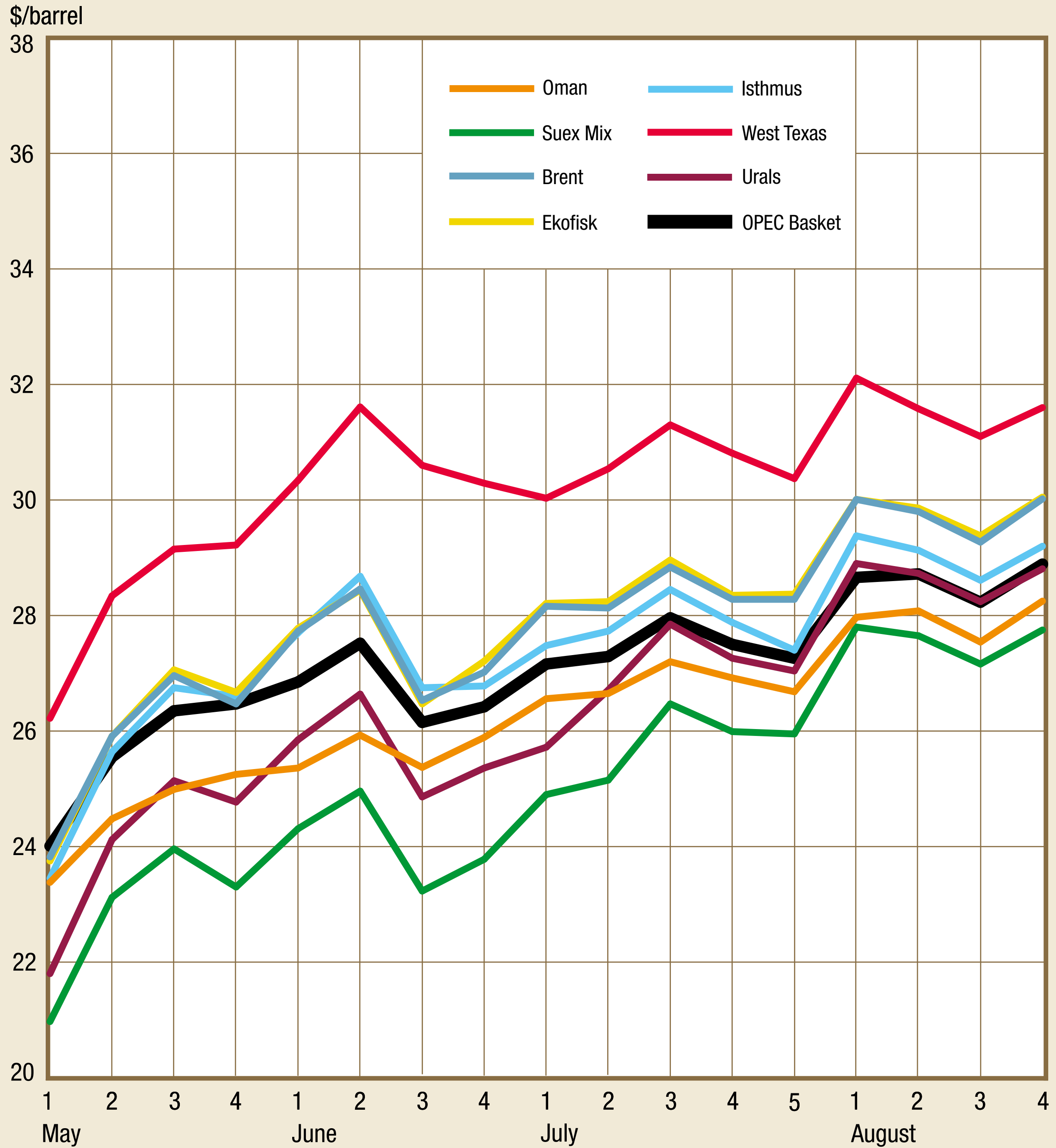


Table 3: North European market — bulk barges, fob Rotterdam ($/b)

		naphtha	regular gasoline unleaded	premium gasoline unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
2001	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	23.35	23.27	27.41	28.53	16.50	16.07
	November	16.88	20.76	20.20	23.03	24.38	15.49	14.68
	December	17.48	19.77	19.16	21.35	23.11	14.98	14.95
2002	January	21.42	20.87	20.93	21.55	23.46	16.20	15.25
	February	23.77	21.18	21.17	21.69	23.43	14.70	15.52
	March	28.27	25.63	25.74	25.05	26.73	17.25	17.86
	April	29.29	29.77	29.94	26.53	28.01	19.51	19.93
	May	27.68	29.14	28.94	26.54	28.99	19.93	21.02
	June	24.33	28.90	29.02	25.97	28.04	19.32	19.94
	July	28.20	30.61	30.77	27.80	29.11	21.18	21.02
	August	30.23	30.95	31.14	28.95	30.46	21.49	21.68
	September	33.46	32.40	32.63	31.54	34.19	24.33	24.02
	October	31.55	32.04	32.16	31.23	33.36	27.20	22.44
	November	28.67	27.75	27.88	28.52	30.48	23.59	18.40
	December	34.20	31.17	31.34	32.63	33.21	26.11	19.99
2003	January	40.35	35.19	35.31	35.22	36.66	26.83	25.97
	February	43.96	39.13	39.15	41.16	43.08	30.77	25.93
	March	40.60	35.98	36.06	39.61	42.75	26.86	21.91
	April	29.40	34.09	34.38	29.59	31.66	23.10	18.61
	May	28.03	31.74	32.06	29.00	30.30	21.68	20.29
	June	32.26	32.92	33.15	30.57	31.72	25.14	21.57
	July	32.81	35.17	35.36	31.08	32.98	25.56	24.15
	August	34.97	38.00	38.04	32.47	34.52	25.86	23.72

Sources: Reuters; as of 2002 Platts. Prices are average of available days.

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

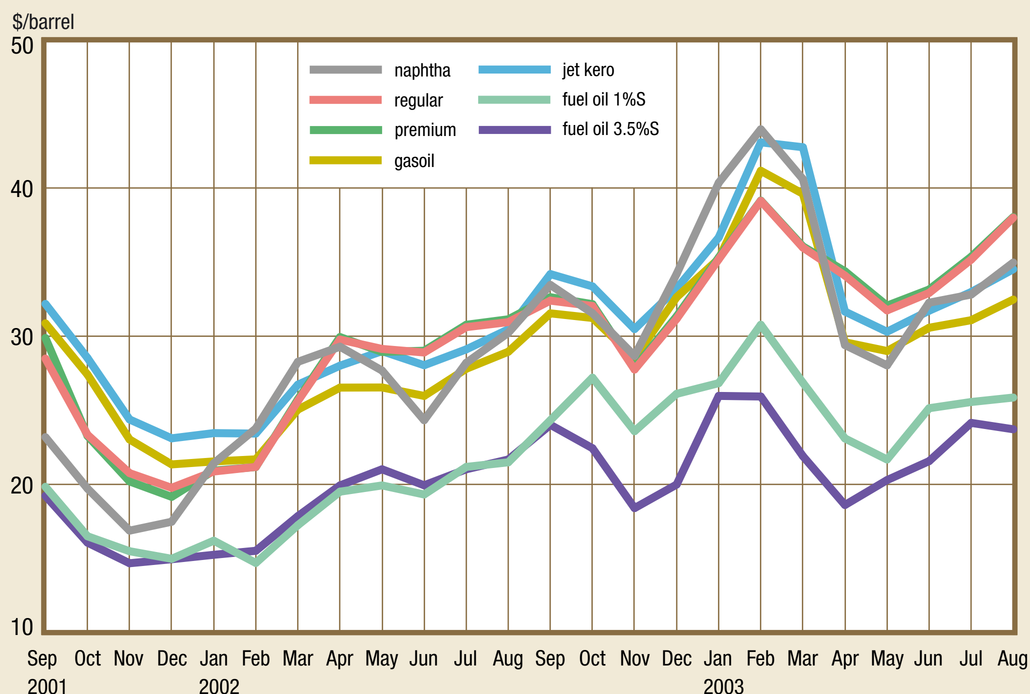


Table 4: South European market — bulk cargoes, fob Italy ($/b)

		naphtha	gasoline premium unleaded 95	gasoline premium 0.15g/l	gasoil	fuel oil 1%S	fuel oil 3.5%S
2001	August	22.26	26.60	39.69	27.58	18.20	16.93
	September	23.46	29.93	39.69	27.58	18.99	17.44
	October	19.14	23.55	39.69	27.58	15.61	15.07
	November	16.22	19.41	39.69	27.58	13.61	12.48
	December	16.91	19.11	39.69	27.58	15.15	13.15
2002	January	17.55	19.89	20.67	22.37	17.26	14.18
	February	19.42	20.06	21.47	21.29	15.37	14.77
	March	23.43	24.07	26.34	24.15	17.99	16.33
	April	24.48	28.27	30.24	28.27	20.31	18.39
	May	22.88	27.80	29.46	25.48	20.01	19.18
	June	22.05	26.23	29.31	25.48	20.21	18.56
	July	23.79	28.45	30.40	26.92	20.43	19.27
	August	24.92	29.21	30.82	28.23	21.45	20.04
	September	27.95	31.79	32.26	30.56	25.07	22.53
	October	26.18	31.13	31.41	29.86	24.28	20.58
	November	23.45	26.78	27.11	27.91	21.26	16.99
	December	27.71	30.57	30.86	32.02	24.07	18.32
2003	January	33.02	34.20	34.44	35.05	29.15	23.71
	February	35.86	38.05	38.22	40.11	31.05	24.65
	March	32.05	33.75	33.99	39.45	28.10	20.94
	April	22.88	29.69	29.96	27.14	21.14	18.18
	May	22.24	28.97	29.28	26.72	21.57	18.46
	June	26.31	31.51	31.78	29.88	25.01	20.94
	July	26.84	34.10	34.33	29.50	27.39	23.29
	August	28.57	37.21	37.40	31.49	27.66	22.64

Sources: Reuters; as of 2002 Platts. Prices are average of available days.

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

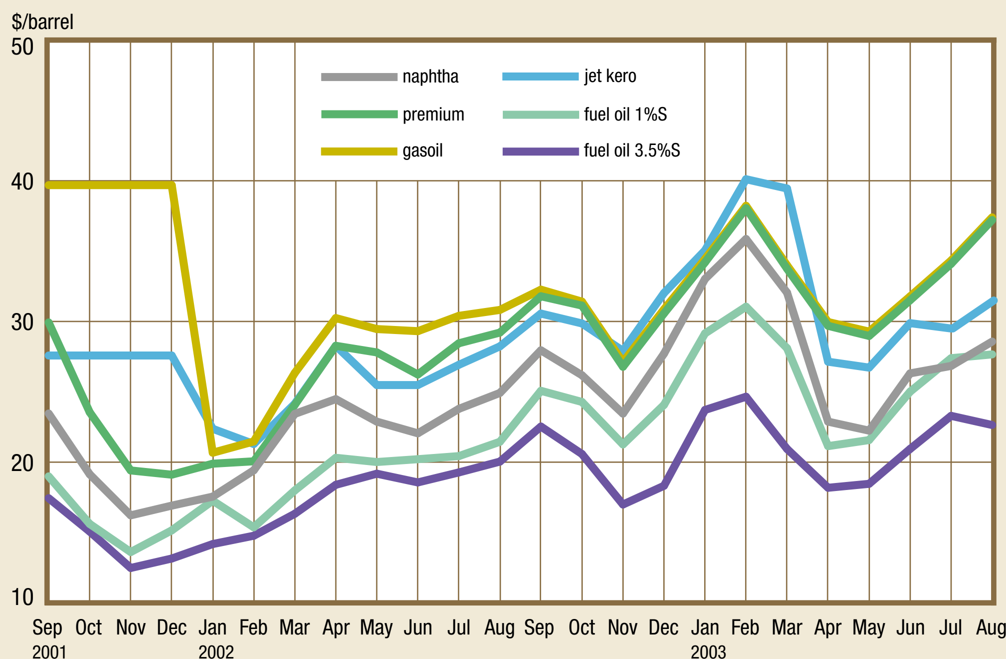


Table 5: US East Coast market — New York *($/b, duties and fees included)*

		regular gasoline unleaded 87	gasoil	jet kero	fuel oil 0.3%S	fuel oil 1%S	fuel oil 2.2%S
2001	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	22.53	22.23	23.35	19.23	16.08	15.30
	February	23.01	22.51	23.96	18.09	14.83	14.42
	March	28.94	26.48	27.00	21.79	19.43	19.05
	April	31.00	27.78	28.61	25.24	22.24	21.59
	May	29.18	27.70	28.70	25.62	23.37	21.73
	June	29.78	26.89	28.34	24.63	22.70	21.54
	July	31.90	28.26	29.84	25.79	22.55	21.60
	August	31.96	29.22	31.31	26.63	25.43	23.51
	September	32.61	32.25	34.11	27.52	26.02	25.35
	October	34.44	31.98	33.97	28.33	26.39	24.43
	November	31.43	29.98	30.79	26.94	23.86	21.46
	December	33.59	34.21	34.67	32.62	26.68	24.30
2003	January	36.60	37.78	38.17	37.87	31.53	30.04
	February	41.65	47.11	48.11	46.52	35.06	30.61
	March	39.86	40.82	40.92	38.71	31.71	27.13
	April	33.37	32.66	32.88	27.29	23.98	20.51
	May	31.65	30.79	31.66	29.58	24.51	21.79
	June	33.58	31.69	32.21	28.40	25.18	22.46
	July	36.45	32.76	33.71	30.45	27.53	26.26
	August	41.92	33.96	35.36	30.97	27.74	26.43

Sources: Reuters; as of 2002 Platts. Prices are average of available days.

Graph 5: US East Coast market — New York

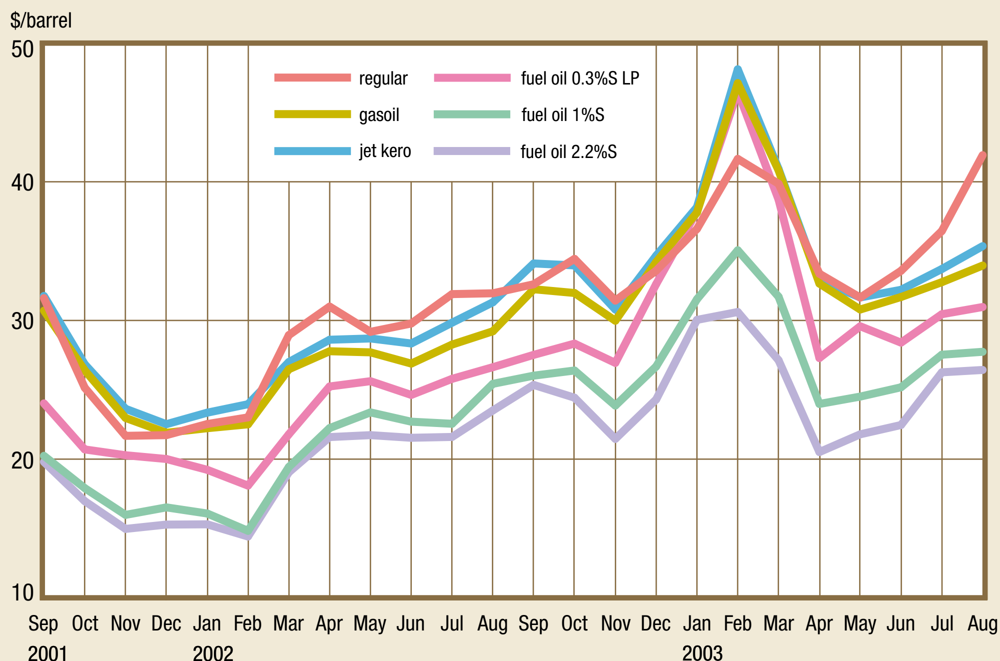


Table 6: Caribbean cargoes — fob ($/b)

		naphtha	gasoil	jet kero	fuel oil 2%S	fuel oil 2.8%S
2001	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	19.63	21.49	22.24	14.50	13.89
	February	21.30	21.79	23.41	13.62	13.54
	March	25.86	25.77	26.72	18.25	18.09
	April	28.55	27.31	28.33	20.79	20.59
	May	27.14	27.28	28.31	20.95	20.65
	June	26.85	26.49	27.66	20.79	20.36
	July	27.98	28.11	29.43	20.88	20.67
	August	28.73	28.83	30.53	22.78	22.52
	September	32.16	31.91	33.67	24.55	24.77
	October	32.54	32.04	33.23	23.70	23.86
	November	24.39	29.65	29.51	20.73	19.97
	December	31.43	33.64	34.27	23.58	23.18
2003	January	37.00	37.44	37.87	29.31	28.51
	February	40.53	45.21	44.77	29.89	28.43
	March	36.78	37.87	37.94	26.05	24.18
	April	29.03	30.65	31.62	19.01	18.45
	May	28.84	29.84	30.36	20.27	19.62
	June	28.91	31.30	31.79	20.95	20.19
	July	30.95	32.35	32.97	24.71	24.64
	August	34.67	33.69	34.72	24.89	24.81

Sources: Reuters; as of 2002 Platts. Prices are average of available days.

Graph 6: Caribbean cargoes — fob

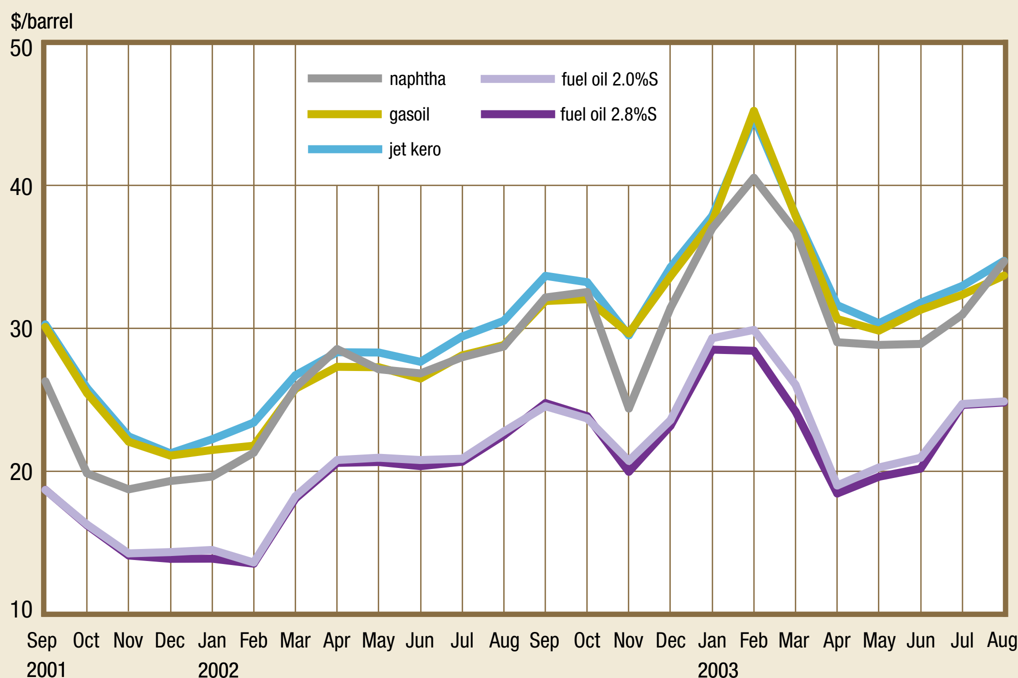


Table 7: Singapore cargoes

($/b)

		naphtha	gasoline premium unleaded 95	gasoline premium unleaded 92	gasoil	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2001	August	24.33	26.68	25.50	28.71	29.37	20.70	20.94
	September	24.67	29.47	28.16	29.44	31.05	21.74	21.85
	October	20.58	22.23	21.24	25.53	25.92	18.53	18.72
	November	18.15	20.75	22.40	21.87	22.40	15.47	15.46
	December	18.36	22.61	21.60	20.11	21.77	16.15	16.44
2002	January	18.97	21.00	20.30	21.66	22.93	16.07	16.24
	February	21.04	24.16	22.95	22.54	22.54	17.04	17.37
	March	24.92	27.93	26.43	25.71	25.16	19.37	19.73
	April	26.11	30.11	28.80	28.64	27.27	21.45	21.75
	May	24.90	29.73	28.81	28.76	27.85	22.60	22.98
	June	23.84	28.54	27.45	27.82	26.49	21.66	21.99
	July	24.64	28.19	26.95	28.19	27.56	22.47	22.88
	August	25.52	28.17	26.65	28.79	29.28	23.39	24.10
	September	27.52	30.49	29.21	31.43	32.92	24.70	25.34
	October	26.87	29.62	28.37	33.10	32.43	23.13	23.46
	November	25.06	27.80	29.38	29.37	29.38	21.77	21.83
	December	29.57	30.25	29.35	31.88	32.10	23.95	24.24
2003	January	32.21	34.34	33.52	34.23	34.37	26.51	26.97
	February	37.34	40.14	39.28	39.35	39.27	29.05	29.33
	March	33.78	37.51	36.67	37.87	35.33	26.19	26.65
	April	23.58	28.74	27.79	30.03	28.35	22.55	23.12
	May	23.77	28.73	27.74	29.12	28.25	23.18	23.15
	June	26.66	31.59	30.84	29.33	28.48	24.20	24.51
	July	27.77	34.59	33.41	29.57	29.78	25.54	26.18
	August	29.67	37.30	35.95	33.27	33.58	24.27	24.92

Sources: Reuters; as of 2002 Platts. Prices are average of available days.

Graph 7: Singapore cargoes

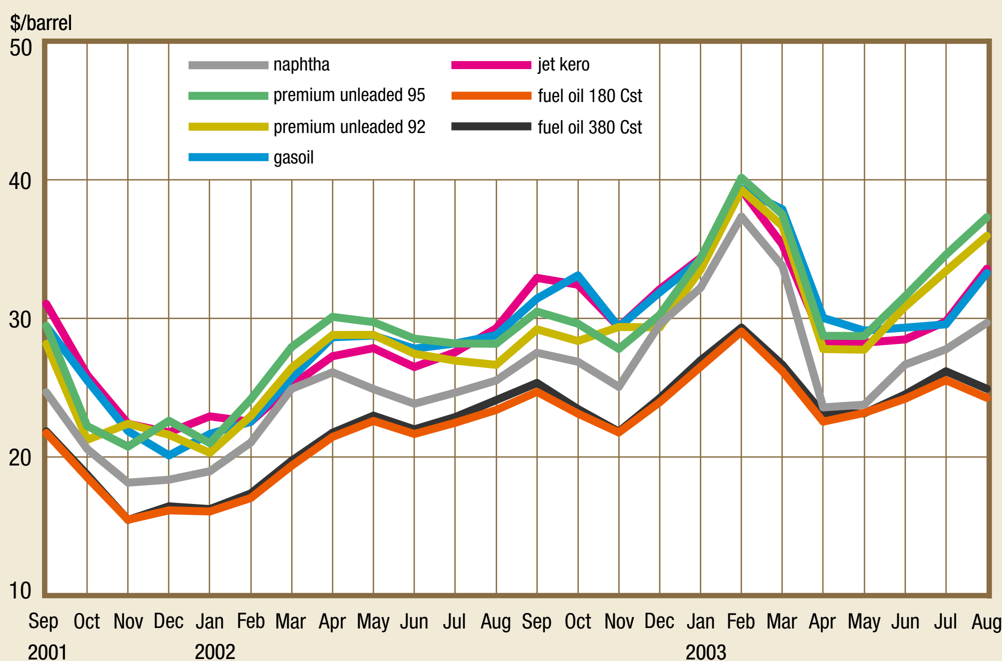
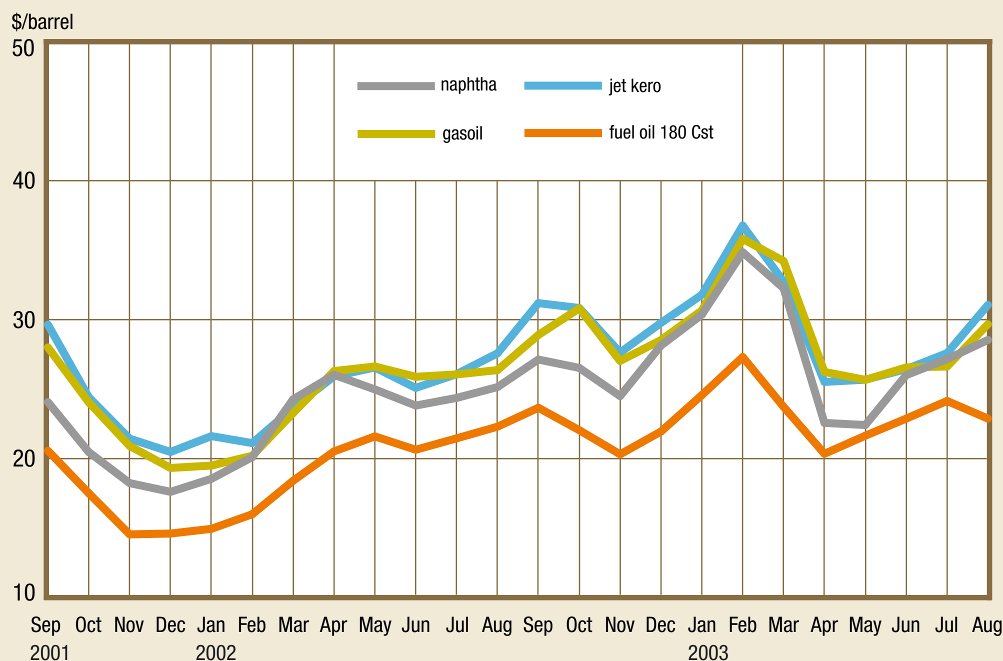


Table 8: Middle East — fob ($/b)

		naphtha	gasoil	jet kero	fuel oil 180 Cst
2001	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	18.55	19.50	21.62	14.95
	February	20.11	20.21	21.12	16.00
	March	24.27	23.28	23.65	18.41
	April	26.03	26.30	25.92	20.52
	May	24.98	26.63	26.56	21.60
	June	23.82	25.89	25.09	20.64
	July	24.37	26.06	26.08	21.46
	August	25.15	26.37	27.58	22.30
	September	27.13	28.90	31.19	23.66
	October	26.53	30.81	30.84	22.05
	November	24.50	27.03	27.63	20.31
	December	28.14	28.53	29.77	21.95
2003	January	30.36	30.66	31.79	24.57
	February	34.85	35.81	36.77	27.31
	March	32.26	34.22	32.74	23.73
	April	22.57	26.24	25.52	20.35
	May	22.42	25.67	25.68	21.65
	June	26.01	26.56	26.44	22.88
	July	27.16	26.63	27.59	24.15
	August	28.54	29.67	31.06	22.88

Sources: Reuters; as of 2002 Platts. Prices are average of available days.

Graph 8: Middle East — fob



Sanctions are lifted on Libya

as compensation deal is reached over Lockerbie bombing

Photo: Reuters/Chip East

by Lizette Kilian

The United Nations has formally ended 11 years of sanctions against Libya, after the UN Security Council voted 13–0 with two abstentions to lift them. The sanctions, which included a ban on the sale of oil-related equipment for refineries and transporting oil, were imposed in 1992 and suspended in 1999, after Libya handed over two men accused of the bombing of Pan Am Flight 103 over Lockerbie, Scotland, killing 270 people.

In a letter to the UN Security Council, Libya admitted responsibility for the Lockerbie bombing and agreed to pay what it described as "appropriate compensation", totalling $2.7 billion, to relatives of the victims.

Despite the affirmation by Libya in the letter to UN Security Council President Mikhail Wehbe that the country would "take the necessary steps to prevent the commission of terrorist acts", the US was one of the two Security Council members which abstained during the vote, announcing that it had no intention to quickly lift its own sanctions against Libya.

Under the deal, which totals $10m in compensation for each victim, an initial $4m will be paid now that the UN sanctions have been lifted. This would be followed by another $4m if the US lifted its own sanctions, and by an additional $2m if it dropped Libya from the list of state sponsors of terrorism.

If the US does not take these steps within eight months of Libya placing the $2.7bn into the escrow account, the victims' families would receive an additional $1m, bringing the total compensation to $5m per victim. The remaining money would then revert to Libya, according to lawyers who were negotiating on behalf of the victims' families.

The US sanctions on Libya include a ban on imports of Libyan crude oil to the United States dating from 1982, and expanded sanctions in 1986 that include a ban on direct trade, commercial contracts and travel-related activities.

They also include the Iran-Libya Sanctions Act (ILSA) passed in 1996 and later amended in 2001, which enables the US to impose its own sanctions on foreign oil companies if the latter invest more than $20m in the oil industries of

Above: French Ambassador to the UN, Jean-Marc de LaSabliere, raises his hand to abstain in the Security Council vote to lift sanctions against Libya.

Left: The UN Security Council voted to lift sanctions against Libya on September 12.

Iran or Libya. ILSA was due to expire in August 2001 but meanwhile has been renewed until August 2006.

The UN vote to lift sanctions could have been derailed at the last minute by France, which threatened to block the resolution unless an improved compensation deal for the downing of a French airliner in 1989 was struck. The French authorities felt that the $2.7bn Lockerbie settlement overshadowed the $33m compensation Libya awarded relatives of 170 victims killed when the French UTA 772 flight was bombed over Niger in September, 1989.

Libya never accepted responsibility for the downing of the UTA flight, but agreed to pay $33m in compensation after a Paris court convicted six Libyans of the bombing *in absentia*. France, therefore, also abstained from the UN Security Council vote since they were in the process of finalising negotiations over the improved compensation package with Libya.

Meanwhile, in a bid to open the country up to direct foreign investment, Libya's Prime Minister and former Director of the OPEC Research Division, Dr Shokri Ghanem, recently announced plans to privatise about 360 state-owned companies starting next year. "The participation of foreign companies in the privatisation process is very welcome," a Reuters report quoted him as saying.

The country's current oil output is around 1.3m barrels/day, and Libya wants to stimulate foreign exploration in order to meet its target of lifting upstream capacity to 1.8m b/d by 2006.

Indonesian government to meet privatization target for 2003

Jakarta — The Indonesian government has announced that it will be able to meet its target for the privatization of state enterprises this year.

The government is set to earn a total of 3.7 trillion rupiahs from the partial sale of gas distributor Perusahaan Gas Negara (PGN), Bank Rakyat Indonesia (BRI) and cement manufacturer Indocement Tunggal Prakasa.

Deputy Minister for State Enterprises, Mahmudin Yasin, noted the government had already collected about 2.5tr rupiahs out of the 6.1tr rupiah target from the sale of a 20 per cent stake in Bank Mandiri through an initial public offering.

It hopes to earn a further 1.5tr rupiahs each from the partial sale of PGN and BRI, and 700 billion rupiahs from the sale of 17 per cent of Indocement.

The government has defended its privatization programme, saying the proceeds helped covered budget deficits and transformed state enterprises to operate on international standards.

Initially, the government had hoped to raise 8tr rupiahs from the programme, but this was lowered to 6.1tr due to a weak response. Finance Minister Boediono conceded that the government had to scale down the target, following its failure to sell three other state companies that had been slated for sale this year.

The firms which found no buyers were pharmaceutical companies Kimia Farma and Indo Farma and airport operator Angkasa Pura II, which runs the country's largest airport, Soekarno-Hatta International.

Despite the setback this year, the government still hopes to raise 10tr rupiahs from selling state-owned enterprises next year, as stated in its draft 2004 state budget.

In a separate development, Indonesia recorded a surge in foreign direct investment (FDI) approvals during the period from January-August this year.

FDI over the period increased by 23.4 per cent to $5.02bn, up from $4.07bn in the same period of last year. The approvals were mostly for investments in the trading, metals, machinery and electronics sectors, said the Investment Co-ordinating Board.

Domestic investment approvals, however, contracted by 14.1 per cent to 13.98tr rupiahs during the first eight months of the year, compared with 16.27tr rupiahs for the same period last year.

The food industry, chemicals, pharmaceuticals, metals, machinery and the electronics industries were the most popular areas for domestic investors, said the Board.

Qatar and South Africa sign deal for large-scale methanol project

Doha — Qatar Petroleum (QP) and Petroworld of South Africa have signed a framework agreement for the development

of a large-scale fuel grade methanol project, it was announced last month.

The agreement was signed by Qatari Minister of Energy & Industry and QP Chairman, Abdullah bin Hamad Al Attiyah, and South Africa's Minister of Minerals and Energy, Phumzile Mlambo-Ngcuka.

A feasibility study for the one billion dollar project is to be completed by the end of 2003. The partners expect the proposed Ras Laffan-based plant, which will produce 12,000-15,000 tons/day of methanol, to be on stream by 2008.

The methanol project will use natural gas from Qatar's North field to produce primarily fuel grade methanol as a clean fuel for electric power generation plants in areas where pipeline gas or liquefied natural gas are not economically viable and further use of distillates and fuel oil is more costly or environmentally unacceptable.

"The project is an economically viable and technologically feasible option that allows QP to diversify from its other existing options, and hence optimise Qatar's competitive position across world markets," Al Attiyah said.

"We are pleased to begin work on this world-scale gas conversion project which will further diversify Qatar's growing gas utilization industry and produce an environmentally friendly, competitive alternative fuel for power generation," he added.

The agreement calls for Petroworld to conduct a feasibility study, as well as a plan for the process selection and project implementation.

"This project will promote South Africa's strong industrial base by utilizing its unique gas-to-liquids (GTL) technologies in conjunction with the global oil, gas and power generation and related projects development experience of Transworld," said Mlambo-Ngcuka.

"This planned project by Petroworld and QP, which is another milestone in the developing co-operation between South Africa and Qatar in the energy sector, will build on the successful foundation laid by the Oryx GTL project of Sasol of South Africa and QP," she noted.

Petroworld is a joint venture equally owned by the Petroleum Oil and Gas Corporation of South Africa, and the Transworld Group.

Indonesia may reconsider decision on power rates

Jakarta — The Indonesian government is mulling plans to drop its mandatory increases in electricity rates, according to the country's Minister of Energy and Mineral Resources, Dr Purnomo Yusgiantoro *(pictured below).*

An earlier presidential decree had mandated a six per cent increase in electricity rates every quarter, in order to help cushion state power company PLN against the huge losses it has been suffering in recent years.

However, in announcing the possible government decision on the politically-sensitive power rates, the Minister said that an exchange rate of 8,200–8,300 rupiahs to the dollar would allow the government to cancel the power rate increases.

Speaking to a House of Representatives commission on for energy, Purnomo said the government had three options — to increase the rates as planned, not to raise the rates at all, or to increase power rates for only certain categories of customers.

Photo: Reuters/Dadang Tri

The government will make a decision soon, according to Luluk Sumiarso, the Ministry's Director General of Electricity and Energy Utilization. The commission has been pressing the PLN to review the rate increase policy, claiming that the rates were already too high.

PLN President Eddie Widiono, however, has defended the policy, and has insisted that power rates would be increased again in October as planned.

PLN has been raising power rates by six per cent each quarter since the beginning of 2002, as stipulated by the presidential decree. Despite widespread protests in January this year, the quarterly price hike was not cancelled, although the government was forced to cancel its plan for a parallel increase in fuel prices.

Cash-strapped PLN had said it would continue to raise power rates until after 2005, when the rates are expected to reach seven cents per kilowatt-hour, reasoning that the seven-cent level is the standard price in many countries for a power company to make a profit.

Venezuela and Poland study investment in coal mining

Caracas — Venezuela and Poland are studying the possibility of investing $20 million to reactivate a coal mine in Tachira State, south-western Venezuela, according to the Polish Ambassador to Venezuela, Adam Skrybant.

The project would have the effect of strengthening relations between the two countries, Skrybant said in a recent interview with state news agency Venpres.

"There is a concrete programme on the part of Venezuela to reactivate one of the coal mines in Tachira State. It calls for an investment of close to $20m and in addition to the reactivation of the mine, it also involves the construction of a copper plant and a residue incinerator," the diplomat told Venpres.

Skrybant added that feasibility studies on the proposal were currently being carried out "and we have established direct contact with two interested organizations and a specialized company in this line of product."

On the Venezuelan side, the Ministries of Production & Trade and Energy & Mines were working to seal the project, the Ambassador noted.

Skrybant went on to say that he hoped to "raise the level of relations" between the two countries during his term of duty, and in this respect, he would be organizing a visit to Venezuela by his country's Under-Secretary of State for Latin American Affairs.

Algeria, Brazil to strengthen trade and energy co-operation

Algiers — Algeria and Brazil have pledged to strengthen trade and investment between the two countries, and to enhance co-operation in the hydrocarbon, mining and geological sectors, it was announced last month.

The pledge came in a joint statement after a three-day visit to the Algerian capital by the Brazilian Energy and Mines Minister, Dilma Roussef, on the invitation of her Algerian counterpart, Dr Chakib Khelil.

The statement, issued at the end of their meeting, said the parties had also agreed to identify areas to encourage the development of joint projects in other sectors, such as sea transport, public works and pharmaceuticals.

The two sides also agreed on the setting up of an Algeria-Brazilian business council to oversee the implementation of the various decisions and to assist in boosting bilateral trade.

Trade between the two countries has increased in recent years, rising to $1.5 billion in 2002, compared with only $100 million in 1998. Algerian exports to Brazil in 2002 constituted mainly oil and gas with a value of about $1.0bn, while the country's imports from Brazil stood at $500m, 65 per cent of which was accounted for by sugar.

IMF directors praise Iran's management of its economy

New York — The International Monetary Fund (IMF) has praised the management of Iran's economy after its annual consultations with the Iranian authorities.

The Fund's executive directors noted that the Iranian economy had performed well over the last three years, as evidenced by the rapid growth of the non-oil sector, a decline in unemployment, a reduction in external debt, the accumulation of gross official reserves and an improvement in key social indicators.

These achievements were in large part attributable to structural reforms implemented over the last three years, including the opening up of the economy to international trade and foreign direct investment, exchange rate unification, and further progress in enhancing fiscal management and reforming the financial system.

The directors commended Iran's firm commitment to promoting economic reforms under its current five-year development plan, and urged the authorities to speed up the pace of implementation. They also welcomed the authorities' intention to introduce corrective fiscal and monetary policy measures during the current fiscal year.

They supported consolidating all spending into the budget and a gradual reduction in overall expenditure, particularly subsidies. While acknowledging that critical capital and social spending should be protected, the directors emphasized the need to improve prioritization of public investment on the basis of efficiency and productivity considerations.

The directors noted the authorities' concerns over the impact of expenditure cuts on employment. They also endorsed the authorities' intention to tighten monetary policy, and welcomed the range of measures that have been approved to contain domestic liquidity growth-including stepped-up sterilization operations.

The IMF also noted that, following the smooth transition to a unified exchange rate system, the Iranian authorities could now move to a more flexible exchange rate management system in order to enhance credibility and facilitate the achievement of monetary policy objectives. It welcomed the authorities' intention to establish a timetable for removing remaining exchange restrictions.

Kuwait records current account surplus of $4.22 billion in 2002

Kuwait — Kuwait recorded a current account surplus of $4.22 billion in 2002, according to the latest economic report on the country's balance of payments from the National Bank of Kuwait.

The surplus, representing some 12 per cent of GDP, was just half the size of the 2001 surplus and was the smallest since 1998. That was the year in which oil prices fell below $10/barrel, pushing oil exports down to their lowest level since

the recovery from the damage wrought by the Gulf conflict in 1990–91.

In contrast, oil exports during 2002 were the third highest in over 20 years and their seven per cent drop was only a small contributing factor to the contraction of the current account surplus, said the report, noting that reduced income from overseas investments and higher imports played a bigger role.

The balance of payments figures showed that Kuwait's net capital and financial account outflow equalled $3.47bn, more or less on a par with the previous year's results. The financial account showed only those flows reported by the government and financial institutions and did not capture all private capital flows.

During 2002, Kuwait scaled back its oil production in line with a reduction in the country's OPEC-assigned output allocations. The quota was 10.5 per cent lower on average for the year, compared with 2001.

However, actual production fell less than the quota, particularly in the fourth quarter of the year, when OPEC Members sought to soften the impact of a strike by oil workers in Venezuela, and to assure markets of their ability to compensate for any loss of Iraqi oil in the months leading up to the war against Iraq.

Meanwhile, an increase in the average price of Kuwaiti export crude of 10.7 per cent helped counterbalance the effect of the output reductions on oil export revenues, which fell for the second year in a row to $14.09bn.

Meanwhile, the country's imports increased at the fastest rate seen in a decade, rising by 13.5 per cent to $8.09bn. Net outflows on services increased by 14.5 per cent. The rise came from increased spending on transportation, travel services, and government services.

Non-oil exports increased by 5.4 per cent to $1.35bn, with most of the rise coming from exports of ethylene products by Equate, the country's major petrochemical facility, whose sales now account for more than half of all Kuwaiti non-oil exports.

Saudi Arabia, EU sign bilateral accord in support of WTO entry

Jeddah — Saudi Arabia and the European Union (EU) have signed a bilateral agreement covering the commodities and services markets, according to a report by the official Saudi Press Agency (SPA).

The agreement, which is expected to boost the Kingdom's efforts to join the World Trade Organization (WTO), was signed by the Saudi Arabian Minister of Commerce & Industry, Dr Hashim Yamani, and the European Trade Commissioner, Pascal Lamy, who was on a visit to the Kingdom.

The accord confirmed the willingness of Saudi Arabia and the EU to work together to pave the way for the future admission of the Kingdom to the WTO, said the SPA report.

The agreement raises to 14 the number of bilateral accords concluded by the Kingdom. Deals have so far been signed with Japan, Australia, New Zealand, Canada, Malaysia, South Korea, Mexico, Argentina, Brazil, Venezuela, Ecuador, Pakistan, Turkey and now the EU, the SPA report added.

UAE again cuts spending to control budget deficit

Abu Dhabi — The United Arab Emirates (UAE) is sticking to its programme of spending cuts in order to keep the federal budget deficit under control and avert domestic borrowing, according to local media reports.

Figures from the Ministry of Planning and the Central Bank show that the curbs cover both current expenditure and investment. However, economists say the cuts have not affected key projects and growth in the non-oil sector has been maintained.

At the start of fiscal 1998, the UAE's budget deficit was slashed from an estimated $534 million to around $144.9m at the end of that year. In 1999, a forecast deficit of nearly $675m was turned into a surplus of around $175.6m.

The deficit in 2000 was also sharply reduced, from around $662m to nearly $115.5m, while the 2001 shortfall of around $607m tumbled to $52.5m.

The report gave no breakdown for 2002, but bankers expected the deficit of $491m to have been slashed again, noted a report in the *Gulf News* of Dubai.

This year's gap of around $599m could also be cut sharply, or even become a surplus, due to a surge in oil prices, which could exceed an average of $28/barrel, their highest level since the end of the oil boom years.

The figures point to major cuts in spending over the past few years, while revenues were almost unchanged. From an estimated $5.82 billion in 1998, actual federal expenditure was cut to around $5.38bn that year, while in 1999, it was slashed from $6.24bn to $5.5bn.

In 2000, spending was also sharply reduced, from around $6.29bn to nearly $5.64bn, while the following year, it was cut from $6.17bn to around $5.72bn.

Spending in 2002 was forecast at around $6.3bn, but actual expenditure was expected to be lower as there were no major commitments for the government. This year's expenditure was forecast at nearly $6.34bn, leaving a deficit similar to that predicted over the past few years.

The report noted that the cut in the federal deficit had sharply reduced its ratio to the country's GDP, which stood at only 0.3 per cent in 1998, 0.16 per cent in 2000, and 0.07 per cent in 2001.

Experts said the deficit in the UAE federal budget remained nominal, as it was easily shored up through additional contributions from the oil-rich emirates.

They added that while the deficit in the financial consolidated account, involving the federal budget and spending by each emirate, was much higher than the federal shortfall, it had also been easily financed through overseas investments.

Venezuela, Argentina sign oil and trade agreement

Caracas — Venezuela and Argentina have signed a series of accords, including an oil and trade agreement designed to rapidly foster closer relations between the two countries.

Photo: Reuters/Marcos Brindicci

The signing of the accords took place in Buenos Aires and formed part of Venezuelan President Hugo Chavez's *(pictured, left)* official visit to Argentina in August. Chavez and the recently inaugurated President of Argentina, Nestor Kirchner *(pictured, right),* met shortly before the signing ceremony.

"We Venezuelans are very grateful for your invitation to make contact with the Argentinean people, grateful for your co-operation and your beautiful gesture of opening the doors of your home. We are home and we feel at home, all of which has allowed us to secure these accords," said Chavez in a brief speech.

The Venezuelan President noted that there were many ways to boost bilateral co-operation between Venezuela and Argentina. One of these was the petroleum sector, while another was the farming industry, said Chavez.

"Venezuela imports more than 80 per cent of the food it consumes. We are preparing to increase the country's food reserves," he noted.

Chavez added that Venezuela was aware that the country did not have food reserves of any kind, which meant a very high degree of food dependence and insecurity.

"That is why we have decided to have a food reserve in deposit for the nation and it is precisely there where Argentina, with its agricultural producing capacity, can help us increase our levels of food.

"I believe that we have begun very well, because we are here engaged in an exchange with results which form a framework for the building of the bi-national integration that we have now begun to develop," said Chavez.

Nigerian electricity authority raises output to 3,000 mw

Abuja — Nigeria's state-owned National Electric Power Authority (NEPA) has boosted its power generation to 3,000 megawatts, following the resumption of full gas supplies from Escravos to the Egbin power plant in Lagos.

The supply of gas to Egbin was affected by the vandalization of the Escravos pipeline in March this year, resulting in erratic power supplies and load-shedding across the country.

NEPA's Managing Director, Joseph Makoju, said in Lagos at the commissioning of an injection sub-station at Maroko and transmission transformer at Aja that the performance was an improvement over NEPA's previous power generation level of 2,000-2,500 mw.

"This is the highest generation ever in the history of NEPA and it has been on for nine consecutive days. Although this is below the NEPA installed capacity of 5,300 mw, it shows the commitment of NEPA to re-position itself in service provision," said Makoju.

He added that as soon as arrangements for the Afam power station were concluded with Shell and the Shiroro power transmission line to Abuja was completed, power outages would be a thing of the past in Nigeria.

Earlier, while commissioning the projects, Makoju said the sub-station at Maroko and transformer at Aja would help boost power supplies to Lagos, which accounted for about 50 per cent of power demand.

NEPA's General Manager for Transmission in the Lagos zone, J O Akinremi, said that the new projects would help relieve overloaded areas in the zone, as some of the areas would be diverted permanently to the Aja station.

He pointed out that some of the transformers in the zone were presently overloaded and that these loads were in excess of their rating, and urged the government to build more power stations across the country, which would enable NEPA to sustain the level of improvement that it had attained.

Algeria plans to boost non-oil sector investment

Algiers — Algeria has said it will need about $12 billion to promote the effective development of the country's non-hydrocarbon sector in the coming years.

Addressing a delegation of Brazilian businessmen, the country's Minister for the Promotion of Investments, Karim Djoudi, noted that Algeria was currently witnessing a renewed flow of foreign direct investment (FDI) in the non-hydrocarbon sector for the first time since 1990.

Recent years have witnessed significant growth and diversification of FDI in Algeria, noted Djoudi, adding that investment for 2003 was put at $4bn, compared with just $1.2bn in 2002.

The Minister said that this flow of investment had been encouraged by the new state law governing foreign capital which, he noted, allowed for free-market legislation, including tax reductions, as well as transfer of invested capital and income.

Iran's non-oil exports set to reach $8 billion in 2003

Arak, Iran — The export of non-oil commodities should earn Iran around $8.0 billion this year, according to Deputy Minister of Commerce and Head of the Export Promotion Centre of Iran, Mojtaba Khosrowtaj.

The Iranian News Agency (IRNA) quoted Khosrowtaj as saying that in the first four months of the current Iranian year, the export of non-oil commodities had fetched the country $1.8bn, which was expected to rise to $8.0bn by the end of the year.

A breakdown of non-oil exports by destination showed that some 52 per cent of Iranian goods were destined for Organization of Islamic Conference members and 30 per cent went to Gulf regional states.

Another 16 per cent were exported to the nations of the Commonwealth of Independent States, 20 per cent to Economic Co-operation Organization members, and 15 per cent to European countries, said IRNA.

A3 rating from Moody's underlines strength of Qatari economic plans

Doha — Credit rating agency Moody's has given Qatar an overall A3 rating in its latest annual report on the country, according to a report in local paper *The Peninsula.*

The rating was based on the fact that Qatar had a diversified economic development strategy and a relatively ambitious privatization programme, according to Moody's.

The agency noted that the Qatari government had signed several long-term supply agreements, including the Dolphin project, which will pipe gas to two neighbouring countries, the United Arab Emirates and Oman.

"Qatar is also playing a leading role in developing the evolving technology of gas-to-liquids," noted the author of the Moody's report, Bernard Musyck, adding that the country's liquefied natural gas revenue was expected to rise steadily and catch up with oil revenues in a few years' time.

"Qatar possesses the world's second-largest gas reserves, and the government's commitment to increasing the contribution of LNG to GDP is paying dividends," noted Musyck

The report observed that Qatar had enjoyed a budget surplus since 2001. Fiscal management had generally been prudent and the borrowing requirements of the government had been modest relative to the performance of the economy.

On the spending side, the government planned to reform the generous welfare system by gradually replacing subsidies on water and electricity consumption with government grants to poorer families. A national pension scheme was also being considered.

"It is not clear, however, whether the government will manage to implement such policies, given that Qataris are accustomed to generous welfare provisions, and that charges for utilities based on cost will be unpopular," commented Musyck.

On the revenue side, he said, the government was committed to the gradual introduction of a modern tax system based on taxes on consumption and profits.

In early 2003, Qatar's total direct government debt (internal and external) amounted to $9.2 billion, or 48.9 per cent of GDP. The level of debt peaked in 1999 at 58 per cent, and was now expected to decline.

Saudi economy set to grow by six per cent this year

Riyadh — Higher-than-expected world oil prices, a massive repatriation of capital, and continuing efforts to reform its economy mean that Saudi Arabia will see economic growth of at least six per cent in 2003, according to an official of the country's Supreme Economic Council (SEC).

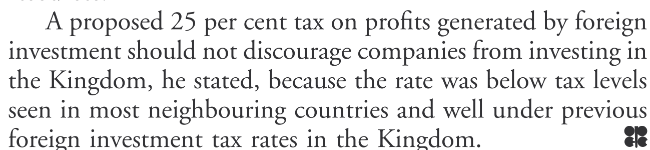
The SEC's Secretary General, Abdul Rahman Al-Tweijri, said in an interview with the *Al-Watan* newspaper that the Saudi economy would show robust growth this year, despite a global economic slump and the May bomb blasts in the capital.

The Kingdom's non-oil sector was expected to record the fastest growth, yielding significant returns for capital investment and gainful employment for a number of Saudi nationals, he noted, adding that the Saudi economy grew by about four per cent in 2002.

Privatization would continue in Saudi Arabia, he said, adding that this was not simply the sale of state-owned companies to private investors, but rather the opening up of formerly state-dominated sectors, such as electricity, water, posts, and telecommunications.

Al-Tweijri also said that the opening up of the Kingdom's mining sector would provide foreign companies with huge investment opportunities, given the country's abundant mineral resources.

A proposed 25 per cent tax on profits generated by foreign investment should not discourage companies from investing in the Kingdom, he stated, because the rate was below tax levels seen in most neighbouring countries and well under previous foreign investment tax rates in the Kingdom.



Correction

The photograph in this section on p71 of the July/August 2003 issue of the OPEC Bulletin, captioned as being the Kuwaiti Energy Minister, HE Sheikh Ahmad Fahad Al-Ahmad Al-Sabah, was in fact of his predecessor as Oil Minister, HE Dr Adel K Al-Sabeeh. We apologise for the error.

July/August

OPEC Meetings

The *Joint OPEC/MGIMO Workshop* was held at the OPEC Secretariat on July 2, 2003.

The *2nd Workshop under the MOU with UNCTAD (OPEC and the WTO),* was held at the OPEC Secretariat on July 4, 2003.

A *WTO Negotiations Co-ordination Meeting* was held at the OPEC Secretariat on July 4, 2003.

The *44th Meeting of the MMSC* was held at the OPEC Secretariat on July 31, 2003.

The *126th (Extraordinary) Meeting of the Conference* was held at the OPEC Secretariat on July 31, 2003.

A *High-Level Meeting of Experts on Quotas* was held at the OPEC Secretariat on August 22, 2003.

An *IEF Working Group Meeting* (OPEC, IEF, EB Chairman, Saudi Arabia and Iran) was held at the OPEC Secretariat on August 24, 2003.

The *109th Meeting of the Board of Governors* was held at the OPEC Secretariat on August 26–28, 2003.

A *WTO Negotiations Co-ordination Meeting* was held at the OPEC Secretariat on August 29, 2003.

Secretary General's diary

A conference on *The geopolitics of energy* was organized by the Aspen Institute Italia, and held in Florence, Italy, July 8–9, 2003.

A *Dinner debate* was organized by the European Energy Foundation and held in Brussels, Belgium, July 9, 2003.

The *Arab Ministerial Meeting* was organized by United Nations Economic and Social Commission for Western Asia (ESCWA), and held in Beirut, Lebanon, July 24–25, 2003.

Secretariat missions

An *Experts Group Meeting (EGM)* on *Statistics of sectoral energy production, consumption and related environmental issues* and workshop on *Energy data with special focus on oil statistics* was organized by OPEC, ESCWA and the United Nations Statistics Division (UNSD), and took place in Beirut, Lebanon, July 8–11, 2003.

A *Preparatory Experts Group Meeting* for the Arab Ministerial Meeting was organized by ESCWA, and held in Beirut, Lebanon, July 22–23, 2003.

The *26th Session of the Industrial Development Board of the United Nations Industrial Development Board Organization* was organized by UNIDO, and held in Vienna, Austria, August 26–28, 2003.

Forthcoming OPEC Meetings

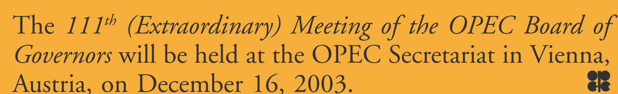
A Meeting of *Member Country PR Liaison Officers/Experts* will be held at the OPEC Secretariat in Vienna, Austria, on October 22, 2003.

A *COP-9 Co-ordination Meeting* will be held at the OPEC Secretariat in Vienna, Austria, on November 28, 2003.

The *46th Meeting of the Ministerial Monitoring Sub-Committee* will be held at the OPEC Secretariat on December 3, 2003.

The *128th (Extraordinary) Meeting of the OPEC Conference* will be held in Vienna, December 4, 2003.

The *111th (Extraordinary) Meeting of the OPEC Board of Governors* will be held at the OPEC Secretariat in Vienna, Austria, on December 16, 2003.



OPEC Fund lends support to Children's Town in Zambia

Humana/DAPP

Happy youngsters at the Children's Town in Chibombo, Zambia.

Busy learning. At the Children's Town, destitute children are able to acquire a good academic education.

In a perfect world, all children the world over would grow up in the comfort and security of a loving family home. Tragically, for millions of youngsters in the less developed countries, this picture-book ideal is a far cry from reality. Orphaned by AIDS or simply abandoned by their parents as one mouth too many to feed, countless numbers are forced to fend for themselves on streets that are lonely, precarious and unforgiving.

by Audrey Haylins

Possibly nowhere is this problem more acute than in Zambia, one of the poorest countries on the African continent. With an economy devastated by falling international prices in agriculture and copper, and a budget bled almost dry by massive debt repayments, social conditions in the southern African republic are grim. Since the onset and escalation of the HIV/AIDS pandemic, the situation has spiralled dangerously out of control.

AIDS orphans forced onto the streets

At 19.7 per cent, Zambia has one of the worst prevalence rates of HIV/AIDS in the whole of Africa. An estimated 600,000 children have been orphaned by the disease and a further 1.6 million have lost one parent. Formerly, children like these would have been cared for within the extended family system that is central to the African way of life. AIDS and economic stagnation, however, have ripped apart this traditional social safety net, leaving thousands at the mercy of the streets.

Left alone to live by their wits, most of these children turn to casual labour, street vending, and even petty theft and prostitution in their desperate quest for survival. Home is a cardboard box or some other crude shelter. Food, when they

The children also learn practical things such as gardening, livestock-raising or poultry farming.

In some Children's Towns, the youngsters have the opportunity to learn computer skills.

can get it, is little more than crumbs. And going to school is out of the question. Not surprisingly, chronic illness and malnutrition are rife. Those who are 'fortunate' enough to obtain refuge with relatives are not always better off. Thrust on already impoverished households, they are usually treated as little more than slaves, forced to perform hard labour and beg for scraps, while their guardian's biological children go to school and receive priority care and attention.

For all of these children there is no childhood, no future, no love, and no time to play and learn — instead there is only hunger, fear and despair.

A safe haven for the homeless

As depressing as this picture may seem, however, all is not lost for the street children of Zambia, thanks to an innovative care scheme set up and run by the Danish NGO Development Aid from People to People (DAPP). Located in the marginalized rural district of Chibombo, some 90 km from the capital Lusaka, the Children's Town is a unique and safe haven for destitute youngsters. As well as material needs such as shelter, food and medical care, the centre provides its young charges with schooling and practical skills training, all in a secure, homely environment. In the words of DAPP Project Co-ordinator, Moses Zulu, "The Children's Town is the final destination for children with no-one to take them under their wing, usually after a long and cruel period of neglect, child labour or other abuses no youngster should endure."

Since extending a $150,000 grant to the Children's Town in November 2001, the OPEC Fund has maintained a keen interest in the activities of the centre, which over the years has grown from a handful of makeshift tents in the bush to a regional centre for education and development. At any one time, it caters for 120 residential students, the majority former street children from Lusaka and other cities, as well as 140 day

Seven of the Town's 120 residents pose in a comfortable dormitory room.

students made up of orphans and other disadvantaged children from the local communities.

Zulu explains the thinking that inspired the Children's Town: "The education of children and youths is of the utmost importance for any nation. Only equipped with appropriate knowledge can they contribute productively and significantly to the development of their respective communities and society in general."

Making dreams come true

The ultimate aim of the centre is to give needy children a future, to encourage them to have dreams, believe in themselves and take charge of their destinies. "The programme is devised around a family structure in which the children are nurtured and encouraged to acquire the academic, vocational and life skills needed to lead independent, useful lives. The youngsters participate fully in the operation of the Children's Town, learning how to produce food, raise farm animals, maintain the buildings and surroundings, and run a general store. At the same time, they learn how to take responsibility for themselves, solve problems, defend their rights and the rights of others, take care of their general and reproductive health, and avoid crime, drugs and alcohol," explains Zulu.

To date, over 1,400 children have benefited from an education at the Children's Town. Many have proceeded to high school, while others have obtained employment or established their own enterprises. Yet the benefits to these youngsters go far beyond mere academic qualifications. Perhaps most significant is their transformation from shy, abused and often traumatized individuals, starved of love and affection, into assertive and enthusiastic young men and women, with the potential to make a valuable contribution to society.

Orphans outreach programme

The centre acknowledges, however, that with the number of vulnerable children growing at an alarming rate, institutionalization cannot possibly be the answer for them all. Hence, says Zulu, the orphans outreach programme. "Through this we support the upbringing of a disadvantaged child within its own community, offering psychosocial counseling to the guardians and empowering these extended families economically." DAPP is facilitating this community-based initiative through capacity building initiatives, project monitoring and technical support in resource mobilization. Extending to 34 villages, the scheme has so far benefited well over 1,000 orphans. Further afield, the success of the Children's Town has inspired a host of similar programmes across Zambia, with scores of graduating students taking the benefit of their skills and knowledge into the wider community.

The way forward

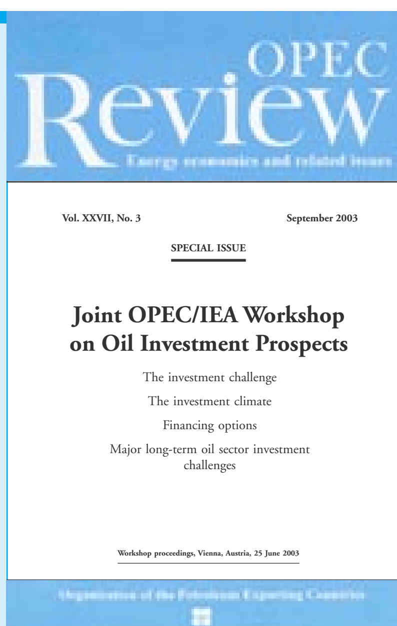
DAPP's plans for the future include expansion of the primary school and establishment of a high school in the Children's Town, along with extension of the orphans programme to other districts as soon as resources become available. Its more immediate goals are to extend the skills training programmes and, in the light of the HIV/AIDS problem, increase reproductive health education.

The centre also hopes, as a priority, to increase the ratio of boys to girls to correct the nationwide gender imbalance in Zambian schools. For the students, however, the most exciting development is sure to be the arrival of electricity in the town. Thanks to the OPEC Fund grant, installation is imminent, and ideas are already afoot to determine how the new facility can best be used.

For an in-depth look at the oil market *and related issues*

the OPEC Review

contains research papers by experts from across the world



Now in its 27th annual volume, the **OPEC Review** is published quarterly. Its content covers the international oil market, energy generally, economic development and the environment.

Subscription enquiries to: Blackwell Publishing Journals, 9600 Garsington Road, Oxford OX4 2DQ, UK. Free sample copies sent on request.

People wishing to submit a paper for publication should contact the Editor-in-Chief of the OPEC Review, Dr Omar Farouk Ibrahim, at the Public Relations and Information Department, OPEC Secretariat, Obere Donaustrasse 93, A-1020 Vienna, Austria.

Recent issues

June 2003

Oil outlook to 2020 — *Adnan Shihab-Eldin, Mohamed Hamel and Garry Brennand*
The importance of weighted variables to OPEC's production quota allocation — *Mahmoud Al-Osaimy and Aziz Yahyai*
The efficiency of natural gas futures markets — *Ahmed El Hachemi Mazighi*
Electric load forecasting for northern Vietnam, using an artificial neural network — *Subhes C Bhattacharyya and Le Tien Thanh*

March 2003

Price elasticity of demand for crude oil: estimates for 23 countries — *John C B Cooper*
Ownership of associated and discovered gas in Nigeria under the old joint venture contracts — *Andrew L Chukwuemerie*
An introduction to the economics of natural gas — *Ferdinand E Banks*
OPEC production agreements: a detailed listing — *OPEC Secretariat*

December 2002

New energy technologies: trends in the development of clean and efficient energy technologies — *Adnan Shihab-Eldin*
Oil and macroeconomic fluctuations in Mexico — *François Boye*
Energy indicators — *OPEC Secretariat*
OPEC official statements — *OPEC Secretariat*

September 2002

Risk measurement for oil and gas exploration: the marriage of geological and financial techniques — *Thomas Stauffer*
The prospects for the oil sector in the Iraqi economy after sanctions — *Imad Jabir*
Energy use and GDP growth, 1950–97 — *Rögnvaldur Hannesson*
Oil price movements and globalisation: is there a connection? — *Robert Looney*

June 2002

Oil outlook to 2020 — *Rezki Lounnas and Garry Brennand*
Short-term forecasting of non-OPEC supply — a statistical analysis — *S M R Tayyebi Jazayeri and A Yahyai*
Using non-time-series to determine supply elasticity: how far do prices change the Hubbert curve? — *Douglas B Reynolds*
A simple economic analysis of electricity deregulation failure — *Ferdinand E Banks*

March 2002

Short-term forecasting of non-OPEC supply: a test of seasonality and seasonal decomposition — *S M R Tayyebi Jazayeri and A Yahyai*
Evidence that the terms of petroleum contracts influence the rate of development of oil fields — *Mustafa Bakar Mahmud and Alex Russell*
Stimulation of investment in international energy through Nigerian tax exemption laws — *Uche Jack Osimiri*
Energy indicators — *OPEC Secretariat*

December 2001

Oil outlook to 2020 — *Adnan Shihab-Eldin, Rezki Lounnas and Garry Brennand*
OPEC oil production and market fundamentals: a causality relationship — *Atmane Dahmani and Mahmoud H Al-Osaimy*
Oil demand in North America: 1980–2020 — *Salman Saif Ghouri*
The price of natural gas — *A M Samsam Bakhtiari*

September 2001

What have we learned from the experience of low oil prices? — *A F Alhajji*
The estimation of risk-premium implicit in oil prices — *Jorge Barros Luís*
The economics of an efficient reliance on biomass, carbon capture and carbon sequestration in a Kyoto-style emissions control environment — *Gary W Yohe*
The geopolitics of natural gas in Asia — *Gawdat Bahgat*

June 2001

Has the accuracy of energy projections in OECD countries improved since the 1970s? — *Jan Bentzen and Hans Linderoth*
Oil product consumption in OPEC Member Countries: a comparison of trends and structures — *Atmane Dahmani*
Oil and macroeconomic fluctuations in Ecuador — *François Boye*
Energy indicators — *OPEC Secretariat*

"The principal objective of the OPEC Review is to broaden awareness of (energy and related) issues, enhancing scholarship in universities, research institutes and other centres of learning."

News from the OPEC Fund

OPEC Fund's new Director General pays tribute to work of Dr Abdulai

Riyadh — The incoming Director-General of the OPEC Fund, HE Suleiman Jasir Al-Herbish *(pictured),* has paid tribute to the work done by his predecessor, HE Dr Y Seyyid Abdulai.

"It may be difficult to attain the achievements of my predecessor, Dr Abdulai. I am, however, confident that with the committed staff he has built, we shall together deliver," Al-Herbish told OPEC News Agency Editor Umar Aminu, who caught up with him in his office at the Ministry of Petroleum and Mineral Resources in Riyadh.

He said that both organizations — OPEC and the OPEC Fund — had come to represent the aspirations of their founders, promoting and supporting world economic and social developments — a role, he said, he would continue to strengthen and promote in the workings of the Fund.

Al-Herbish, Saudi Arabia's OPEC Governor for many years, expressed a feeling of nostalgia that he would be leaving the Ministry of Petroleum and Mineral Resources after several decades of committed service.

"It is very difficult indeed leaving a body that has come to be part of one's self for the most part of one's career," he said.

He went on to say that he viewed his new role and responsibilities as a challenge, and one that would be in line with his continuing commitment to the objectives of OPEC in ensuring the stability of global oil supply.

The OPEC Fund, he noted, was created by the Members of OPEC to extend humanitarian, financial and technical assistance to the world's poor, and had since risen to become a highly reputable international financial aid development organization.

August 2003

Loans signed

Fund extends loans worth over $61m

Ten agreements for loans totalling $61.25 million have been signed between the OPEC Fund and eight developing countries in Africa, Asia and the Caribbean. The financing was extended to Belize, Burkina Faso, Benin, Guinea, Seychelles, Sri Lanka, the Sudan and Uganda. Six of the loans will help support public sector projects in the agriculture, multi-sectoral, transportation and education sectors, while two will provide debt relief within the context of the Enhanced Heavily Indebted Poor Countries Initiative (HIPC II). Through the Fund's private sector window, an equity financing agreement was concluded with Byblos Bank Africa, and a lease agreement signed with the Sudan Telecommunications Company. All six public sector projects will be co-financed by the concerned governments and by international development institutions such as the Islamic Development Bank, the Kuwait Fund for Arab Economic Development, the African Development Fund and the Asian Development Bank.

Belize.
Amount: $6m.
Project: Golden Stream-Big Falls-Guatemala border road.
Interest rate: 3.75 per cent per annum.
Executing agency: Ministry of Works.
Total cost: $23m.
Co-financiers: Kuwait Fund; Government of Belize.
Two gravel roads, totalling 50 km which make up the Gold Stream-Big Falls-Guatemala Border link, will be upgraded to double bitumen standard. Drainage systems and culverts will be built to reduce the threat of flood damage. Bridges will also be repaired, and signalling and safety devices installed. Some 30,000 local inhabitants will benefit from greater mobility and easier access to social services and employment opportunities. Additionally, as the road provides a link to the Pan-American Highway, it should make the Toledo district more appealing to tourists.

Benin.
Amount: $4.73m.
Project: Second technical and vocational education.
Interest rate: one per cent per annum.
Executing agency: Ministry of Primary and Secondary Education.
Total cost: $22.93m.
Co-financiers: African Development Fund; Government of Benin.
The current project will help constructing 150 classrooms and rehabilitating 16 existing ones in selected primary schools. Six secondary schools will also be built, and in all, places created for over 12,000 pupils. In addition, a technical high school will be constructed in Lokossa province, along with two agricultural colleges in Djougou and Savalou. All schools will contain science and computer laboratories, workshops and other facilities, as well as dormitories, which will encourage regular attendance, especially among girls. Equipment, pedagogical materials and furniture will also be provided. Sensitization campaigns covering topics such as HIV/AIDS and malaria and the promotion of education for young girls are envisaged, as are literacy programmes for around 10,000 women.

Guinea.
Amount: $1.82m.
Project: North lower Guinea small farmers development — II.
Interest rate: 1.25 per cent.
Executing agency: Ministry of Agriculture and Livestock.
Total cost: $2.31m.
Co-financier: Government of Guinea.
Under the project, works will be conducted

in the prefectures of Telimele, Dubreka, Fria, Boka and Boffa, home to around 700,000 people. Specific needs have been identified by rural associations and the villagers themselves. The project will construct/upgrade some 178 km of feeder roads and 12 bridges totalling 229 metres in length. Over 120 ha of lowland territory will be developed in order to expand present rice-cropping activities. Water supplies will be enhanced through the drilling of 100 boreholes and installation of manually-operated pumps in selected villages, and five springs that supply water to a number of areas will be rehabilitated. Another component entails building infrastructure such as schools, health centres, warehouses, dispensaries and a cultural centre, all of which will be appropriately equipped and furnished. In order to insure the sustainability of the initiative, training for the beneficiary population will also be provided.

Seychelles.
Amount: $4.7m.
Project: Baie St Anne school complex construction.
Interest rate: four per cent per annum.
Executing agency: Ministry of Education and Youth.
Total cost: $5.25m.
Co-financier: Government of Seychelles.
Under the project, the Baie St Anne School will be torn down and rebuilt at a better location. The new 4,600 sq m, three-story facility will comprise five classroom blocks, library, staff room and dining area. Two appropriately furnished classrooms will be devoted to accommodating children with special needs. A modernized and fully equipped school meals centre will be built at the new Baie St Anne School site to replace the present one in Grand Anse. Eventually, the old cafeteria building will be demolished to free up space for expanding the Grand Anse Primary school. All teaching aids, books, furniture and sports equipment will be procured. Once completed, the new school will provide crèche facilities for some 200 children, and be able to accommodate 650 primary school pupils.

Sri Lanka.
Amount: $8.5m.
Project: Road improvement.
Interest rate: 2.5 per cent per annum.
Executing agency: Ministry of Home Affairs; provincial councils and local governments.
Total cost: $81.6m.
Co-financiers: AsDB; Government of Sri Lanka.
The project will rehabilitate and upgrade some 1,020 km of provincial and community access roads and bridges in Sri Lanka's North Central, North Western, Uva and Western Provinces, according highest priority to impoverished areas. Depending on projected traffic levels and present road conditions, provincial stretches will be upgraded with either asphalt concrete or bitumen and, where necessary, bridges, culverts and drainage structures repaired. Approximately 40 km of community access roads, many of which are no more than dirt tracks, will be rehabilitated to a modified gravel surface. The selected roads will be those that provide linkages to markets and community centres.

Sudan.
Amount: $12m.
Project: Roseires dam rehabilitation.
Interest rate: one per cent.
Executing agency: Project Implementation Unit, Ministry of Irrigation and Water Resources.
Total cost: $17.7m.
Co-financiers: IsDB.
The Roseires dam's deep sluices have been in operation for over 25 years, and a series of inspections has revealed that sediment flow has caused extensive abrasion and as a result, the stainless steel-clad liners of the sluices have eroded considerably. Although a number of temporary repairs have taken place, none have provided a long-term solution. Under the project, the steel liners on all five sluices will be replaced and grouted, and all unprotected concrete surfaces refaced. Materials will be used to ensure 25 years of service without the need for major repairs. In order to ensure the reliability and safety of the entire deep sluice installation, the hydromechanical plant and all associated equipment will be extensively refurbished.

Private sector

Sudan.
An equity financing agreement for $5m has been signed with Byblos Bank Africa in order to support the establishment of a new private sector bank in the Sudan. The new bank is being sponsored by Byblos Bank SAL, one of the leading banks in Lebanon, which has been expanding its activities both in Lebanon and in other countries in the region. The Fund will participate in the $18m capital of the new enterprise by means of a minority equity participation together with a subordinated loan. The project will provide immediate benefit by injecting new capital into the country's banking sector, thus helping it meet the financing requirements of major companies. Byblos Bank Africa will also support trade financing for Sudanese firms through lines of credit and pre-export facilities. Furthermore, by providing direct loans to the industrial sector, it will participate in the country's reconstruction.

A private sector lease agreement for $7.6m has been signed with the Sudan Telecommunications Company (Sudatel), one of Sudan's leading private sector companies. Sudatel provides fixed-line services throughout Sudan and has recently launched a major capital expansion programme involving the installation of some 5,000 km of fibre optic cable, the transition from analogue to digital services, and the introduction of digital satellite networks. Proceeds from the lease will assist Sudatel with the procurement of digital telecommunications equipment in order to support their capital expansion programme. Ensuring access to communications networks is expected to contribute to economic growth.

July 2003

Grants approved

Fund grant to train hospital technicians

The Fund has approved a grant of $37,000 to help fund a training programme for two hospital technicians from the Pyongnam Area Hospital in North Korea. In 1996, the Fund approved a $6m loan to North Korea to co-finance the expansion and rehabilitation of a hospital in Pyongnam. The project has been successfully completed, and the quality of medical care has improved substantially. However, repairs and maintenance are needed. The two-week long technical training programme will be provided by the hospital equipment supplier Odelga, and will be held in Vienna, Austria and Erlangen, Germany. Topics to be covered include systems control, functionality and handling, as well as common components of several medical systems that were acquired under the original scheme.

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

Forthcoming events

Amsterdam, the Netherlands, **October 27–28, 2003**, *Portfolio optimisation for the energy industry — Europe 2003.* Details: IQPC, Tel: +44 (0)20 7368 9300 or 0800; e-mail: enquire@iqpc.co.uk; Web site: www.iqpc.co.uk.

London, UK, **October 27–28, 2003**, *Reconstructing Iraq.* Details: The SMi Group, 1 New Concordia Wharf, Mill Street, London, SE1 2BB, United Kingdom. Tel: +44 (0)20 7827 6176; fax: +44 (0)20 7827 6001; e-mail: denise.austin@smi-online.co.uk; Web site: www.smi-online.co.uk.

Moscow, Russia, **October 28–29, 2003**, *Gas monetisation in Russia.* Details: The CWC Group, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 708 94200; fax: +44 (0)20 708 94201; e-mail: info@thecwcgroup.com; Web site: www.thecwcgroup.com.

New York, USA, **October 29–30, 2003**, *Maritime security Expo USA 2003.* Details: Maritime Global Net, PO Box 207, Bristol, Rhode Island 02809, USA. Tel: +1 401 247 7780; fax: +1 401 247 7756; e-mail: capps@ejkrause.com; Web site: www.maritimesecurityexpo.com.

London, UK, **October 29–30, 2003**, *Floating production systems.* Details: IQPC, Tel: +44 (0)20 7368 9300 or 0800; e-mail: enquire@iqpc.co.uk; Web site: www.iqpc.co.uk.

Lisbon, Portugal, **October 29–31, 2003**, Houston, Texas, USA, **November 3–5, 2003**, *Production sharing contracts and international petroleum fiscal systems.* Details: Conference Connection Administrators Pte Ltd, 105 Cecil Street #07–02, The Octagon, Singapore 069534. Tel: +65 62220230; fax: +65 62220121; e-mail: info@cconnection.org; Web site: www.cconnection.org.

London, UK, **October 30, 2003**, *GTL 2003.* Details: IBC Energy Conferences, Informa House, 30-32 Mortimer Street, London W1W 7RE, UK. Tel: +44 (0)207 017 4027; fax: +44 (0)207 436 8377; e-mail: jessica.jones@informa.com; Web site: www.ibcenergy.com.

Cambridge, UK, **November 2–7, 2003**, *Modern gas markets — commercial and regulatory challenges.* Details: Alphatania, EconoMatters Ltd, Rodwell House, 100 Middlesex Street, London E1 7HD, UK. Tel: +44 (0)207 650 1430/1402; fax: +44 (0)20 7650 1431/1401; e-mail: training@alphatania.com; Web site: www.alphatania.com.

Amsterdam, the Netherlands, **November 5–6, 2003**, *5th Annual Dutch energy conference.* **November 7, 2003**, *Liberalising the Dutch Electricity Market.* Details: The SMi Group, 1 New Concordia Wharf, Mill Street, London, SE1 2BB, UK. Tel: +44 (0)20 7827 6176; fax: +44 (0)20 7827 6001; e-mail: bjones@smi-online.co.uk; Web site: www.smi-online.co.uk/dutchnrg9.asp.

London, UK
November 4–5, 2003

Oil & Money

Details: Eileen Kennedy
New York
Tel: +1 212 532 1112
E-mail: ekennedy@energyintel.com
Web site: www.energyintel.com

London, UK, **November 6, 2003**, *National oil companies conference 2003.* Details: Global Pacific & Partners, 2nd Floor, Regent Place, Cradock Av, Rosebank, 2196, Private Bag X61, Saxonwold, 2132, South Africa. Tel: +27 11 778 4368; fax: +27 11 880 3391; e-mail: global.pacific@pixie.co.za; www.petro21.com.

Houston, TX, USA, **November 6–7, 2003**, *The PSC Roundtable III 2003.* Details: Conference Connection Administrators Pte Ltd, 105 Cecil Street #07–02, The Octagon, Singapore 069534. Tel: +65 62220230; fax: +65 62220121; e-mail: info@cconnection.org; Web site: www.cconnection.org.

Houston, TX, USA, **November 10–11, 2003**, *Upstream government petroleum contracts.* Details: Conference Connection Administrators Pte Ltd, 105 Cecil Street #07–02, The Octagon, Singapore 069534. Tel: +65 62220230; fax: +65 62220121; e-mail: info@cconnection.org.

London, UK, **November 10–11, 2003**, *The oil & gas exchange 2003.* Details: IQPC, Tel: +44 (0)20 7368 9300 or 0800; e-mail: enquire@iqpc.co.uk; Web site: www.iqpc.co.uk.

Beijing, China, **November 11–12, 2003**, *7th China gas/LNG/pipeline and power.* Details: Ms Cynthia Yeo, Event Manager, 80 Marine Parade Road, #13-02 Parkway Parade, Singapore 449269. Tel: +65 6346 9132; fax: +65 6345 5928; e-mail: cynthia@cmtsp.com.sg; Web site: www.cmtevents.com.

Beijing, China, **November 12–13, 2003**, *China lubes markets 2003.* Details: Ms Sandy Leong, Event Manager, 80 Marine Parade Road, #13-02 Parkway Parade, Singapore 449269. Tel: +65 6345 7322; fax: +65 6345 5928; e-mail: sandy@cmtsp.com.sg; Web site: www.cmtevents.com.

Houston, TX, USA, **November 17–18, 2003**, *North America LNG markets, terminals and shipping.* Details: Centre for Management Technology, Ms Nancy Phua, Event Executive, 80 Marine Parade Road, #13-02 Parkway Parade, Singapore 449269. Tel: +65 6345 7322; fax: +65 6345 5928; e-mail: sandy@cmtsp.com.sg.

Houston, TX, USA, **November 17–18, 2003**, *CBI's 3rd Annual Latin American oil and gas.* Details: The Centre for Business Intelligence Research, 500 W Cummings Park Ste 5400, Woburn, MA 01801; USA. Tel: +1 781 939 2400; fax: +1 781 939 2490; e-mail: register@cbinet.com; Web site: www.cbinet.com.

Houston, TX, USA, **November 17–19, 2003**, *2nd annual conference: GEPetrol and oil and gas in Equatorial Guinea.* Details: The CWC Group, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 708 94200; fax: +44 (0)20 708 94201; e-mail: info@thecwcgroup.com; Web site: www.thecwcgroup.com.

London, UK, **November 17–20, 2003**, *Sakhalin Oil and Gas 2003.* Details: IBC Energy Conferences, Informa House, 30-32 Mortimer Street, London W1W 7RE, UK. Tel: +44 (0)207 017 4027; fax: +44 (0)207 436 8377; e-mail: jessica.jones@informa.com; Web site: www.ibcenergy.com.

Houston, TX, USA, **November 19–20, 2003**, *North American natural gas summit.* Details: The CWC Group, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 708 94200; fax: +44 (0)20 708 94201; e-mail: info@thecwcgroup.com.

Santa Cruz, Bolivia, **November 24–25, 2003**, *3rd annual Bolivian energy summit.* Details: The CWC Group, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 708 94200; fax: +44 (0)20 708 94201; e-mail: info@thecwcgroup.com.

Reach decision-makers through OPEC Bulletin

The OPEC Bulletin is distributed on subscription and to a selected readership in the following fields: oil and gas industry; energy and economics ministries; press and media; consultancy, science and research; service and ancillary industries. Recipients include OPEC Ministers, other top-level officials and decision-makers in government and business circles, together with policy advisers in key industrial organizations.

The magazine not only conveys the viewpoints of OPEC and its Member Countries but also promotes discussion and dialogue among all interested parties in the industry. It regularly features articles by officials of the Secretariat and leading industry observers. Each issue includes a topical OPEC commentary, oil and product market reports, official statements, and the latest energy and non-energy news from Member Countries and other developing countries.

General terms

Orders are accepted subject to the terms and conditions, current rates and technical data set out in the advertising brochure. These may be varied without notice by the Publisher (OPEC). In particular, the Publisher reserves the right to refuse or withdraw advertising felt to be incompatible with the aims, standards or interests of the Organization, without necessarily stating a reason.

Advertising Representatives

North America: Donnelly & Associates, PO Box 851471, Richardson, Texas 75085-1471, USA. Tel: +1 972 437 9557; fax: +1 972 437 9558.
Europe: G Arnold Teesing BV, Molenland 32, 3994 TA Houten, The Netherlands. Tel: +31 30 6340660; fax: +31 30 6590690.
Middle East: Imprint International, Suite 3, 16 Colinette Rd, London SW15 6QQ, UK. Tel: +44 (0)181 785 3775; fax: +44 (0)171 837 2764
Southern Africa: International Media Reps, Pvt Bag X18, Bryanston, 2021 South Africa. Tel: +2711 706 2820; fax: +2711 706 2892.
Orders from **Member Countries** (and areas not listed below) should be sent directly to OPEC.

Black & white rates (US dollars)

Multiple:	**1X**	**3X**	**6X**	**12X**
full page	2,300	2,150	2,000	1,850
1/2 (horizontal)	1,500	1,400	1,300	1,200
1/3 (1 column)	800	750	700	650
1/6 (1/2 column)	500	450	400	350
1/9 (1/3 column)	300	275	250	225

Colour surcharge

Spot colour: 400 per page; 550 per spread.
3 or 4 colours: 950 per page; 1,300 per spread.

Special position surcharge

Specific inside page: plus 10 per cent
Inside cover (front or back): plus 35 per cent
The back cover: plus 50 per cent

Discounts

Payment sent within 10 days of invoice date qualifies for two per cent discount. Agency commission of 15 per cent of gross billing (rate, colour, position, but excluding any charges for process work), if client's payment received by Publisher within 30 days.

Technical data about OPEC Bulletin

Frequency: Published bi-monthly.
Deadlines: Contact Publisher or local advertising representative at the address above.
Language: Advertisement text is acceptable in any OPEC Member Country language, but orders should be placed in English.
Printing/binding: Sheet-fed offset-litho; perfect binding (glued spine).
Page size: 210 mm x 275 mm (8 1/4" x 10 7/8").
Full bleed: +3 mm (1/4") overlap, live material up to 5 mm (1/2") from edge.
Text block: 175 mm x 241 mm (6 7/8" x 9 1/2").
Readership: Estimated to be on circulation to around 6,000 readers in 100 countries.
Material: Originals preferred as film positives (right-reading when emulsion side down). Design and typesetting charged at 15 per cent of advert cost. Artwork accepted (but deadline advanced by one week). Reversing and artwork processing charged at cost and billed separately. Printer requires proof or pre-print.
Screen: 60 dots per cm (133dpi) ±5 per cent (North America: 133 line screen).
Colour indication: Use Pantone matching scheme, or send proof (otherwise no responsibility can be accepted for colour match).
Proofs: Sent only on request; approval assumed unless corrections received within two weeks of despatch.
Payment: Due upon receipt of invoice/proof of printing, either by direct transfer to the following account number: **2646784** Creditanstalt, Vienna, Austria. Or by **banker's cheque**, made payable to **OPEC.** Net 30 days. Payment may also be made by the following credit cards: Visa, Euro Card/Master Card and Diners' Club.

OPEC Annual Statistical Bulletin 2002

This 144-page book, including colour graphs and tables, comes with a CD-ROM featuring all the data in the book and more (for Microsoft Windows only). The book with CD-ROM package costs $85.

☐ ***Please send me .... copies of the OPEC Annual Statistical Bulletin 2002 (book plus CD-ROM)***

OPEC Bulletin

is published bi-monthly and a subscription costs $70. Subscription commences with the current issue (unless otherwise requested) after receipt of payment.

☐ ***I wish to subscribe to the OPEC Bulletin for a one-year period***

OPEC News Agency

provides a twice-daily news service on energy developments within Member Countries as well as reports from the key world energy centres. OPECNA also carries up-to-date data and reports prepared by the OPEC Secretariat. Charges depend on the mode of transmission (e-mail, telefax or post) and location of subscriber.

☐ ***I would like information on subscription prices to OPECNA***

OPEC Monthly Oil Market Report

Published monthly, this source of key information about OPEC Member Country output also contains the Secretariat's analyses of oil and product price movements, futures markets, the energy supply/demand balance, stock movements and global economic trends. $525 per year (including airmail delivery) for an annual subscription of 12 issues.

☐ ***I wish to subscribe to the MOMR for a one-year period*** ☐ ***Please send me a sample copy***

OPEC Review

contains research papers by international experts on energy, the oil market, economic development and the environment.
Available quarterly only from the commercial publisher.
For details contact: Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK.
Tel: +44 (0)1865 776868; fax: +44 (0)1865 714591; e-mail: jnlinfo@blackwellpublishers.co.uk; www.blackwellpublishing.com.
Institutional subscribers £177/yr (North/South America $274); Individuals £67/yr (North/South America $104).

Shipping address (please print in block letters):

Name:

Address:

Invoicing address (if different from shipping address):

Name:

Address:

How to pay:

Invoice me ☐ Credit card ☐ (Visa, Eurocard/MasterCard and Diners Club)

Credit card company: Credit card no: Expiry date:

Holder: Signature:

Please mail this form to:
PR & Information Department
OPEC Secretariat
Obere Donaustrasse 93, A-1020 Vienna, Austria

or telefax to:
PR & Information Department
+43 1 214 98 27

Windows™ is a trademark of the Microsoft Corporation.

OPEC offers a range of publications that reflect its activities. Single copies and subscriptions can be obtained by contacting this Department, which regular readers should also notify in the event of a change of address:

PR & Information Department, OPEC Secretariat
Obere Donaustrasse 93, A-1020 Vienna, Austria
Tel: +43 1 211 12-0; fax: +43 1 214 98 27; e-mail: prid@opec.org

Annual Report 2001
Free of charge

OPEC Bulletin
Annual subscription $70

OPEC Monthly Oil Market Report
Crude oil and product prices analysis
Member Country output figures
Stocks and supply/demand analysis
Annual subscription $525 (12 issues)

OPEC Review
(published quarterly)
annual subscription rates for 2004: Institutional subscribers £241/yr (North/South America $390); Individuals £78/yr (North/South America $126).
Orders and enquiries: Blackwell Publishing Journals, 9600 Garsington Road, Oxford OX4 2DQ, UK. Tel: +44 (0)1865 776868; fax: +44 (0)1865 714591; e-mail: jnlinfo@blackwellpublishers.co.uk; www.blackwellpublishing.com

OPEC Review

Vol. XXVII, No. 3 September 2003

SPECIAL ISSUE

Joint OPEC/IEA Workshop on Oil Investment Prospects

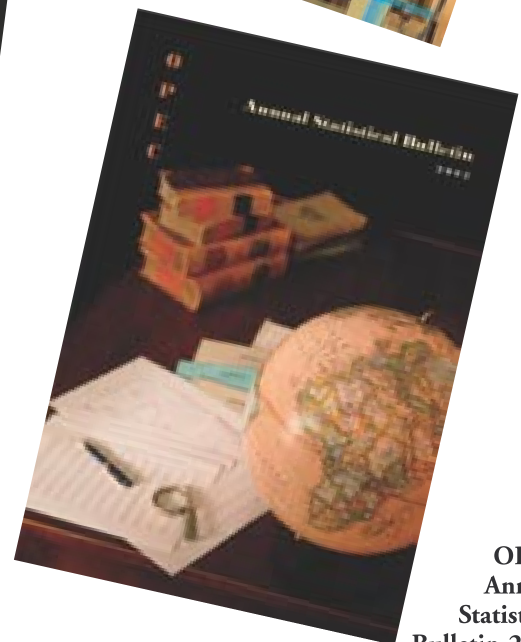
The investment challenge

The investment climate

Financaing options

Major long-term oil sector investment challenges

Workshop proceedings, Vienna, Austria, 25 June 2003



OPEC Annual Statistical Bulletin 2002
144-page book with CD-ROM
Single issue $85
The CD-ROM (for Microsoft Windows only) contains all the data in the book and much more.

- Easy to install and display
- Easy to manipulate and query
- Easy to export to spreadsheets such as Excel

To order, please fill in the form opposite