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

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This month's cover ...

shows the NGL 800 plant at Ahwaz, IR Iran, which recently hosted the inaugural meeting of the Gas Exporting Countries Forum in Tehran (see Commentary on page 3 and Newsline story on page 15).

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OPEC bulletin

Vol XXXII, No 6 ISSN 0474-6279 **June 2001**

2 NOTICEBOARD
Forthcoming conferences and other events

3 COMMENTARY
A forum for co-operation
The formation of the Gas Exporting Countries Forum offers an opportunity to strengthen co-operation between producers and consumers

4 FORUM
World oil: scarce or abundant?
By Professor Ferdinand E Banks, Uppsala University, Sweden

8 CONFERENCE NOTES
115th (Extraordinary) Meeting of the OPEC Conference

13 PRESS RELEASE
Inflationary pressure not linked to oil prices — Rodríguez Araque

15 NEWSLINE
Energy stories concerning OPEC and the Third World

25 MARKET REVIEW
Oil market monitoring report for May 2001

42 MEMBER COUNTRY FOCUS
Financial and development news about OPEC Countries

46 OPEC FUND NEWS
Recent loans and grants made by the OPEC Fund

53 SECRETARIAT NOTES
OPEC Secretariat activities and forthcoming meetings

55 ADVERTISING RATES
How to advertise in this magazine

56 ORDER FORM
Publications: subscriptions and single orders

57 OPEC PUBLICATIONS
Information available on the Organization

NOTICEBOARD

Forthcoming events

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Dubai, UAE
September 15–18, 2001

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E-mail: general@ice-ltd.demon.co.uk
Web site: www.araboilgas.com

Rio de Janeiro, Brazil, **September 3–4, 2001**, 6th annual *Latin Upstream 2001.* Details: Global Pacific & Partners. Tel: +27 11 778 4360; fax: +27 11 880 3391; Web site: www.petro21.com.

Dundee, Scotland, UK, **September 3–7, 2001,** *Negotiation and Documenting Petroleum Industry Transactions.* Details: Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee, DD1 4HN Scotland, UK. Tel: +44 (0)1382 344300; fax: +44 (0)1382 322578; e-mail: cepmlp@dundee.ac.uk; Web site: www.dundee.ac.uk/cepmlp; or www.cepmlp.org.

Aberdeen, UK, **September 4–7, 2001**, *Offshore Europe 2001.* Details: The Offshore Europe Partnership, Ocean House, 50 Kingston Road, New Malden, Surrey KT3 3LZ, UK. Tel: +44 20 8949 9222; fax: +44 20 8949 8193/8186/8204; e-mail: oe2001@spearhead.co.uk; Web site: www.offshore-europe.co.uk.

Singapore, **September 7–8, 2001,** *Pacific Petroleum Insiders 2001.* Details: Conference Connection Administrators Pte Ltd, 212A Telok Ayer Street, Singapore 068645. Tel: +65 226 5280; fax: +65 226 4117; e-mail: info@cconnection.org; Web site: www.cconnection.org.

Houston, USA, **September 10–11, 2001**, 5th annual *Worldwide Independents Forum 2001.* Details: Global Pacific & Partners. Tel: +27 11 778 4360; fax: +27 11 880 3391; www.petro21.com.

Singapore, **September 10–12, 2001**, *17th Asia-Pacific Petroleum Conference.* Details: APPEC 2001, Times Conferences & Exhbitions, 1 New Industrial Road, Times Centre, Singapore 536196. Tel: +65 3801420; fax: +65 2865754; e-mail: tcecfe@tpl.com.sg.

Dundee, Scotland, UK, **September 10–14, 2001,** *Natural Gas Negotiations and Contracts.* Details: Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee, DD1 4HN Scotland, UK. Tel: +44 (0)1382 344300; fax: +44 (0)1382 322578; e-mail: cepmlp@dundee.ac.uk; Web site: www.dundee.ac.uk/cepmlp; or www.cepmlp.org.

Boston, MA, USA, **September 10–21, 2001**, *International Petroleum Business Management Programme.* Details: IHRDC Headquarters, 535 Boylston Street, Boston, MA 02116, USA. Tel: +1 617 536 0202; fax: +1 617 536 4396; e-mail: corporate@ihrdc.com; Web site: www.ihrdc.com.

Tripoli, SP Libyan AJ
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LIOGE 2001
1st Libyan International Oil and Gas Exhibition and Projects Conference

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London NW6 6RG, UK
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Fax: +44 (0)20 7596 5111
dan.coberman@ite-exhibitions.com

Boston, MA, USA, **September 10–October 5, 2001**, *International Petroleum Management Certificate Programme.* Details: IHRDC Headquarters, 535 Boylston Street, Boston, MA 02116, USA. Tel: +1 617 536 0202; fax: +1 617 536 4396; e-mail: corporate@ihrdc.com; www.ihrdc.com.

London, UK, **September 12–13, 2001,** *Gas to Liquids IV.* Details: SMi Conferences Ltd, 1, New Concordia Wharf, Mill Street, London, SE1 2BB, UK. Tel: +44 (0)870 9090 711; fax: +44 (0)870 9090 712; e-mail: customer_services@smi-online.co.uk; Web site: www.smi-online.co.uk/gtl.asp.

Tehran, IR Iran
September 22–24, 2001

Middle East Energy Strategy to the Year 2014

Details: APS Conferences
PO Box 23896
Nicosia, Cyprus
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Jakarta, Indonesia, **September 23–26, 2001,** *IIOGE 2001, 3rd Indonesian International Oil and Gas Exhibition & Conference.* Details: ITE Group PLC, 105 Salusbury Rd, London NW6 6RG, UK. Tel: +44 (0)20 7596 5233; fax: +44 (0)20 7596 5106; e-mail: oilgas@ite-exhibitions.com; Web site: www.ite-exhibitions.com/og.

London, UK, **September 24–25, 2001**, *IBC's 3rd Annual North African Oil and Gas Summit.* Details: IBC Global Conferences, Karen Bligh, Gilmoora House, 57–61 Mortimer House, London W1N 8JX, UK. Tel: +44 (0)20 7453 2058; e-mail: karen.bligh@informa.com.

Johannesburg, South Africa, **September 26–27, 2001,** *Africa Power 2001, 5th Annual International Energy Event.* Details: Global Pacific & Partners. Tel: +27 11 778 4360; fax: +27 11 880 3391; e-mail: info@glopac.com; Web site: www.petro21.com.

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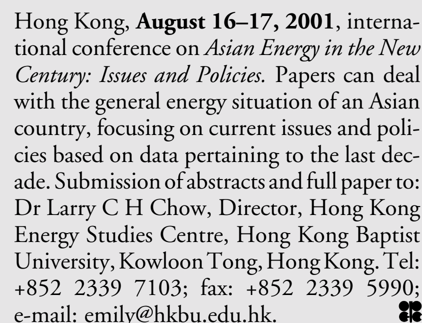

Hong Kong, **August 16–17, 2001**, international conference on *Asian Energy in the New Century: Issues and Policies.* Papers can deal with the general energy situation of an Asian country, focusing on current issues and policies based on data pertaining to the last decade. Submission of abstracts and full paper to: Dr Larry C H Chow, Director, Hong Kong Energy Studies Centre, Hong Kong Baptist University, Kowloon Tong, Hong Kong. Tel: +852 2339 7103; fax: +852 2339 5990; e-mail: emily@hkbu.edu.hk.

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A forum for co-operation

The formation of the Gas Exporting Countries Forum offers an opportunity to strengthen co-operation between producers and consumers

When eleven of the world's major gas-exporting nations gathered in Tehran last month for the inaugural meeting of the Gas Exporting Countries Forum (GECF), it was to be expected that the international media would draw parallels between the new grouping and OPEC. Indeed, there are certain similarities between the two — for instance, the fact that the GECF's members control about two-thirds of the world's natural gas reserves. And not only was the GECF born in the capital city of an OPEC Member, but the two groups also have five members in common: Algeria, Indonesia, Iran, Nigeria and Qatar.

It is also worth noting that the majority (although not all) of the members of the GECF are developing countries. Besides the five OPEC Members, the other six nations in attendance at the Tehran meeting were Brunei, Malaysia, Norway, Oman, Russia and Turkmenistan. All of these countries are reliant on sales of natural gas for a significant portion of their export earnings. They therefore have a point of common interest around which they can unite and co-ordinate their policies, in much the same way as OPEC has done over the past four decades.

Yet those commentators worried about the formation of an 'OPEC for the gas industry' will be disappointed. For one thing, the structure of the gas industry is very different from that of oil, in large part because the difficulties in transporting natural gas (either by pipeline or as LNG in tankers) mean that its markets are regionalized. Additionally, gas sales are often characterized by longer-term relationships between buyers and sellers than is the case in the oil industry.

Quite apart from these economic and practical considerations, there is one other major factor to be taken into account: the GECF was never intended to perform a similar role to that of OPEC. All the participants at the GECF meeting (including several OPEC Ministers) were keen to stress that the new organization — which will meet at ministerial level every year to discuss issues of common concern — should function as a forum for dialogue and co-operation between countries with similar interests, and that these efforts would be of benefit to both producers and consumers of natural gas.

It has become something of a cliché to say that gas is 'the fuel of the future', yet the reason these words are repeated so often is because they are true. Looking ahead, the OPEC World Energy Model's (OWEM) reference case sees gas demand climbing from 2,015 million tonnes of oil equivalent in 2000 (accounting for a 22.7 per cent share of the global energy mix) to 2,798m toe in 2010 (25.5 per cent) and further to 3,825m toe in 2020 (29.1 per cent). In other words, gas demand in absolute terms is set to almost double over the next two decades.

The fact that this increasingly important fuel now has its own forum dedicated to discussing issues of concern to gas-exporting countries is, therefore, a highly positive development that should be welcomed. In the past, there were cases (such as the liberalization of the European Union gas market) where the consuming nations have taken important decisions affecting the gas-producing countries without consulting the latter.

The creation of the GECF should do a great deal to avoid such situations, by encouraging and promoting dialogue and co-operation not only among its members, but also on a broader scale between gas-producing and consuming nations. The future of gas, it can be said with confidence, now looks even brighter.

World oil: scarce or abundant?

Over the years, there have been numerous predictions about the world running out of oil, many of which have been wrong, but, as ***Professor Ferdinand E Banks**** *notes in this article, the writing is now on the wall for those who wish to see it — and those who prefer not to.*

The mechanics of the world oil market are still a mystery to many observers, and the reason is simple: they and their favorite publications prefer to suspend common sense in order to believe that there will always be sufficient motor fuel available at or near those prices which they feel that they have a right to pay. Oil has been likened to bread a century or two ago, which may or may not be true; but just now it is the most important commodity in the world, and can be expected to retain that distinction for the foreseeable future.

Almost a quarter of a century ago, experts at the Workshop on Alternative Energy Strategies (WAES), comprising 70 persons recruited from business, government, and universities in 15 oil-importing countries, came to the conclusion that soon after the year 2000 the supply of oil would fail to meet increasing demand, and consequently coal, gas, nuclear energy, and eventually alternative fuels would have to become the focus of global energy systems. (Although not considered at the time, nuclear energy might be useful for extracting, from water, the hydrogen required for fuel cells.)

By supply not meeting demand they meant, of course, that the price of oil would have to rise to obtain an equality. The late Armand Hammer (CEO of Occidental Petroleum) must have believed strongly in the WAES report, since he insisted that the price of oil would be $100/barrel by the end of the century, and there were many observers who thought that $75/b was a reasonable figure.

Because the world oil market changed so radically during the decade after WAES, the work of that commission is almost completely forgotten; however remembering my own scrutiny of the WAES results, as well as a short conversation with its director (C L Wilson of the Massachusetts Institute of Technology), I still find it possible to conclude that the commission was on the right track. Their key mistake was to assume that oil demand would grow at a rate of 3.5 per cent/year between 1975 and 1985, and then at 2.5 per cent/year until the end of the century, and that the inflation-adjusted oil price — ie, the *real price* — would rise at about four per cent per year. (In these circumstances the money or *nominal* price might then increase by seven per cent/year or more.) In reality the annual demand growth seldom exceeded two per cent, and following the oil price shock of 1979, a remarkable wave of successful exploration and investment activities found and produced large amounts of 'new' oil. In conjunction with decreased demand, these additional supplies brought the oil price escalation to an end.

Economic forces

What has not changed is the conceptual basis for the WAES forecasts, and one of my intentions here is to explain to readers that there are important geological and economic forces at work that could rapidly transform the world oil picture. There is no shortage of oil in the crust of the earth, but at the margin — where the oil price will ultimately be determined — there is a deficiency of cheap oil. Regardless of the technological advances that are supposed to be forthcoming, and which ostensibly will enable *large* quantities of oil to be lifted from deep water, or extracted from shale and tar sands, or for that matter to be manufactured from natural gas (or coal), the only way that the oil price can be kept at its present level or a few dollars below is via political pressures. For instance, the US Energy Secretary rushes to certain oil-producing regions with his hat in his hand, and by the liberal use of veiled threats and flagrant misrepresentations convinces various politicians and/or civil servants to act against the economic self-interest of their constituents. In terms of the economics and global finance that I teach, the era of 'dirt cheap' oil should be almost over; and even if it is not over, this should always be surmised: there is too much to lose if oil is assumed to be abundant, and it turns out to be scarce! In real (inflation-adjusted) terms oil is still inexpensive, even though today it trades for around $30/b.

There are two fundamental notions that everyone should keep in mind when

* *This paper by* ***Professor Banks*** *was written specially for the OPEC Bulletin. The author teaches economics at Uppsala University, Sweden.*

considering the *long term* oil market. They have to do with the work of M King Hubbert, and the reserves-production (R/P) ratio. Fortunately, they can be understood by everyone who is interested in this subject, and if they were better understood then we might be able to avoid much of the wishful thinking about the future of oil that fills both the popular press *and* some learned journals.

Production peak

M King Hubbert is regarded by some as the patron saint of petroleum geologists. His work turns on a (logistic curve) presentation which says that the production of oil in a large deposit or field tends to peak when about half of the reserves in the deposit have been pumped out. In the 1950s Hubbert predicted that production in the lower 48 states of the USA would peak between 1969 and 1970, and it peaked in 1970.

Perhaps he was lucky, but the same phenomenon has been observed in the former Soviet Union. Moreover, at the recent meeting of the International Association for Energy Economics (IAEE), I was told that with almost half the reserves in the UK North Sea extracted, the peak was imminent.

Presumably, one of the reasons why so many economists are unhappy with Hubbert is because his work does not include things like prices and costs: for instance, if price was to rise by a substantial amount, as over the past year, mainstream economics tells us that it would lead to more exploration, and ostensibly a greater effort to improve technology. What has happened of late, however, is that technological advances (such as seismic imaging) have confirmed that increased exploration is not going to find the very large deposits — or 'elephants', as they are sometimes called — that would bring about a radical change in oil availability, Oil discovery is trending downwards, and nobody in the executive suites of the major oil companies expects it to reverse direction, regardless of what they might say.

As for costs, one of the things brought out at the meeting of the IAEE referred to above, and earlier meetings, is that some costs associated with exploration and production might actually be falling. Moreover, as one well-known oil optimist enjoys pointing out, "we keep looking for more oil, and finding more oil." Going back to the discussion above, more oil is being found, but even so, in terms of quantity, the aggregate amount of oil discovered is falling over time. Nearly 365 billion b were discovered in the 1960s, about 275bn b in the 1970s, 150bn b in the 1980s and when the figures are in for the 1990s another large drop will be registered. Furthermore, even if it is true that technology is 'overwhelming natural depletion', and reducing costs all along the line, without an increase in the amount of oil discovered — preferably in the form of larger deposits — production will fall. This is one of the major outcomes derived from the work of Hubbert.

> ***'More oil is being found, but in terms of quantity, the aggregate amount of oil discovered is falling over time.'***

Now for this business of the R/P ratio. Simply put, when the R/P ratio of a deposit falls below about ten, this ratio will determine production in the sense that production must adjust in such a way as to hold the R/Q ratio constant. Why is this? The main reason is that when the R/P ratio falls below (about) ten the deposit is 'being worked too hard': it is being 'destroyed'. This is similar to what happens when a vehicle is driven too fast, and thus physical deterioration increases. Put another way, the R/Q ratio is a numerical indicator of production capability for an oil deposit, oil field, or collection of fields.

An example might be useful here. Assume that we have a field with 225 units (= R) of oil reserves, and we desire to lift 15 units/year (= Q), It is obvious that we can have an output of 15 units/year every year for five years. During this time, the R/Q ratio falls from 14 (at the end of the first year) to ten at the end of the fifth year, and reserves fall to 150 units. After that, however, if we continue to remove Q = 15 units/year, we are violating our constraint: the R/Q ratio will fall under ten. For instance, if we removed 15 more units (Q = 15), then reserves fall to 135, and R/Q decreases to 135/15 = 9. To keep this ratio at ten, production in the sixth year cannot be larger than 13.64. (Thus R/Q = (150 – 13.64)/13.64 ≈ 10.) Continuing, in the seventh year, production cannot be larger than 12.4. Readers should be able to get these results by simple trial and error, however this discussion may be generalized to show that $10 \leq R_t/Q_t \leq (R_{t-1}-Q_t)/Q_t$. In turn this expression may be solved to give $Q_t \leq R_{t-1}/11$. Note here that this ratio is measured at the *end* of a year.

False impression

Now for something that is extremely important! In the above example production turned down after the fifth year. At that time we have (150/225) x 100 per cent = 66.7 per cent of reserves still in the ground. If we had calculated the 'length of life' of this oil field, we would have obtained 225/15 = 15 years, which would have presented a fake impression of the availability of oil! Your favorite journalist or energy economist might tell you that the global R/Q ratio of oil at the present time is approximately 41 years, but what we should understand in the light of the above discussion is that this figure is meaningless. It is made meaningless by the importance of a 'critical' R/Q ratio (= 10 in the above example), as well as the fact that production from an oil field shows a tendency to decline after the half-way point for reserves is reached. Incidentally, in the above, the global 'length of life' of oil reserves is not the 41 years that is usually

cited, but thousands of years — in fact it approaches infinity. However even if we can look forward to sufficient oil in ten thousand years to light the lamps of China or Beverly Hills, we should not expect that there will be enough to keep our Volvos moving at top speed towards the skiing and partying at Åre or Riksgränsen.

Some comments are necessary here. In the USA production (in the lower 48 states) began falling in 1970, and continued to decline, as did the R/Q ratio. This ratio fell below ten, and did not stop until it was approaching nine. At that point the inevitable happened in the form of one of the largest declines in oil output in modern US history. On the other hand, it can be shown with some algebra, that sharp declines can take place with R/Q ratios well above ten. This results from the presence of fields of different sizes in a given 'basin'.

An interesting observation is that the R/Q ratio is under 5.5 in the UK North Sea. This does not, however, vitiate the above discussion! What it means is that even in medium-deep water, costs can be so high that — unless prices are high — maximizing profits entails some of the deposit being 'destroyed'. ('Consumed' does not quite describe this process.) Here I should mention that despite what many observers believe, the R/Q ratio has its foundation in economics, and not geology: geology provides a constraint. First and foremost we are maximizing the discounted flow of profits from a deposit or field. If, for instance, prices (and profits) were rising, then efforts would be made to keep the deposit intact for as long as possible.

According to many observers, to include the OECD, a study of the size and movement of the R/Q ratio for the oil producing world outside OPEC, together with the Hubbert 'model', suggests that non-OPEC oil (in the aggregate) will peak before 2010. The possible economic consequences of this scenario are left to the imagination of the reader. A similar project shows global oil peaking before 2020. Macroeconomically speaking, this is probably not good news. Even worse news would arrive if the oil pessimists are correct. They see non-OPEC oil peaking no later than 2005. 2005 is an interesting date, because it is about this time that the new vehicle technology will be ready — or so vehicle manufacturers claim. Of course, at least some of us think that, ready or not, it will still be too late.

A myth in the making

Some economists and journalists have published articles saying that if the OPEC countries do not increase their production of oil, the ensuing price rises will lead to more exploration, discoveries, non-OPEC production, technological advances that reduce the dependence on OPEC oil and/or oil in general, etc. Even the very knowledgeable Sheikh Yamani has compared oil to the stones of the Stone Age, saying that there were plenty of stones remaining when the Stone Age came to an end.

> *'It is doubtful whether the low-cost oil of the Middle East has much to fear from oil dredged up near Iceberg Alley.'*

As far as he is concerned, it would not be a good thing for the OPEC Countries if they possessed large reserves of oil when the highways are filled with automobiles utilizing some sort of hydrogen technology, etc.

I hope that our political masters do not make the mistake of jumping on this particular bandwagon before they carefully scrutinize the evidence. As Douglas R Reynolds has said in a valuable discussion, "Oil has been, and continues to be, the most valuable energy resource there is." *(OPEC Review,* June 2000). In these circumstances, I doubt whether the low cost oil of the Middle East has much to fear, competition-wise, from oil dredged up near Iceberg Alley (in the North Atlantic), or even synthetic oil produced from natural gas. Almost any technological breakthrough involving medium-deep or deep water would probably involve comparatively small quantities of oil that might or might not be expensive, and the large oil producing OPEC Countries should always have the option of signing (at lower prices) long-term contracts with oil or energy poor countries, and particularly those of Asia.

As for the future of synthetic oil, a prominent observer in the USA has stated that a barrel of synthetic oil can now be produced for $20, and thus $20, or thereabouts, will soon be the ceiling price — the 'backstop price' — for a barrel of oil. A contention such as this can only result from an almost complete unfamiliarity with normal economic theory and the way real markets function: nobody who can produce oil for $20/b is going to sell it for less than the market price if the market price is higher, and it will be higher until *huge* annual outputs of this synthetic oil are available. Some questions can also be asked about how much gas these 'huge' amounts might require, and what will eventually happen to the price of this gas.

Of course, the thing that is always missed here is that for a country like Saudi Arabia, as well as a few others, its domestic supplies of oil and gas are going to be invaluable as inputs for the oil and gas intensive industries that are now under construction or expansion, or will be under construction at some point in the future. Without these industries (oil products, petrochemicals, aluminum, etc) a comprehensive economic development in these countries is very unlikely. Unless I am mistaken, this was not adequately appreciated until the price of oil began to approach $10/b, and oil was being produced that — as a petrochemical input later in this century — could be worth much more. Saudi Arabia now produces almost ten per cent of world petrochemicals. Exactly what share they hope to obtain of

this market in the near or distant future is impossible to say, but if — for instance — they are aiming at something on the order of 20 per cent (of a larger global industry), then they hardly need to worry about the Stone Age analogy conjured up by Sheikh Yamani. As Professor A A Kubursi puts it: "The states of the region ... face the historical challenge of accumulating enough productive capital (both human and physical) in the non-oil sectors of their economies, and of raising productivity levels sufficiently in all sectors, to offset the drawing down of oil reserves. They are in a race against time." One way of making sure that they lose that race is to assume that technology is on the verge of creating an adequate substitute for oil, and so they should immediately begin to sell as much of this commodity as they can at bargain basement prices.

To have and have not

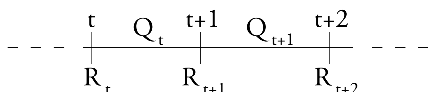
One of the things that Dr Hubbert was aggressive in pointing out was that even large additions to reserves would only delay production declines by a few years. Many observers are unable to accept this reality, although it can be easily shown with a little algebra. Oddly enough, this contention may not have been completely valid when it was made, since global consumption of oil was around 50 million b/day at that time; but with consumption up to 75m b/d, and increasing at the rate of 1.5–2 per cent per year, even the location of a major reservoir would not be a reason for jubilation in the oil-importing countries. Of course, major reservoirs are probably not going to be found outside the Middle East, although the Gulf of Mexico, Central Asia, and the waters off West Africa might contain a baby elephant or two.

Even the oil optimists, however, are not claiming that oil consumption will decline. The burgeoning middle class of Asia, for example, will require copious amounts of fuel for their cars and other vehicles, and since their industries will be able to export the manufactures required to purchase the oil required to produce this fuel, it is difficult to believe in the dramatic oil price collapse that some observers have started to talk about. There are also those regions that will need oil to produce and/or transport food, fertilizer, and other non-luxury items, and they too will not hesitate to purchase this oil, for the simple reason that they cannot do without it.

Everything considered, the handwriting is on the wall; and it is there for those who do not see it, or do not want to see it, as well as those who do.

Appendix

It might be useful to present a simple derivation which leads to an interesting conclusion about the R/Q ratio. In what follows, R/Q will be called θ. Consider the two-period hypothetical production and reserve scheme shown in the figure:



Assume that production, which is driven by demand, increases by 'n' per cent per year = (n%/y), and the autonomous reserve growth rate is 'g' %/y. For the two periods shown in the diagram we immediately get $R_t - Q_t + gR_t = R_{t+1}$, or rearranging slightly $[R_t(1+g) - Q_t]/Q_t = R_{t+1}/Q_t$. Introducing $Q_{t+1} = Q_t(1+n)$, and performing some simple manipulation will give us an elementary first order difference equation in θ_t: $\theta_t(1+g) - 1 = \theta_{t+1}(1+n)$. The solution is:

$$\theta_t = A[(1+g)/(1+n)]^t + 1/(n-g) \qquad (A1)$$

In this expression A is a constant, and with θ = θ(T) at the time we begin our scrutiny (which could be designated T = 0). this constant is easily determined. Before doing this, the above expression will be reformulated. Since $1+g \approx e^{gt}$ and $1+n \approx e^{nt}$, we get as our expression for θ (instead of θ_t):

$$\theta = [\theta(T) - 1/(g-n)]e^{(g-n)} + 1/(g-n) \qquad (A2)$$

Differentiating θ with respect to time will give us:

$$d\theta/dt = (g-n)[\theta(T) - 1/(g-n)] = (g-n)\theta(T) - 1 \qquad (A3)$$

From equation (A3) we see at once that for dθ/dt > 0, we require θ(T) > 1/(g–n). Now let us modify the numerical example given above by taking g = 5 per cent, n = 0, $\theta_t = 10$, $Q_t = 15$, and $R_t = 150$. With reserves growing, but production constant (n = 0), we might conclude that θ is growing or constant, but this is not true. Using these figures and the relationships implicit in the figure (and given above) we see that $R_{t+1} = 150 + 7.5 - 15 = 142.5$, where 7.5 is the growth of reserves during the period in question. But if Q remains at 15 (= Q_{t+1}), we end up with $\theta_t = 9.5$. Using equation (A3) we find that for reserve growth we must have θ(T) > 1/(0.05–0) = 20. Put another way, if θ(T) = 10 in the present example (which is equal to 150/15 at the time we begin our scrutiny), then for θ to increase, reserves must grow by more than ten per cent. That is, we must have 10 > 1/(g–0), or g > 1/10 (= 10 per cent).

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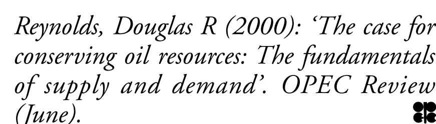


115th (Extraordinary) Conference agrees to maintain OPEC production level stable at 24.2 million barrels/day

Press Release No 10/2001
Vienna, Austria, June 5, 2001

Opening address
to the
115th (Extraordinary) Meeting of the OPEC Conference
by
HE Dr Chakib Khelil
President of the Conference
and
Minister of Energy and Mines, Algeria

Excellencies, ladies and gentlemen,

Welcome once again to the beautiful city of Vienna for the 115th Extraordinary Meeting of the OPEC Conference. The specific purpose of this Meeting is to review the present state of the international oil market, in the light of the latest OPEC production agreement, which was reached on March 17. As you will recall, in that agreement, we pledged to reduce production by one million barrels per day, with effect from April 1.

Since our March Meeting, and in fact since the start of the year, the price of OPEC's spot Reference Basket has remained firm at around $25 per barrel. What we conclude from this is that our price targets are realistic ones in the current global economic climate. Our flexible pricing mechanism has also had a beneficial effect, in providing a yardstick against which the strength of the market can be measured.

Our recent agreements have sent a clear message to the market that OPEC is ever-mindful of the need to ensure that stable, low-cost supplies of crude will continue to contribute positively to sound economic growth in consuming countries — and that the Organization will, therefore, act, whenever necessary, in the interests of the market's general welfare. This has all contributed to the relatively high level of stability we have witnessed.

Let me take this opportunity to restate clearly what the Organization has been striving to do in recent months. We are aiming:

— To ensure that world demand for crude is satisfied without fail. Let me be quite clear on that: if OPEC believes that

Above: Algeria's Minister of Energy & Mines and President of the Conference, HE Dr Chakib Khelil (right) with the Chairman of the Board of Governors, HE Abdulla H Salatt of Qatar (left).

Above: Seen here in a lighter moment just before the beginning of the Conference are (left to right) Nigeria's Presidential Advisor on Petroleum and Energy, HE Dr Rilwanu Lukman, Saudi Arabia's Minister of Petroleum and Mineral Resources, HE Ali I Naimi, and the United Arab Emirates' Minister of Petroleum and Mineral Resources, HE Obaid bin Saif Al-Nasseri.

Above: Answering the reporter's questions is Libya's Chairman of the National Oil Corporation, HE Ahmed Abdulkarim Ahmed (seated centre), together with the Secretary of the Libyan People's Bureau, HE Dr Said Abdulaati (left) and the country's new OPEC Governor, Hammouda M El-Aswad (right).

Above: In the camera's eye are Saudi Arabia's Minister of Petroleum and Mineral Resources, HE Ali I Naimi (seated centre), flanked by the country's Ambassador to Austria, HE Omer Mohammed Kurdi (left), and OPEC Governor, HE Suleiman Jasir Al-Herbish (right).

Below: Qatar's Minister of Energy and Industry, HE Abdullah bin Hamad Al Attiyah (left) in conversation with Kuwait's Minister of Oil, HE Dr Adel K Al-Sabeeh (right).

Below: Preparing for the start of the Conference are Venezuela's Minister of Energy and Mines, HE Alvaro Silva Calderon (left), and the country's OPEC Governor, Edgar Rodriguez (right).

market circumstances make it necessary to adjust output, we will do so.

— To stabilize the market at a fair OPEC Basket price level of around $25/b.
— To further build consensus, harmony and discipline within the Organization.
— To continue to develop ties with non-OPEC oil producers, as well as with major international organizations and other parties.

What changes relating to these areas have taken place since our last Meeting? First of all, OPEC has continued to expand its presence on the international stage. We have opened up even more channels of communication, including visits to nations such as Russia, the UK, and India. We have participated in the Conference of African Energy Ministers in Algiers, and the recent meeting of gas-exporting nations in Tehran, an event which is of great significance to us in OPEC.

Let me also recall our attendance at the UN Conference on Least Developed Countries in Brussels. It goes without saying that we in OPEC are always concerned about the

Above: The journalists listen attentively, ready to transmit details of OPEC's latest agreement to the world via their laptops.

Above: Iran's Minister of Petroleum, HE Bijan Namdar Zangeneh (seated left), answers questions from reporters.

Above: The United Arab Emirates' Minister of Petroleum and Mineral Resources, HE Obaid bin Saif Al-Nasseri (seated right), talks to the press.

Above: The Director of OPEC's Research Division, Dr Shokri Ghanem (second right), talks with the Head of the Indonesian Delegation and Minister of Energy and Mineral Resources, HE Dr Purnomo Yusgiantoro (second left), the country's Ambassador to Austria, HE Rhousdy Soeriaatmadja (right), the Secretary of Pertamina's Board of Commissioners, Roes Aryawidjaya (centre) and Advisor, Professor J C Kana (left).

Above: The Algerian Delegation included OPEC Governor HE Abdelhadi Benzaghou (c), Chargé d'Affaires ad interim, HE Lazhar Soualem (r) and Sonatrach Vice-President, Ali Hached (l).

plight of the LDCs. The tireless efforts of our sister Organization, the OPEC Fund, in improving conditions in those countries, deserve to be praised and more fully recognized. All these developments show that OPEC is getting its message across to an ever-larger global audience.

Additionally, there have been significant developments concerning the Kyoto Protocol. OPEC has for many years been drawing attention to the shortcomings of the treaty, particularly the financial losses it would cause for oil-exporting nations.

The US has also unveiled its national energy strategy. In this regard, it is noteworthy that senior US officials have absolved OPEC of responsibility for high product prices. They recognize that the situation is due to a number of constraints including shortage of refinery capacity, which leads to higher refinery margins, increasingly stringent product specifications, transport problems such as inadequate pipeline infrastructure, and the policy of just-in-time stocks management. All of these issues contribute to upward pressure on prices, and it is good to see concrete measures being taken to address them. In this connection it is relevant to note that the crude and product stock situation in the major consuming countries is constantly easing.

In many European countries, however, product prices remain high due to the excessive levels of fuel taxation. Consumer governments sometimes receive as much as four times the revenue of the oil producers. We call upon these high-tax governments to

Above: The Head of OPEC's PR & Information Department, Farouk U Muhammed, mni (left), reads the final communiqué at the post-meeting press conference. Next to him are (left to right) Algeria's Minister of Energy & Mines and President of the Conference, HE Dr Chakib Khelil, OPEC Secretary General, HE Dr Alí Rodríguez Araque, and OPEC News Agency Editor, Fernando J Garay.

Above: The press room was crowded as ever.

Far left: The Head of the Iraqi Delegation and Senior Under-Secretary for Oil, HE Taha H Mosa (left), talking to the Director General of the Economics and Finance Department at the Ministry, Dr Abdul Elah M M Al-Tikriti.

Left: Face to face with the media are Nigeria's Presidential Advisor on Petroleum and Energy, HE Dr Rilwanu Lukman (seated centre), together with the country's Ambassador to Austria, HE Abdulkadir Bin Rimdap (left) and Economic Commission Board Representative, Mohammed S Barkindo (right).

review their distortionary fiscal policies, which unfairly affect oil product prices for their citizens, many of whom have taken part in street protests against these taxes. It is worrying that this taxation is also being progressively applied to gas as well as oil products. Meanwhile, we are keeping a close eye on the liberalization of the gas markets in Europe and Asia, and the impact this could have on the oil market.

In both sets of circumstances — in the USA and in Europe — the producers' share of the final consumer price is much diminished, to their obvious detriment. The inequity of all this is clear, particularly in the light of all our efforts to restore stability to the market at price levels that will neither trigger inflation in the consuming countries, nor slow down global economic growth. This is especially important considering the apparent weakness of the US economy and the possible repercussions of this on Europe and elsewhere.

We all know how difficult it is to achieve stability even at the best of times, and conditions can change very quickly if the market is left unattended. The present, relatively stable situation is no fluke. It has been arrived at through the unflinching efforts of responsible producers, from both within our Organization and outside of it, to ensure that there is a reasonable balance between crude oil supply and demand. However, we have to work at this to maintain it. It requires constant vigilance. That is why we are holding today's Extraordinary Meeting, to assess the market outlook and, if we believe this to be necessary, to fine-tune our production agreement.

On top of all this, we are currently reviewing the way we communicate OPEC's message to the world at large. We see ourselves as an Organization well-versed in the realities of the 21st century oil market and ready to take the appropriate action to ensure that it functions in an efficient and effective manner at all times. OPEC has made strenuous efforts to become a more open, more transparent, more co-operative Organization. We very much hope that these efforts will gain their due recognition, and that this will be reflected in the media coverage of today's Conference.

Excellencies, ladies and gentlemen, it is now time to proceed with our Meeting.

Thank you for your attention.

HE Dr Rodríguez Araque, flanked by HE Dr Khelil, Mr Muhammed and Mr Garay, responds to questions at the press conference.

Press Release No 11/2001
Vienna, Austria, June 5, 2001

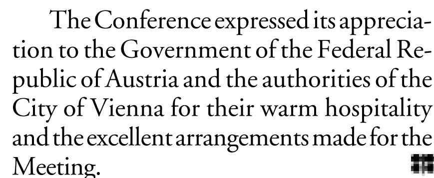
115th (Extraordinary) Meeting of the Conference

The 115th (Extraordinary) Meeting of the Conference of the Organization of the Petroleum Exporting Countries (OPEC) convened in Vienna, Austria, on June 5, 2001, under the Chairmanship of its President, HE Dr Chakib Khelil, Minister of Energy & Mines of Algeria and Head of its Delegation.

The Conference considered the report of the Ministerial Monitoring Sub-Committee, and thanked the Sub-Committee Members for their continuous endeavours on behalf of the Organization.

Having reviewed the oil market situation and supply/demand expectations for the forthcoming period, the Conference noted that stocks of both crude oil and products are at satisfactory levels, and agreed that, if present conditions continue, the balance presently observed in the market can be expected to continue until year-end. While observing that prices are relatively stable, with the year-to-date average of the OPEC Reference Basket price of $24.8/b having been within the agreed range of $22-28/b, deemed acceptable to consumers and producers, since the beginning of the year, the Conference nevertheless reiterated its commitment to satisfy the needs of consumers and to continue its efforts to maintain stability in the market.

In light of the above the Conference sees no need to make any adjustments to its agreed production levels at the present time. However, in view of eventual adjustments that may be required in response to future developments in the oil market, the Conference decided to convene an Extraordinary Meeting in Vienna on July 3, 2001, to review the market situation and take whatever measures are considered appropriate at that time.



The Conference expressed its appreciation to the Government of the Federal Republic of Austria and the authorities of the City of Vienna for their warm hospitality and the excellent arrangements made for the Meeting.

Inflationary pressure not linked to oil prices — Rodríguez Araque

Press Release No 12/2001
Vienna, Austria, June 26, 2001

In recent days, some influential voices have blamed OPEC for contributing to sustained 'high' oil prices, which, they claim, would lead to increased inflationary pressure on the world economy, particularly in Europe, OPEC Secretary General, Dr Alí Rodríguez Araque, told the OPEC News Agency (OPECNA).

"As OPEC Secretary General, I feel compelled to set the record straight on this matter," he said.

"First of all, it is important to note that fluctuations in oil prices have a much smaller impact on inflation nowadays than was the case in the 1970s. The reasons for this are that industrialized countries now need less oil to generate the same value of gross domestic product (GDP), as their economies are more energy efficient. Today, the industrial economies use 40 per cent less oil per unit of output than in the 1970s.

"Another important reason is that the share of taxes in the energy prices paid by the final consumer in Europe dwarfs any other component. Taxation accounts for around two thirds of the price of a refined barrel of oil. Additionally, the weakness of the euro versus the US dollar has accounted for more than a third of the increase in crude oil import prices in Europe in 1999 and 2000.

"Those speaking up seem to be forgetting that economic cycles are a constant in the world's economic system. And the global economy continues to demonstrate its strength, in spite of the various anti-cyclical measures that need to be implemented from time to time.

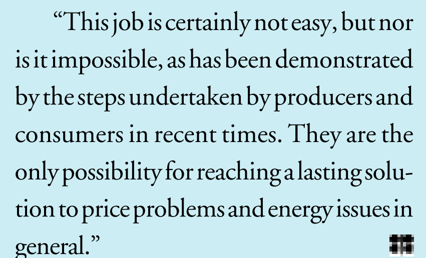
"Today, again, the threat of recession is being much discussed — as in the case of Japan — and creating much uncertainty regarding the downturn in the United States economy and its impact on Asia.

"Moreover, these pressures are now extending to the European continent, which until recently was not particularly concerned. Thus, economies as strong as that of Germany are showing less and less optimistic prospects.

"For its part, OPEC continues to demonstrate its commitment to a policy aimed at stabilizing the oil market. With this goal in mind, we have designed our price band mechanism, in order to prevent prices from rising too high and hurting consumers, or from falling too low, making producers suffer.

"Sharp price fluctuations have a negative impact on efforts to maintain the pace of investment and could endanger the capacity of producers to satisfy the world's growing energy needs.

"For this same reason, we insist that the solution is not to exchange accusations, but rather to promote dialogue and cooperation.



"This job is certainly not easy, but nor is it impossible, as has been demonstrated by the steps undertaken by producers and consumers in recent times. They are the only possibility for reaching a lasting solution to price problems and energy issues in general."

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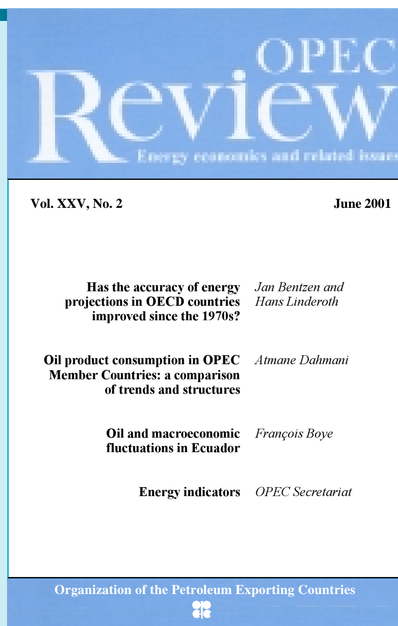

People wishing to submit a paper for publication should contact the Editor-in-Chief of the OPEC Review, Farouk U Muhammed, at the Public Relations and Information Department, OPEC Secretariat, Obere Donaustrasse 93, A-1020 Vienna, Austria.

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The economic cost of oil or gas production: a generalised methodology—*Thomas Stauffer*

"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."

Several OPEC Member Countries attend first meeting of world's major natural gas-exporting countries in Tehran

Tehran — The first ministerial-level meeting of major natural gas-producing countries was held last month in the Iran capital Tehran, according to the official Islamic Republic News Agency (IRNA).

Ministers and high-ranking officials from five OPEC Members — Algeria, Indonesia, Iran, Nigeria and Qatar — met with representatives from six other nations — Brunei, Malaysia, Norway, Oman, Russia and Turkmenistan — at the inaugural meeting of the Gas Exporting Countries Forum (GECF) on May 19-20.

Addressing representatives of the gas-producing nations gathered in Tehran, Iranian President Mohammad Khatami called for co-operation to stabilize the global energy market and guarantee the interests of producers and consumers.

"The countries which hold sizeable natural gas reserves should have appropriate planning and co-operation for a better utilization of this vital material," Khatami was quoted by IRNA as saying.

Liberal environment

However, delegates were keen to stress that they were not willing to establish an organization of major gas-exporting countries similar to OPEC, because they preferred the gas industry to operate in a liberal and unrestricted environment.

The Qatari Minister of Energy and Industry, Abdullah Bin Hamad Al Attiyah, commented: "We have not met here to create such an organization. Oil and gas are essentially different because oil contracts are often short-term, while the opposite is true for gas."

Nigeria's Presidential Advisor on Petroleum and Energy, Dr Rilwanu Lukman, confirmed to journalists that the eleven nations in Tehran were "not ganging up to exploit consumers", according to a report in the *Middle East Economic Survey*.

The delegates were unanimous on the aim of the talks — to promote an exchange of views on gas market issues and to boost co-operation between natural gas producers and consumers.

Speaking at the inauguration ceremony, Iranian Petroleum Minister, Bijan Namdar Zangeneh, said that co-operation between gas-exporting countries in today's increasingly open and competitive world could not mean the formation of a monopolistic power in the energy market.

Exchanging experiences

He added that co-operation could take the form of exchange of experiences on technical issues, upstream industries, transportation, marketing, and the technological implications of converting natural gas to liquids.

Co-operation was not only in the interests of any country or group, but would benefit both gas producers and consumers, leading to higher productivity in the industry and more secure supplies.

"Higher energy demand, along with the changing composition of energy consumption in the direction of more natural gas use in the future, will heighten the responsibilities of the exporting countries in ensuring a steady flow of gas to the markets," Zangeneh said.

He added that the participating countries in the GECF, with over two-thirds of the world's natural gas reserves, had a pivotal role to play in supplying gas and would do their utmost to provide secure and economical gas supplies to the world.

Many energy experts shared the view that natural gas, as a clean and environmentally friendly fuel, was a necessity for sustainable socio-economic development in this century, he said.

"Annual growth of the world's natural gas consumption for the next two decades is estimated at 3.2 per cent, which is higher than the growth in other kinds of energy," he pointed out.

Furthermore, he said, the share of natural gas in the world energy mix was slated to increase from 22.7 per cent now to 29 per cent by 2020.

Meanwhile, Algerian Energy and Mines Minister, Dr Chakib Khelil, confirmed that his country would host the second meeting of the GECF in January 2002.

Khelil stressed the importance of the Forum, which, he said, came "at an appropriate time, because the world is witnessing a major restructuring of its energy sector, due to globalization, liberalization and the restructuring of major oil and gas players, through mergers and acquisitions."

Globalization, he said, was leading to an opening-up of borders to trade and the creation of economic blocks facilitating international energy dealings.

Khelil pointed out that the liberalization of energy markets and the privatization of state entities were forcing players to adapt their market strategies and partnerships to better position themselves in the still-developing world gas market.

The Minister also noted that natural gas exporters had not been consulted in the process of the liberalization of the European Union energy market and there was a risk that this might happen again when the Asian gas-consuming countries liberalized their markets.

It was not desirable that decisions such as the taxation of fuels or the issuing of gas directives by the European Commission should be taken unilaterally, he added.

Khelil stressed that his country believed in dialogue and consensus-building in addressing the concerns of gas-producing and consuming countries.

Nigeria outlines three stage procedure for the setting up of refineries

Abuja — The Nigerian government has drawn up procedures for the setting up and operation of private refineries, it was announced last month.

The country's Presidential Advisor on Petroleum and Energy, Dr Rilwanu Lukman, told newsmen in the capital Abuja that prospective investors would be granted approval in three stages.

The first stage involved the selection of an appropriate number of applicants on payment of a fee of $50,000, while the

second stage entailed the submission of a basic design package, on the strength of which the licensee would be permitted to proceed with detailed engineering procurement and construction of a refinery.

The third stage involved the granting of the licence to operate the plant, following confirmation that the refinery had been built in accordance with an approved design, coupled with another fee of $100,000.

Lukman said that in order to facilitate the granting of the licence, applicants would be required to submit a feasibility study explaining the type of refinery, the refining capacity range, and the preliminary product slate.

Other pre-requisites, he noted, included a preliminary marketing plan, a preliminary crude oil or feedstock slate, and a proposed evacuation scheme in case of accidents.

"The government will only consider those applicants that have the wherewithal to confirm a feasibility study of the proposed project," said Lukman.

He added that applications would be entertained from prospective investors in the third quarter of the year. He advised those that had submitted applications earlier to update them to conform with the new procedures.

"I believe that government encouragement towards the private sector's involvement in the refining of petroleum products through liberalization will result in a reliable supply of petroleum products and increased industry efficiency, while ensuring competitive pricing," he said.

Lukman stressed that rising demand for gasoline was a pointer to the fact that new refineries would have to be built and the existing ones revamped to meet the increasing demand for petroleum products.

The outlining of the plan to allow private refineries to be built in Nigeria is part of moves by the federal government to combat the perennial scarcity of petroleum products in the country.

In a related development, the Managing Director of the Petroleum Products Marketing Company, Dan Nzelu, said last month that Nigeria had spent over $4 billion on petroleum product imports over the past five years, as domestic supplies were insufficient.

He told a Nigerian Senate committee, which has been set up to probe the import of adulterated petroleum products, that $2.5bn of the total amount was spent on imports between 1999 and 2000.

Nzelu blamed the breakdown of local refineries for the product shortages, which had led to the need for imports. The government had frustrated efforts to regularly refurbish the refineries and had turned down requests for money to carry out the work, he claimed.

Turnaround maintenance work on Nigeria's refineries ought to be carried out every year, he added, but this had not been done, leading to a situation where, for example, the Kaduna refinery had broken down.

Calling for the establishment of additional refineries and the deregulation of the petroleum sector, Nzelu said the country's plants could only produce 15 million litres/day of fuel, as against the 25m lt/d required by domestic consumers.

The five-man Senate committee investigating fuel imports, which is headed by Senator Ali Modu-Sherif, was set up following the adoption of a motion by Chief Arthur Nzeribe calling for a probe of imports of bad fuel into the country.

Algeria's Sonatrach signs $70 million pipeline deal with ABB Lummus

Algiers — Algerian state oil and gas company Sonatrach has signed a $70 million contract with ABB Lummus Global for the extension of the OH3 oil pipeline, it was announced last month.

The OH3 pipeline links the Hassi Berkine oil fields in the south-east of the country with the oil facilities at Haoud El Hamra.

The project, awarded to ABB Lummus in January this year, following a tender, involves setting up a crude storage facility and shipping station from Hassi Berkine, and the construction of a pumping station.

The scheme, due to be completed within 22 months, will allow for an increase in the capacity of the pipeline to 500,000 barrels/day.

The agreement was signed by Sonatrach Vice-President, Abdelhamid Zerguine, and ABB Lummus Managing Director, Francisco Gentily, in the presence of Algerian Energy and Mines Minister, Dr Chakib Khelil.

ABB Lummus Global is the international engineering and construction unit of Swiss-Swedish industrial giant ABB.

In another recent development, Sonatrach signed two contracts amounting to $185m for the construction of a pipeline from Haoud El Hamra to the oil port of Arzew on the coast.

The first stage — from Haoud El Hamra to Laghouat — was assigned to a consortium comprising Algeria's Cosider (the state-owned engineering and construction company) and Brown and Root Condor of the United States, and is worth some $95m.

The deal covering the second stage — from Laghouat to Arzew — is valued at $90m and was signed with the Russian company, Stroytransgaz.

Saudi Arabia names companies selected to carry out gas projects

Riyadh — Saudi Arabia has announced the names of the companies which have been selected to carry out three major gas development projects in the Kingdom, the official Saudi Press Agency (SPA) reported last month.

SPA quoted the country's Foreign Minister, Prince Saud Al Faisal, as saying that the first project, involving the north of the Empty Quarter, had been awarded to a consortium of ExxonMobil, Shell, BP and Phillips Petroleum.

The second scheme — the Red Sea and north-western Saudi Arabia project — was awarded to a group led by ExxonMobil and including Occidental Petroleum and Enron.

The third project — the Al-Shaybah gas field and the south-eastern part of the Empty Quarter — was awarded to a consortium of Shell, TotalFinaElf and Conoco.

Prince Saud, who headed the negotiating team that handled the gas development talks with the majors, said that an announcement would be made later concerning which companies would lead the

consortiums in the first and third projects.

He added that preliminary agreements would be signed within a few weeks with the companies involved, in order to determine project design, total investment required, and timetables for carrying out the work. Final agreements will be concluded after completion of the design process.

In a separate development, the *Saudi Gazette* reported last month that state oil firm Saudi Aramco is planning to embark on a massive programme of oil and development projects worth more than $15 billion over the next five years.

The paper quoted the company's Senior Vice-President for Engineering and Operations Services, Dhaifallah A F Al-Utaibi, as saying that Saudi Aramco was intending to expand its crude oil production potential.

"In response to the anticipated increase in demand for gas in the Kingdom, we had to expand the capacity of the Master Gas System from 3.7bn cubic feet/day to 7.8bn cu ft/d," he told an industry conference.

Al-Utaibi added that Saudi Aramco's efforts to find new associated gas sources had resulted in the discovery of about 30 trillion cu ft of gas in the last three to four years.

"Exploration for more gas sources is now focused on the South Ghawar, Berri and Qatif fields in the Eastern Region," he said, urging local and foreign companies to be ready to respond positively to oil, gas and petrochemical expansion plans in the region over the next 10 years.

German oil company seeking to drill in oil fields in Libya

Brussels — German firm Wintershall is seeking permission from Libya to drill in the country's oil fields where United States oil companies previously operated, it was announced last month.

Several US oil firms were formerly active in Libya, but were forced to cease their operations there in 1986 when President Reagan ordered them to pull out.

The Libyan oil fields in which Wintershall is interested are said to contain more than 3 billion barrels of oil, as well as substantial quantities of natural gas.

A US administration official has described the German move, which would involve taking over the assets of three American companies — Conoco, Amerada Hess and Marathon — as "a very serious issue" and said that the US had raised the issue with Germany at senior government level.

The move is being made in defiance of the US Iran-Libya Sanctions Act (ILSA), which allows the US to impose sanctions on foreign companies that invest millions of dollars annually in the Iranian or Libyan oil industries. ILSA expires in August and it is unclear whether or not it will be renewed.

The Wintershall bid is also seen as a major escalation in the long-running dispute between Brussels and Washington over investment in Iran and Libya. The European view is that the US has no right to legislate on the actions of foreign companies which operate outside its territory.

ExxonMobil to assess Aceh security situation before resuming output

Jakarta — ExxonMobil's Indonesian unit has started assessing the security situation in the troubled province of Aceh, with a view to resuming production from the onshore gas fields there, it was reported last month.

The US firm shut down production at its fields in Aceh early in March, following attacks on facilities by the rebels of the Free Aceh Movement, who are fighting for an independent state.

ExxonMobil has also sent in a team of experts to prepare for restarting production from the fields, the output from which is used to run the PT Arun liquefied natural gas plant in north Sumatra.

A company official confirmed that ExxonMobil was using a combination of aerial photographs, feedback from its employees, and the military to monitor the security level in Aceh.

If the PT Arun plant, which has also been closed since March, is unable to resume LNG exports to Japan and South Korea from next month, its owners, which include the state oil and gas firm Pertamina, will suffer a monthly loss of

In brief

Talisman finds more oil in North Sea

BRUSSELS — The UK subsidiary of the Canadian oil and gas exploration group, Talisman Energy, has announced the discovery of crude oil in the central part of the UK sector of the North Sea. The find by Talisman Energy (UK) was made by the 13/29B-7 exploration well, adjacent to the Ross field. According to the company, the well tested and flowed at a rate of 2,200 b/d. Talisman holds an 80 per cent interest in the 13/29B licence block, along with Paladin Expro, a wholly-owned subsidiary of Paladin Resources (20 per cent). "This good result is the latest in a string of successful North Sea wells for Talisman and offers further potential for our Ross field," said Talisman President and Chief Executive Officer, Jim Buckee. "Discussions will now take place between the current Ross field owners and the block 13/29B owners regarding incorporation of this area into the Ross development," he added.

UK oil expert calls for fuel tax cut

LONDON — An oil industry expert urged the British government last month to cut its tax on fuel, which runs as high as 78 per cent, as soon as possible. Professor Andrew Oswald, from Warwick University, in Northern England, was quoted last month by the *Daily Mail* and *Daily Express* newspapers as saying that the UK had Europe's cheapest petrol before tax and the most expensive petrol after tax. "It's time for the government to de-escalate the cost of fuel," Oswald said. Last September, fuel protesters in Britain brought the country to a standstill as lorry drivers blockaded major oil refineries and depots. The protesters were calling on the government to cut the amount of fuel duty, which they said had caused severe hardship to road haulage companies and consumers.

Norway to drill gas wells in Sharjah

BRUSSELS — Norway's Atlantis plans to drill four new gas wells off Umm Al Qaiwain, in Sharjah, the company announced last month. This follows the drilling of the first well, Umm Al Qaiwain-3, where work started in April. Daily output is expected to reach 100 million cubic feet of gas and 1,000 b/d of liquids, comprising liquefied petroleum gas and condensates. According to project sources, output may start in the second half of 2002. The gas is expected to be processed in Sharjah and marketed to consumers in the northern United Arab Emirates (UAE). Umm Al Qaiwain-3 was drilled after successful seismic studies were conducted last year. Two earlier wells, Umm Al Qaiwain-1 and Umm Al Qaiwain-2, were drilled in 1976 and 1977, respectively.

In brief

UK oil, gas output up in March

LONDON — Crude oil and gas output from Britain's North Sea increased during March, according to last month's *Oil and Gas Index* from the Royal Bank of Scotland. The report said: "As expected, oil production rose in March as increased operator expenditure started to feed through. However, output remains significantly lower than it was 12 months ago." The Bank said it expected oil output to continue to increase this year, although it now seemed unlikely that production for 2001 would be as high as it was in 2000. UK North Sea oil output for March rose to 2.3 million b/d, 4.3 per cent up from February. But, in spite of this, output was 11.7 per cent lower than the March 2000 levels. UK gas output also increased in March, rising by 1.4 per cent to a level only 0.2 per cent lower than in March 2000.

EU energy output down in 2000

BRUSSELS — Indigenous energy production in the European Union (EU) declined last year by 1.1 per cent, according to the European Commission's (EC) *Tenth Annual Energy Review*, published last month. It is the second year running that the region's output has decreased, following the production peak in 1996, and this decline comes at a time when energy consumption is rising. Analysts said the fear was that the EU was likely to become even more dependent on oil imported from the Middle East and Africa, as North Sea oil production declined. As the indigenous energy output has declined, import dependency has increased by 1.1 per cent, said the EC Transport and Energy Commissioner, Loyola de Palacio. "This underlies the urgency for an open debate on the security of energy supply," she said. Meanwhile, energy consumption grew by 1.9 per cent in 1998 and this utilization growth had continued, the report noted.

French oil import prices rise

PARIS — Average import prices for crude oil into France firmed to $25.60/barrel in April, compared with $24.50/b in March, on fears of supply disruptions because of problems in a number of refineries. The latest report from the National Statistics Institute, released in the French capital, noted that some sectors were already nervous about shortages of fuel for the busy summer season in the area of transport. "The imbalance between supply and demand for gasoline also weighed on the market for crude," the report said. Premium gasoline was trading at $324/tonne in April, up from $269/t in March. Diesel fuel and domestic heating oil prices rose by $10 to $233/t in April, from $223/t in March.

$100 million for failure to meet contractual obligations.

The Director of Pertamina's production-sharing contracts division, Iin Arifin Takhyan, stressed that although ExxonMobil and Pertamina had discussed the resumption of gas supply from Aceh, this would ultimately depend on the US company's own assessment of the situation, since it would not want to resume operations, only to be forced out again.

Pertamina has so far covered the Arun supply shortfall from surplus production at its second LNG complex at Bontang, in East Kalimantan on Borneo Island. However, from the end of this month, that gas will be going to new buyers, forcing Pertamina to seek another solution.

Industry observers say that this the first time that an LNG plant has been forced to suspend operations and cut off supply. The incident has raised concerns among buyers about security of supply, which could affect the negotiation of future LNG contracts.

Kuwaiti government to heed National Assembly proposals on oil fields

Kuwait — Kuwaiti Oil Minister, Dr Adel K Al-Sabeeh, has stressed that the government will adhere to ideas proposed by the National Assembly with regard to developing the country's northern oil fields, according to a report carried by the official Kuwaiti News Agency (KUNA).

Speaking after a meeting with members of the Assembly's finance and economy committee, the Minister underlined that the government was committed to taking into full consideration all and any recommendations the Assembly had with regard to the contracting of international firms to carry out the job of developing the fields.

Al-Sabeeh added that the government believed that it was more cost-effective to contract international firms to do the entire job of developing the fields, instead of turning the massive project over to the limited resources of the state-owned Kuwait Oil Company (KOC).

He also pointed to the long time span, perhaps seven years, that KOC would need if it were awarded the job, whereas experienced international firms would be able to do the same work in a shorter time.

KUNA also quoted the Minister as saying that a great deal of the required infrastructure for the project was already in place, and all that was needed was international investment.

The Assembly's finance and economy committee asked Al-Sabeeh to provide it with all the relevant documentation regarding project feasibility studies and the pros and cons in detail of contracting the work out either to KOC or to foreign firms.

UAE Offsets Group acquires Enron's stake in Dolphin gas project

Abu Dhabi — The United Arab Emirates Offsets Group (UOG) announced last month that it had acquired US energy giant Enron's stake in Dolphin Energy.

The move came after Enron decided in May to relinquish its 24.5 per cent share in Dolphin Energy, which is managing a project to route a gas pipeline from Qatar to Abu Dhabi and Dubai in the UAE, as well as Oman.

Enron's Managing Director for the Middle East, Richard Bergsieker, told a press conference that the project required long-term equity investment in upstream, which would not be appropriate for Enron since it was not an upstream company.

UOG now owns 75.5 per cent of Dolphin following Enron's pull-out, while the other 24.5 per cent of the shares are held by the French firm, TotalFinaElf.

Commenting on the Enron pull-out, Dolphin Energy's Chairman, Ahmad Al-Sayegh, said that he did not think the US firm's departure would have a negative bearing on the progress of the pipeline project.

The scheme involves drilling 20 gas wells, building a gas-processing plant, and transporting nearly 1 billion cubic feet/day of natural gas via a 350-km pipeline, extending from Qatar to Abu Dhabi and from there to Dubai.

Estimates of the cost of the project ran to $4bn, said Al-Sayegh, adding that Dolphin had been awarded unprecedented

concessions by the Qatari government to carry out the project in a way that would produce and distribute gas at a reasonable price.

He pointed out that Qatar had approached other states in the region, such as Kuwait and Bahrain, in a bid to allow Dolphin to provide them with natural gas.

Earlier last month, Dolphin invited international, regional and local companies to pre-qualify for five separate contracts for the project. The move followed the establishment of a technical project team to oversee the implementation of the first cross-border gas pipeline scheme in the Middle East.

Venezuelan firm Bitor announces profit of $60m for year 2000

Caracas — Bitumenes Orinoco (Bitor), the subsidiary of Petroleos de Venezuela which handles the power plant fuel Orimulsion, posted a $60 million profit for 2000, according to the firm's General Manager, Alfredo Riera.

Bitor's profit last year represented a substantial increase over the $10m posted in 1999, and the losses of $13m in 1997 and $25m in 1998.

Commenting on the results, Riera said: "The development of Orimulsion has allowed Venezuela to diversify its exports and target markets."

Among Bitor's clients are major electricity-generating plants in Italy, China, Canada, Japan, Germany, Denmark, Finland, Lithuania and Barbados.

Bitor estimates that potential demand for Orimulsion is 6.7m tonnes/year in Italy, 5.2m t/y in China, 1.8m t/y in Canada and the United States, 2.4m t/y in Ireland, India and south-east Asia, and 4.4m t/y in western Venezuela.

Bitor is currently negotiating the construction of two additional production units, one with the China National Petroleum Corporation and the other with Italy.

It has also signed a contract with the United States Trade and Development Agency to study the feasibility of building a fourth production unit to supply Enelven's electricity plant in Zulia State, western Venezuela, which has the capacity to consume up to 1.2m t/y of Orimulsion.

The construction of the three units would allow Venezuela to quadruple its Orimulsion output in the medium term from the current level of 6.2m t/y.

In a related development last month, Bitor announced the signing of a 10-year contract to supply an estimated 1.5m t/y of Orimulsion to the Pulau Seraya power station in Singapore.

Under the terms of the contract, PowerSeraya, which owns the Pulau Seraya power station, has agreed to build a flue gas desulphurisation facility at the Singapore plant, prior to the first deliveries of Orimulsion, which are scheduled for early in 2004.

This would allow the first stage of the 750-megawatt unit to operate at the lowest emission levels of all the fuel oil-fired power plants in Singapore, the firm noted.

PowerSeraya had been evaluating the use of Orimulsion since 1997 and had carried out full trials, prior to reaching a decision to proceed with the purchase of the product.

QatarGas signs two new contracts to deliver LNG to Spanish gas company

Doha — QatarGas has signed two contracts with Spanish firm Gas Natural for the delivery of up to 12.6 million tonnes of liquefied natural gas over the period 2001–12, it was announced last month.

The first of the two deals comprises the delivery of 5.6m t of LNG between 2001–09, while the second contract involves 3.5m t to be delivered between 2002–07, with an option for the same amount between 2007–12.

The Qatari Minister of Energy & Industry and Chairman of QatarGas, Abdullah Bin Hamad Al Attiyah, and the Chief Executive Officer of Gas Natural, Jose Luis Lopez de Silanes, signed the contracts on behalf of their respective companies.

Al Attiyah said the agreement was a milestone, in that it represented the first medium-term LNG contracts signed by any east of Suez project, and also represented

In brief

Malaysia's MISC focuses on LNG
KUALA LUMPUR — The Malaysia International Shipping Company (MISC) will this year expand into the liquefied natural gas (LNG) transportation markets of India, the United States, Iran, China and Norway. MISC, a subsidiary of the Malaysian state oil and gas corporation, Petronas, plans to move into these regions because of anticipated strong demand for LNG over the next 10 to 15 years, said MISC Managing Director and Chief Executive Officer, Mohamad Ali Yasin. He added that MISC was expected to take delivery of six new LNG vessels in stages from next year through to 2005. The company already has more than 20 vessels handling all of Malaysia's LNG deliveries to Japan, South Korea and Taiwan.

Norway's oil, gas sector in shake-up
BRUSSELS — Norway, Western Europe's largest oil producer, is determined to push ahead with a radical shake-up of its oil and gas sectors, which will structurally alter the regional energy market, according to industry sources. The restructuring will focus on the partial privatization of Norway's state-owned oil company, Statoil, and the disposal of a large slice of the government's direct stakes in reserves on the Norwegian Continental Shelf. In response to calls from the European Union, Norway is also altering the way in which it sells gas to the region. The sources said the aim of these moves was to make Norway's oil and gas industries more competitive, which is necessary because the country's break-even price for oil is far higher than in rival areas. Norway's break-even price for crude production is $14/barrel, compared with just $3/b in Iran, the sources said.

Work progresses on UK's Clair field
BRUSSELS — Engineering design work on the huge $900 million Clair oil field in Britain's sector of the North Sea, which holds 4.0 billion barrels of oil, has been completed and funds are expected to be released for the project in July this year. According to industry sources, contractors are then expected to bid for the main components of the project, including the provision of the oil production platform, before the end of the year. Clair has already been delayed several times in the past, but barring any hitches, the project is expected to come onstream sometime in 2002 and will help to create or preserve hundreds of jobs in Scotland's oil industry. The Clair field was discovered in July 1977, but because of the difficulty of its geological formation, development was postponed. BP has now decided to concentrate on core area with reserves of around 250m b of heavy oil.

In brief

API welcomes President's energy plan
NEW YORK — United States President George W Bush's announcement of proposals for a new national energy policy was welcomed last month by the US petroleum industry. The President announced measures in the new policy proposals to encourage domestic oil production and energy conservation measures. A statement by the American Petroleum Institute (API) said: "We applaud the President and Vice-President for their leadership and the comprehensive nature of their national energy strategy recommendations. Americans will benefit from the important national discussions about our energy future, now under way as a result of this and other proposals from Democrats and Republicans in Congress. Our nation has not broadly discussed energy for several decades." The API added that the US needs additional energy production, as well as increased conservation and energy efficiency, to ensure sufficient supplies are available to meet future demand.

IPE takeover move draws criticism
BRUSSELS — A $150 million takeover bid for London's International Petroleum Exchange (IPE) by Atlanta-based online energy trading site IntercontinentalExchange has been criticized by some members and users of the IPE, it was reported last month. IntercontinentalExchange is owned by Royal Dutch/Shell, BP and other oil majors, plus a handful of global investment banks, such as Goldman Sachs and Morgan Stanley Dean Witter. Critics of the deal, including IPE brokers, say these oil companies could have undue control of the pricing of crude oil, made worse by the fact that they already control most of the world's refineries and service stations. Many IPE brokers say they could lose out as pit trading is replaced by screen trading, which could be more subject to delays and the subsequent loss of liquidity.

Lukoil may buy stake in Veba
MOSCOW — Russia's Lukoil has expressed an interest in buying a 50 per cent stake in Germany's Veba Öl, which is partly owned by state oil company, Petroleos de Venezuela. The announcement came following a meeting last month between the Russian First Deputy Minister of Energy, Ivan Matlashov; the President of Lukoil, Vagit Alekperov; several other high-level Russian oil industry executives, and members of a delegation accompanying Venezuelan President, Hugo Chavez, on a visit to Moscow. An official from Lukoil (which is 85 per cent state-owned) said the two countries could possibly establish a joint-venture company in Russia and a heavy crude oil refinery in Venezuela.

Qatar's first strong foothold in the highly competitive European gas market.

He added that Spain and QatarGas had enjoyed a good relationship from the first LNG delivery to Enagas a few years ago. Gas Natural is the holding company of Enagas, to which QatarGas has sold more than 40 LNG spot cargoes since October 1997.

"For QatarGas, these contracts represent a major breakthrough for a Middle East LNG supplier into the European market in the medium term," said Al Attiyah, adding that the contracts did not in any way impact or jeopardize Qatar's long-term Japanese buyers.

QatarGas is committed to supplying 6m t/y of LNG to Japanese companies, including 4m t/y to the Chubu Electric Power Company, for a 25-year period.

The firm recently decided to go ahead with a debottlenecking project at its plant, which is scheduled for completion in 2005. The scheme will increase capacity to 9.2m t/y from the current 7.7m t/y and will supply some of the additional volumes required by the new contracts with Gas Natural.

QatarGas, the country's first LNG project, is 65 per cent owned by Qatar Petroleum, 10 per cent by TotalFinaElf of France, 10 per cent by ExxonMobil's Qatari unit, and 7.5 per cent each by Mitsui and Marubeni of Japan.

Iraq discovers new oil and gas areas in the Western Desert

Baghdad — Iraq has announced the discovery of new oil fields in the Western Desert region, local newspapers reported last month.

The Director General of the North Oil Company, Rafed Abdel Halim, was quoted as saying that plans were being worked out to drill exploratory wells at some point in the future.

New natural gas fields had also been discovered in the Akkas region in the same area, he added, but gave no further details. The Western Desert region covers almost half of Iraq's territory.

Earlier this year, Iraq said it had increased its oil reserves by 3 billion barrels, from 112bn b to 115bn b, despite the sanctions imposed by the United Nations since 1990.

Iraq currently produces about 3 million barrels/day of crude and plans to increase this to 6m b/d in the next few years. The country exports some 2.1m b/d under UN supervision.

Iran to expand gas processing capacity by 61 per cent

Abu Dhabi — Iran has earmarked 19,430 billion rials to invest in natural gas projects during the country's third five-year plan (2000-05), according to industry analysts.

With at least four gas refineries planned, the country's gas-processing capacity would expand by 61 per cent to 350 million cubic metres/day by 2004, Iranian energy expert Siamak Namazi told a conference on oil and gas pipelines in the Middle East.

Namazi, who is Director of Risk Management and Strategy for Atieh Bahar Consulting in Tehran, pointed out that Iran was taking every step required to meet the security concerns of India in the proposed Iran-Pakistan-India gas pipeline.

Relations have often been strained between India and Pakistan, making India wary of reliance on a gas pipeline running via its neighbour.

With the second-largest proven gas reserves in the world, Iran was enhancing investment in gas processing with four plants planned, representing gross capacity of 133m cu m/d and raising refining capacity to 350m cu m/d, he noted.

During Iran's third plan, he added, 5,000 km of gas pipeline and 23 new gas boosting stations would be built, he was quoted as saying by the *Gulf News* of Dubai.

Of the 19,430bn rials earmarked for the various projects, 81 per cent would be in local currency and $2.13bn would be in foreign currency.

Iran's gas pipeline network amounted to some 14,000 km, with 21 boosting stations operational. Annual growth of pipeline construction was 8.5 per cent.

Namazi noted that planned gas-

processing facilities included the Bid Boland II refinery, due to be fed by phases six, seven, and eight of the South Pars field, with a capacity of 30m cu m/d of gas, and the Parsian refinery, to be built in Lamerd and fed by the Shanoul, Varvi and Tabnak fields, with a capacity of 79m cu m/d.

The other two refineries planned were the Chavar plant, in Ilam Province, with a capacity of 10m cu m/d, and the Gashou refinery, in the suburbs of Bandar Abbas, with a capacity of 14m cu m/d.

Namazi said that with the memorandum of understanding signed between Iran and India recently, the gas pipeline project from Iran to India, via Pakistan, was approaching reality.

Indonesian government still mulling plans to cut fuel subsidies

Jakarta — The Indonesian government plans to cut its fuel subsidy by around $600 million as a measure to stop the widening deficit in this year's budget, according to a report in the *Jakarta Post* last month.

Government officials have expressed concern that the budget deficit could climb as high as six per cent of the nation's gross domestic product, but have worked out a revised version to keep it down to 3.8 per cent.

The measures under consideration in the revised budget also include increasing tax and excise revenue by around $300m, and raising privatization proceeds by just over $240m.

In addition, wealthier provinces and districts have been asked to contribute around $600m to the state budget by purchasing state-issued bonds and buying state enterprises being privatized.

Finance Minister Prijadi Praptosuhardjo said efforts were being made to limit the budget deficit to an initial estimate of 3.7 per cent, but the figure could rise to 3.8 per cent.

The report said that the government had no option but to cut spending and raise domestic revenue, in order to maintain the deficit at a tolerable level.

However, the government was concerned about reducing the fuel subsidy as it would mean raising fuel prices, a measure that could trigger widespread social unrest, the paper noted, adding that it was one of the most difficult decisions to be taken.

The revised budget sees the exchange rate at 9,600 rupiahs to the dollar, down from 7,200 rupiahs set earlier, an inflation rate of 9.3 per cent, compared with 7.2 per cent, and economic growth of 3.5 per cent, down from five per cent. The interest rate of Bank Indonesia promissory notes would also be raised to 15 per cent from 11.5 per cent.

The House must approve the revised budget swiftly, in order to persuade the International Monetary Fund (IMF) to disburse its next $400m tranche to Indonesia.

The IMF is financing the restructuring and revival of the Indonesian economy, which was badly hit by the 1997 Asian economic crisis, when the rupiah plunged from 2,500 rupiahs to the dollar to way past the 10,000 rupiah level.

Shell announces new oil find in Nigeria's offshore Bonga field

Abuja — The Shell Nigeria Exploration and Production Company (SNEPCO) has announced a new oil discovery in its Nigerian offshore field, Bonga SW.

A company statement said that the well, which was drilled in a water depth of 1,245 metres, reached a final depth of 4,160 m and was subsequently logged and suspended, after encountering substantial amount of net oil sand.

"An initial evaluation of the well indicates that the recoverable reserves discovered with Bonga SW could be large enough to form the basis for a new deep-water development in Oil Mining Lease 118," it noted.

Ron van den Berg, the Chairman and Managing Director of SNEPCO's parent firm, the Shell Petroleum Development Company of Nigeria, was quoted as describing the discovery as "a further demonstration of the commitment of Shell and its partners to the development of the country's oil and gas potential."

Bonga SW is SNEPCO's second dis-

In brief

New LNG pricing seen for India, China

SINGAPORE — New price regimes may develop for liquefied natural gas (LNG) sales, particularly in India and China, eventually influencing the regional market, according to the Vice-Chairman and Managing Director of QatarGas, Faisal M Al Suwaidi. He told delegates attending the 13th LNG Conference and Exhibition in the South Korean capital Seoul last month, that "to date, Indian buyers have agreed rather conventional East of Suez price terms." However, he said that this could change, as pricing was tailored to the needs of the different industrial sectors which all required diverse alternative fuels. In China, he said it was a matter of sellers and buyers reaching acceptable price terms where the "landed prices of LNG would be competitive with the delivered price of LNG from other projects."

US gasoline output hits new record

NEW YORK — Refinery operations and gasoline production in the United States set new records for April, the American Petroleum Institute (API) reported last month. About 15.6 million b/d of mostly crude oil was turned into various products, nearly two per cent more than in April a year ago, in part to try to avert shortages, particularly in petroleum products, as was the case in summer 2000. The national capacity utilization rate was 93.8 per cent, the highest since last September, the API's monthly statistical report stated. Gasoline output of 8.37m b/d was 3.4 per cent higher than a year ago and 7.7 per cent more than in March. Production of California's special blend of reformulated gasoline (RFG) was up sharply over last year, but Midwest RFG output was nine per cent below 2000 figures.

Trinidad & Tobago encourages gas E&P

SEOUL — In a bid to increase the use of natural gas, the Caribbean country of Trinidad & Tobago is providing new incentives for raising the level of exploration and production, according to the Minister of Energy and Energy Industries, Lindsay Gillette. The Minister told the 13th International Conference and Exhibition on Liquefied Natural Gas, which was held last in the South Korean capital Seoul last month, that the country had also been encouraging the employment of more advanced natural gas technologies to reduce costs and increase efficiency through regulatory action. The twin-island nation has significant further potential, as evidenced by the success already experienced, along with the growth seen in the reserve base. Singapore's proven gas reserves have risen from 8.0 trillion cubic feet in 1995 to 23tr cu ft today.

In brief

Citgo, Unocal agree on patent licensing

CARACAS — Venezuela's state oil company, Petroleos de Venezuela (PDVSA), has announced that its United States' subsidiary, Citgo Petroleum, had been granted the right to use Unocal Corporation's patents for the cleaner-burning gasoline that is required under the US Clean Air Act. According to PDVSA, the licensing accord was effective from the beginning of this year and covered the three refineries operated by Citgo in Lake Charles (Louisiana), Corpus Christi (Texas), and Lemont (Illinois), as well as all the gasoline imported by Citgo. The terms of the agreement were not disclosed. "We are very pleased to complete this licensing agreement, since it is advantageous for Citgo to use Unocal's patented formulations to maximize our reformulated gasoline (RFG) production," commented Citgo's Senior Vice-President of Refining, Adolph Lechtenberger.

Malaysian energy spending is cut

KUALA LUMPUR — The Malaysian energy sector has been allocated $13.89 billion in the country's eighth economic plan (2001-05), lower than the $14.87bn spent in the seventh five-year development period, which ended last year. The oil and gas sector was expecting $7.27bn under the new plan, while the electricity sector was counting on $6.62bn. In contrast, the oil and gas sectors spent $8.0bn in the last plan (1996-2000), while the electricity sector spent $6.87bn. Malaysia's crude oil output would be maintained at 600,000 b/d during the eighth plan, which was officially announced by the country's Prime Minister, Dr Mahathir Mohamad. Crude output averaged 606,000 b/d in 2000, down from 663,000 b/d in 1995, which marked the end of the sixth plan.

TotalFinaElf reports find in Kazakhstan

PARIS — TotalFinaElf of France announced last month that the Offshore Kazakhstan International Operating Company (OKIOC), of which it is a part, had successfully tested a second well in the Kazakhstan sector of the Caspian Sea. OKIOC reported that the Kashagan West 1 well had produced 3,400 b/d of 42–45° API oil from a depth of 4,250 metres. The latest drilling took place about 75 km south-east of Atyrau in the north-west sector of the Caspian Sea and 40 km from an earlier find in the eastern region. TotalFinaElf, which holds a 14.28 per cent stake in OKIOC, said that once the latest well was completed, appraisal drilling would be carried out on the structure. OKIOC also includes subsidiaries of Italy's ENI, the UK's BP and BG, ExxonMobil, Inpex Petroleum, Phillips Petroleum, Royal Dutch/Shell and Norway's Statoil.

covery in OML 118. The company's first find was the world-class Bonga field, currently under development, with first oil expected by the end of 2003.

SNEPCO currently operates two licences — OML 188 and OPL 219 — on behalf of the Nigerian National Petroleum Corporation, under a production-sharing contract with Esso Exploration and Production Nigeria (Deepwater), Nigeria Agip Exploration, and Elf Petroleum Nigeria.

Algerian, Iraqi Ministers sign accord to develop Iraqi oil and gas fields

Algiers — Algeria and Iraq last month signed an accord allowing the Algerian state oil and gas company, Sonatrach, to participate in the development of Iraqi oil fields, according to a report by the Algerian News Agency (APS).

Algeria's Energy and Mines Minister, Dr Chakib Khelil, and his Iraqi counterpart, Dr Amer Mohammed Rasheed, signed the accord, which also covered the development of partnership projects in the oil and gas sectors in Algeria and Iraq.

The APS report noted that the two countries were due to sign another accord soon, which would pave the way for the development of an oil field in southern Iraq and a gas pool in the north of the country.

The agreement was signed during a three-day official visit to Baghdad by an Algerian delegation. Khelil, who headed the delegation, also met with Iraqi President Saddam Hussein, Vice-President Taha Yassin Ramadan and Finance Minister Hekmat Alazzaoui.

Ramadan stressed the "important and diversified potentialities of Iraq and Algeria", and called for "the extension of economic co-operation with Algeria."

He noted that these economic possibilities required common efforts to exploit them within the framework of joint projects and a free trade area.

Sonatrach is already involved in the Iraqi hydrocarbons sector, particularly in the area of pipelines, distribution, and marketing of oil, as well as in oil studies and seismic topography.

Venezuela plans to issue licences soon to natural gas investors

Caracas — Venezuela's Ministry of Energy and Mines is planning to grant licences for private, national and foreign investors soon, it was announced last month.

The move, which was announced by Deputy Energy and Mines Minister Bernardo Alvarez at a forum in Caracas on the Venezuelan gas sector, would allow investors to participate in gas activities not related to oil exploitation.

He put the level of investment required at between $3 billion and $6bn, generating up to 10,000 direct jobs and 30,000-50,000 indirect employment possibilities over a period of 10 years.

The Ministry of Energy and Mines was speeding up the process for the bidding of 11 areas, the Venezuelan Press Agency quoted Alvarez as saying, adding that the process would be carried out under a transparent legal system, with clear rules for investors.

He noted that it was vital to stress to investors the importance of the gas industry for the greater development of the Venezuelan economy.

Alvarez also said that measures had been taken to solve an existing gas deficit in some regions of the country, due to unavailability of the fuel.

McDermott wins Qatari contract for offshore well-head platform

Dubai — Marine engineering firm J Ray McDermott has won an engineering, procurement, construction and installation (EPCI) contract from Qatar to develop a new offshore well-head platform and associated pipelines for the Maydan Mahzam fields.

McDermott's facility at Jebel Ali in Dubai in the United Arab Emirates, will handle project management, design engineering, procurement, fabrication, installation, hook-up and mechanical completion of the offshore facilities.

Front-end and design engineering will be done by local engineering firms, while detailing will be carried out at the Jebel Ali unit, according to a report in Dubai's daily *Gulf News*.

"The project's scope again demonstrates our capabilities as a full EPCI contractor, allowing us to provide our customers with the advantage of uniform safety and quality programmes, as well as savings in cost and time," said the company's Vice-President and General Manager responsible for eastern hemisphere operations, Kurt Nelson.

Work on the well-head jacket and deck would begin at the yard in mid-August, while offshore installation work was scheduled for December 2001 and January 2002.

The pipeline scope would comprise two new lines — a six- inch bulk flow line and an eight-inch gas lift pipeline between existing facilities and three spur lines to sub-sea tie-ins.

This is the second EPCI contract within a month that McDermott has won for offshore Qatari fields. The Ras Laffan Liquefied Natural Gas Company recently chose the firm to build onshore facilities, including part of a new third LNG train, for Qatar's North field.

Iran not intending to overhaul buyback deals, says Petroleum Minister

Tehran — Iranian Petroleum Minister, Bijan Namdar Zangeneh has ruled out reports that his Ministry was intending to overhaul the country's buyback deals with foreign oil firms.

"I have already announced that we are not intending to review buyback deals under any conditions," the *Tehran Times* quoted him as saying last month.

However, Zangeneh did not rule out making changes in some articles of foreign buyback agreements. The aim, he said, was to improve the deals, although he stressed that a total overhaul was out of the question.

He noted that parliament had permitted the National Iranian Oil Company (NIOC) to sign up to $7.5 billion in foreign buyback deals during the current Iranian fiscal year (which started on March 21) and had extended earlier permits.

Zangeneh denounced those who had criticized his Ministry for encouraging buyback deals, arguing that the Ministry had the green light for the procedure from the Majlis, Iran's parliament.

"The legislature, namely the Majlis, has issued permission to the Oil Ministry to enter into buyback deals. Thus, there should be no problem in this respect whatsoever," he stressed.

Buyback deals have come in for extensive criticism by some sectors in Iran, claiming that they were opening the door to a sell-off of national wealth.

Under a buyback programme, a foreign investor is to recover his investment from products produced. Buybacks, though largely unpopular with foreign firms, were resorted to in the mid-1990s, in a bid to help the Iranian government skirt constitutional bans on foreign ventures and attract much-needed capital to revamp the ageing energy sector.

Since 1997, Iran has pushed for greater foreign investment and has attracted some $11.5bn in foreign buyback deals in its oil and gas sectors. Contracts worth over $7bn have already been sealed to develop the first eight of the planned 25 phases of South Pars, although delays in project implementation have occurred.

Negotiations are continuing for several other buyback oil deals with Spanish and Italian companies emerging as the front-runners. Other bidders are BP, Royal Dutch/Shell, Italy's ENI, and France's TotalFinaElf.

Nigerian Senate says indigenous firms losing out on oil contracts

Abuja — A Nigerian Senate committee has said that indigenous firms are losing out with regard to awards of oil-related contracts by the state-run Nigerian National Petroleum Corporation (NNPC) and the multinational oil companies operating in Nigeria.

The Chairman of the Senate Committee on Gas and LNG, Michael Adewari Pepple, told the Senate, which is the upper legislative chamber, that there were

In brief

Korean demand growth seen slowing

SEOUL — South Korean oil demand is expected to grow at an average of 2.6 per cent annually for the next five years, a sharp drop from the 7.6 per cent a year recorded in the past 10 years, according to the Ministry of Commerce, Industry and Energy. It said the slower growth rate was due to growing consumer demand for high-quality energy sources, the positive impact of official energy conservation policies and competition among energy sources. Oil demand for the first five years to 1995 recorded an average of 13.7 per cent growth per annum, it said, adding that the 1996 economic crisis slowed energy demand to a mere 1.9 per cent up until last year. The ministry said the power generation sector would lead the other sectors in oil consumption, growing by 7.3 per cent a year.

Dependence on Arab oil to rise

DUBAI — Global dependence on Arab oil will continue for the foreseeable future, with world demand rising to 113 million barrels/day over the next 20 years, according to a regional oil expert. Dr Hussain Abdallah, a former senior official at the Egyptian Ministry of Petroleum, was quoted by Dubai's *Gulf News* as saying that: "The world will increasingly depend on Arab oil. Global oil demand will rise by 1.9 per cent annually from around 75m b/d to 113m b/d by 2020." He also predicted that the industrialized countries' oil imports from the Middle East would account for 75 per cent of their needs by 2020. Abdallah also praised OPEC for its success in withstanding heavy economic and political pressure over its 40 years and restoring oil prices through production cuts, with the support of non-OPEC countries like Mexico, Norway, Oman and Russia.

Petron mulls upgrade of refinery

MANILA — The Petron Corporation of the Philippines will need to make a reasonable profit before venturing into a long-planned, $1.2 billion combined refinery conversion and petrocoke power project, the firm's President Motassim Al Ma'ashouq said last month. He was quoted by local media as saying that the project would upgrade Petron's 180,000 barrels/day refinery from a simple to a complex facility and allow the country's largest oil group to diversify into the domestic power generation sector. The conversion, adding at least 85,000 b/d of new capacity, would enable the plant to produce high-value products, such as gasoline and diesel. Petron is 40 per cent owned by the government of the Philippines state, 40 per cent by state oil firm Saudi Aramco, with the remaining 20 per cent floated on the Manila stock exchange.

In brief

IAEA reappoints ElBaradei as DG

Vienna — The Board of Governors of the International Atomic Energy Agency (IAEA), has reappointed Dr Mohamed ElBaradei for a second four-year term as Director General, with effect from the end of November when his first term expires. The appointment is subject to the approval of the IAEA General Conference. Dr ElBaradei, who has served as Director General since December 1, 1997 has been a senior member of the IAEA Secretariat since 1984, holding a number of high-level policy positions. He was the Legal Adviser before heading the Division of External Relations, and becoming Assistant Director General for External Relations in 1993. Dr ElBaradei was born in Egypt in 1942. He gained his Bachelor degree in Law in the 1960s at the University of Cairo, and subsequently his Doctorate in International Law at the New York University School of Law between 1971 and 1974.

TotalFinaElf increases Kashagan stake

Paris — France's TotalFinaElf has finalised agreements with BP and Statoil to purchase their respective interests of 9.52 per cent and 4.76 per cent in the North Caspian Sea Production Sharing Agreement, including the Kashagan field, in the Kazakh section of the Caspian Sea. The first two Kashagan exploratory wells revealed a giant discovery, confirming the northern Caspian Sea's status as a major oil province. The first well of the appraisal drilling campaign is now underway and several promising exploration prospects remain to be drilled. In addition to TotalFinaElf, BP and Statoil, the other partners included in the Kashagan production-sharing contract are Italy's ENI (14.28 per cent), BG (14.28 per cent), ExxonMobil (14.28 per cent), Shell (14.28 per cent), Inpex (7.14 per cent) and Phillips Petroleum (7.14 per cent).

Chevron finds oil in South China Sea

Beijing — Chevron and its partners announced last month that they have drilled two discovery wells which identify separate oil fields in the northern portion of Block 16/19 in the Pearl River Mouth Basin of the South China Sea. The first discovery well, designated HZ 19-3-1, was drilled in 100 metres of water to a depth of 3,344 m and encountered multiple oil-bearing zones. Three representative zones were tested and yielded crude oil at a combined rate of 6,403 barrels/day of 40° API crude oil. The second discovery, HZ 19-2-1, was also drilled in 100 m of water to a depth of 3,875 m and also encountered multiple oil-bearing zones. A single zone was tested, yielding 46° API crude oil at a rate of 4,700 b/d.

imbalances in the award of service contracts in the oil and gas sector, to the detriment of indigenous concerns and the economy of Nigeria.

Pepple noted that the joint-venture partners operating in Nigeria had awarded various contracts totalling billions of dollars and creating thousands of jobs, to foreign firms.

He added that it was regrettable that the Nigerian companies which tendered their bids were frequently disqualified, despite their partnerships with reputable foreign firms.

As an example, Pepple said that one deal, for an FPSO hull, which could have been done in Nigeria, was fabricated in South Korea at a cost of over $150m, creating jobs for workers in that country.

The same situation had occurred with regard to various oil fields operated by foreign firms, notably the Agbami, Erha, Amenam/Okpono and Bonga developments, he said, where contracts worth more than $1bn apiece had gone abroad.

"In total, we expect almost $10 billion to be spent without any active participation of Nigeria and Nigerians," he said.

He proposed that the Heads of the NNPC and the foreign firms involved, which included the Nigerian units of Shell, TotalFinaElf, Chevron and Texaco, should be made to explain what measures they had taken to ensure 100 per cent wholly-owned Nigerian indigenous companies could participate with competent foreign technical partners in such developments.

Indonesia's Pertamina signs production and technical help deals

Jakarta — Indonesia has awarded two production-sharing contracts (PSCs) and one technical assistance contract (TAC) for its Sumatra and Java Provinces, it was announced last month.

State oil and gas firm Pertamina signed a 30-year PSC with PT Chevron Kisaran and Texaco Kisaran for the exploration and development of the Kisaran block in north Sumatra.

It also gave Coparex Banyumas 30-year PSC rights to the Banyumas block in central Java and signed a TAC with Buana Sadpetra for 20 years of exploration and investment in the Mambang Sebasa block in south Sumatra.

The signing of these contracts reflected a strong commitment of oil and gas companies in Indonesia, said Energy and Mineral Resources Minister, Dr Purnomo Yusgiantoro.

The contractors were expected to invest up to $5.5 million in each of the blocks in initial exploration, said Pertamina in a statement.

The Kisaran prospect was expected to yield natural gas which would be used in the existing enhanced oil recovery projects operated by PT Caltex Pacific Indonesia, said the firm's President Director, Humayunbosha, who signed the contract.

Sonatrach and Sonelgaz sign accord to set up Algerian Energy Company

Algiers — Algerian state oil and gas company Sonatrach and the national electricity and gas distribution firm, Sonelgaz, have signed the articles of association for the setting up of the joint-venture Algerian Energy Company (AEC).

The new firm, whose capital will be held equally by Sonatrach and Sonelgaz, will be in charge of activities related to the production, transportation and distribution of electricity.

Speaking at the signing ceremony, Algeria's Energy and Mines Minister, Dr Chakib Khelil, noted that co-operation between Sonatrach and Sonelgaz aimed at increasing markets for Algerian gas and benefiting from the deregulation of energy markets throughout the world.

He stressed that, in the coming years, AEC should be able to put forward proposals, including electricity and gas schemes, to European energy firms.

Industry observers have also said that one of the objectives of AEC is to attain a business footing in the European gas market, through participation in projects associated with the big users of natural gas, such as power plants.

AEC Managing Director, Nourredine Bouarfa, said that his company's first activity would be to set up a power plant to produce 2,000 MW of electricity.

May[1]

Crude oil price movements

The spot Reference Basket[2] of OPEC crudes averaged $26.25/b in May, a gain of $1.87/b over its April level. Brent-related crudes made the highest gains, with Bonny Light and Saharan Blend adding $3.08/b and $2.82/b to their values, respectively. Tia Juana Light and Isthmus followed, increasing by $1.98/b and $1.76/b, respectively. Dubai and Arabian Light moved $1.34/b and $1.53/b higher, respectively, while Minas rose by the least amount, 57¢/b (see **Table A**).

In the first week of June, the average weekly price of the Basket edged 40¢/b lower to $25.66/b, amid divergent price trends and a strong linkage to the gasoline market in the USA. While West Texas Intermediate prices traded sideways, Brent prices were boosted by healthy refiners' margins in Europe, as refiners there tried to maximize gasoline production to take advantage of the record-high prices across the Atlantic. Supply disruptions in Nigeria added support. The Basket, however, reversed its direction and gained 39¢/b in the second week, on several supporting factors. The cancellation of two Brent cargoes from the May programme supported prices in Europe. The announcement of the new National Energy Policy in the USA, which did not tackle any short-term issues, in addition to President George W Bush's comments that the present problems in gasoline supply were due to insufficient US refining capacity, provided bullish sentiments, while the closed transatlantic arbitrage raised fears of a supply crunch in the USA. However, the rally was capped by a build in US crude oil and gasoline stocks and a revision by the International Energy Agency of its demand growth forecast by 300,000 barrels per day. The Basket rally continued into the third week, rising by 98¢/b to $26.97/b, basically driven by Brent, as a Dutch trader (Vitol) pushed prices higher in amassing several Brent cargoes. Concern about the availability of gasoline was also driving prices in the USA, and these reached unsustainable levels, but, as soon as API statistics showed a build in stocks, prices moved lower on profit-taking. In the final week, the Basket lost 37¢/b, as US stocks showed another build in gasoline, thereby relieving concern and causing sell-offs. The only factors that supported prices were concern about the interruption of Iraqi exports and statements from OPEC officials pointing towards keeping the Organization's present production level.

US and European markets

The very high gasoline crack spread (premium of gasoline over crude) of $16/b was the main driver in the US market in May, encouraging refiners to buy whatever sweet crude they could find, irrespective of transatlantic arbitrage. The closure of Nigeria's Escravos terminal, due to pipeline problems, and the closure of the same country's Qua Iboe gave West African crudes a big boost at the beginning of the month. Prices remained firm during the whole month, despite a build-up in stocks, which reached 20 million barrels above last year's level, as refiners maintained their high rates of utilization. Crude imports were also high, reaching 10m b/d, despite the closed transatlantic arbitrage, which was caused by the higher Brent prices. Demand for sour crudes was also strong, especially in the US Gulf Coast.

In Europe, gasoline-rich North Sea grades were in heavy demand. Dated Brent witnessed a big rise as a European major and a European trader sold May Brent to the US Gulf Coast, despite the closed arbitrage. The high prices persisted during the month, when a trader amassed cargoes loading in early June, and this put pressure on refiners' margins, leading some refiners to cut runs in Europe.

Far Eastern markets

The high premium of light sweet Tapis over Dubai in May caused refiners to prefer Middle Eastern crudes, since their margins were better, and this resulted in

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

	April	May	Year-to-date average 2000	Year-to-date average 2001
Reference Basket	**24.38**	**26.25**	**25.72**	**24.80**
Arabian Light	24.24	25.77	25.19	24.17
Dubai	24.06	25.40	24.26	24.08
Bonny Light	25.43	28.51	26.57	26.29
Saharan Blend	25.65	28.47	26.80	26.63
Minas	27.64	28.21	26.25	26.22
Tia Juana Light	20.79	22.77	24.78	22.20
Isthmus	22.86	24.62	26.18	23.98
Other crudes				
Brent	25.37	28.35	26.28	26.28
WTI	27.37	28.60	28.29	28.48
Differentials				
WTI/Brent	2.00	0.25	2.01	2.20
Brent/Dubai	1.31	2.95	2.02	2.20

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

an overhang of light sweet grades, especially as demand for naphtha was weak. Minas was weak continuously, due to the absence of demand from China and Japan; however, towards the end of the month, most Minas cargoes were committed, thereby supporting its price. Middle East grades started the month on a bullish note, with the high Brent/Dubai differential reaching almost $3.9/b; however, the absence of buying from China and the release of 2m b of July Oman from South Korean reserves weakened Middle Eastern grades. The premiums for light sour grades then surged, as Japan tended to buy crudes to tighten strategic reserves, and Dubai shot up at the end of the month, when Egypt's new refinery, Midor, bought up to four cargoes from Dubai.

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

		March 01	April 01	May 01	Change May/Apr
US Gulf					
Regular gasoline	*(unleaded)*	32.38	42.03	38.79	–3.24
Gasoil	*(0.2%S)*	29.03	30.93	31.65	+0.72
Fuel oil	*(3.0%S)*	18.63	15.19	16.80	+1.61
Rotterdam					
Premium gasoline	*(unleaded)*	31.52	37.57	39.09	+1.52
Gasoil	*(0.2%S)*	29.38	30.37	31.18	+0.82
Fuel oil	*(3.5%S)*	17.58	17.05	18.23	+1.18
Singapore					
Premium gasoline	*(unleaded)*	29.88	32.76	32.64	–0.12
Gasoil	*(0.5%S)*	26.83	29.80	30.79	+0.99
Fuel oil	*(380 cst)*	20.04	20.47	22.07	+1.60

Product markets and refinery operations

The US gasoline market tumbled in May, driven more than anything else by strong refinery and import flows, despite the start of the summer driving season. In Europe, robust gains in Brent markets, together with several refinery outages, including gasoline-producing units, pulled up the gasoline price. Refiners' margins deteriorated in all the centres, and yet, in the USA, margins remained healthy enough to boost refinery throughputs, in contrast with the situation facing European refiners, who opted to cut runs. Current refinery maintenance in North Asia reduced available supply and mitigated falling refiners' margins (see **Table B**).

Table C: Refinery operations in selected OECD countries

	Refinery throughput *(m b/d)*			Refinery utilization *(%)*[1]		
	March 01	April 01	May 01	March 01	April 01	May 01
USA	14.84	15.48	15.84	89.7	93.6	95.8
France	1.57R	1.65	1.60	82.6R	87.3	84.5
Germany	2.06R	2.15R	2.07	91.1R	95.4R	91.7
Italy	1.76R	1.92	1.70	74.5R	81.5	71.8
UK	1.54	1.42	1.29	86.8R	80.4	73.1
Eur-16[2]	11.45R	11.92	11.40	83.9R	87.3	83.5
Japan	4.46	4.25	*na*	89.8	85.7	*na*

1. Refinery capacities used are in barrels per calendar day.
2. European Union plus Norway.
Sources: OPEC Statistics, Argus, Euroilstock Inventory Report/IEA.
na Not available.
R *Revised since last issue.*

US Gulf market

Following a record high in April, the regular gasoline price plummeted by $3.24/b in May. It was undermined by a better-supplied market, that resulted from geared-up refinery throughputs with favourable operational modes directed towards a higher gasoline yield, and this coincided with robust import flows, particularly from Latin America, as strong European gasoline prices complicated trading with the US Atlantic Coast market. Both factors consequently outstripped increased demand and, hence, caused an uptrend in total US gasoline stocks. Nonetheless, after gasoline markets appeared to have sufficient regular gasoline supplies, the focus switched to reformulated gasoline (RFG) inventories, which declined at one time interval, leading to price spikes; but RFG stocks finished the month at almost the same level as the year before. This combined with the fact that the Unocal Corporation granted its patent for producing RFG to two independent refineries (Citgo and Tosco), with the expectation that other refining companies would follow suit, and this took the heat out of this particular gasoline market. Lower imports, at a time of dwindling refinery output, as distillate products were cracked into gasoline, together with prevailing agricultural demand in the mid-continent, constituted the main reason for an increase of 72¢/b in the gasoil price. The fuel oil price soared by $1.61/b, in tandem with crude gains and some exports to the Far East (see **Table B**).

Refiners' margins retreated from their record peaks of the previous month, mainly on plunging gasoline prices and increased crude prices. Nonetheless, the WTI margin was healthy and equalled $3.57/b.

Despite sliding refiners' margins, refinery throughput increased by 360,000 b/d to reach 15.84m b/d, and this was aimed at raising gasoline availability (see **Table C**). As a result, the refinery utilization rate was 95.8 per cent, which was 1.6 per cent higher than the year-ago level.

Rotterdam market

Some European refinery glitches during the first half of May, coupled with

sustained strength in the Brent market, lent support to the gasoline price, which surged by a further $1.52/b. However, the month's average gasoline price masked some pronounced downtrends that took place in the final two weeks, driven largely by tumbling US gasoline markets, that translated into less activity with transatlantic arbitrage. The gasoil price experienced another increase, of 82¢/b, on strong demand in north-west Europe to replenish winter stock-draws, and this was coupled with tighter prompt supply in the Mediterranean, on partial refinery shutdowns in Italy and Algeria. The fuel oil price rebounded by $1.18/b, in line with hefty crude prices and continued intensive cargo movements to Asian markets (see **Table B**).

Soaring Brent markets eclipsed moderate gains in product prices and, therefore, weakened refiners' margins. The Brent margin, for example, barely stood in positive territory at just 18¢/b from $2.30/b in the preceding month.

Refinery throughput in the Eur-16 countries hovered at 11.40m b/d, down by 520,000 b, being affected by squeezed refiners' margins. The refinery utilization rate, therefore, dropped to 83.5 per cent (see **Table C**).

Singapore market

In Singapore, during May, the gasoline price rose in the first week, but then fell steadily during the course of the month to close 12¢/b lower; this was in line with the firm closure of transpacific arbitrage to the US West Coast, on the back of rising regional stocks that led to the tumbling gasoline market. This left Chinese gasoline cargoes without secured buyers, resulting in abundant supply at a time of fading regional demand. Both the middle and the end of the barrel rose, in tandem with stronger crude prices and other fundamentals. The gasoil price surged further by 99¢/b, on healthy demand from Indonesia, in addition to strong buying from Vietnam, in conjunction with major seasonal refinery maintenance in Japan and South Korea, which resulted in tight supply. Meanwhile, this paved the way for Middle East distillate cargoes to move east on the back of price differentials. A decline in heavy crude oil supply, as a consequence of reduced OPEC output, translated into a lower yield of fuel oil and, therefore, squeezed supply. At the same time, growing bunker demand made the Singapore market attractive for all fuel oil cargoes from around the world; consequently its price rose by $1.60/b (see **Table B**).

Rising Dubai prices, together with the weaker gasoline market, constituted the main reasons for falling refiners' margins, with Dubai margins hovering at 50¢/b in May.

The beginning of seasonal refinery maintenance in Japan, coupled with slack demand, cut refinery throughput by 210,000 b/d to 4.25m b/d in April. The equivalent utilization rate stood at 85.7 per cent, which was about the same as in the previous year (see **Table C**).

The oil futures market

NYMEX WTI ended May at the same level that it had started the month, at around $28.4/b. In the first few days, the contract was highly volatile, responding to the build-up in US crude oil stocks and rumours of refinery outages. The same volatility continued throughout the first week, as rumours of refinery glitches in the USA and news of supply disruptions in Nigeria drove prices higher, while a lower-than-anticipated draw on crude stocks and a bearish outlook for demand in the USA put a cap on prices. The bearish outlook stemmed from the prediction of a further cut in interest rates by the Federal Reserve Board.

During the second week, prices were less volatile, moving in the range of $28.55–28.98/b; crude fundamentals were bearish, especially after the International Energy Agency had revised its demand estimates for 2001 and as the American Petroleum Institute's weekly statistics showed a build in crude oil stocks. The only factor that continued to support crude was the unwinding of gasoline cracks, where traders sold gasoline and bought crude after these spreads exceeded $16/b and moved slowly down during the week to around $13/b. Meanwhile, the Commodity Futures Trading Commission's report showed that non-commercial positions were very low and volatility was also down.

A big rise in prices at the beginning of the third week came in response to the new US National Energy Policy announced by President Bush, since it did not address any short-term solutions to the gasoline problem. Adding to that was a persistent contango in the market, which led to extra demand for prompt barrels. However, a build in US stocks prevented the rally from continuing, especially at these high levels. By the end of the week, the high spread between reformulated gasoline and conventional gasoline indicated that there were sufficient gasoline supplies, and this dragged down their value, together with that of crude.

During the last, short trading week, when the occurrence of the Memorial Day holiday indicated the start of the driving season, NYMEX WTI continued its downtrend amid volatility; it was affected mainly by the gasoline market, where a build in unleaded and reformulated gasoline stocks caused a sell-off.

The tanker market

OPEC area spot-chartering rose by 4.04m b/d to a monthly average of 13.95m b/d in May. However, this volume was 1.23m b/d lower than the level observed last year. As a result of this rise, global spot-chartering edged 3.65m b/d higher to a monthly average of 22.90m b/d, which was 1.98m b/d below the year-ago figure. Therefore, the OPEC area's share of global spot-chartering improved by 9.42 percentage points to 60.92 per cent, which was almost the same share as maintained last year. Eastbound long-haul spot fixtures from the Middle East rose by 2.34m b/d to 5.20m b/d, while, westbound, they moved up by only 840,000 b/d to 2.23m b/d. Thus, the eastbound and westbound long-haul shares of OPEC's total fixtures rose by 8.46 and 2.00 percentage points to 37.29 per cent and 15.96 per cent, respectively; together, they accounted for 53.26 per cent of total chartering in the OPEC area, and this was 10.46 percentage points higher than the volume observed in April. According to preliminary estimates, sailings from the OPEC area declined by 2.15m b/d to a monthly average of 21.45m b/d, which was 9.12 percentage points below the previous month's level. Sailings from the Middle East declined by 1.39m b/d to register a monthly average of 15.10m b/d, which was about 70 per cent of total

OPEC sailings. Arrivals in the US Gulf Coast, the US East Coast and the Caribbean declined in May by 1.78m b/d to a monthly average of 7.52m b/d. Also, arrivals in NW Europe and Euromed decreased by 850,000 b/d and 1.30m b/d to 5.36m b/d and 4.09m b/d, respectively. The estimated oil-at-sea on May 27 was 472m b, which was only 3m b above the level registered at the end of April.

The crude oil tanker market experienced a weaker trend in May, and spot freight rates for all tanker sizes declined, under pressure from tonnage over-supply. VLCC freight rates on the Middle East eastbound and westbound long-haul routes dropped further, by 21 points to Worldscale 62 and 24 points to W58, respectively, the lowest levels so far this year. However, the rates have not bottomed out, for, although they were 42 per cent and 35 per cent lower than the levels observed last year, each was still about 47 per cent above the 1999 levels. The Suezmax market in West Africa experienced slow activity, with freight rates for voyages to the US Gulf Coast edging 14 points lower to W113, as the market appeared to correct what was perceived as overvalued rates during the first half of the month, compared with VLCCs operating on the same route. In NW Europe, Suezmax was much better, with the freight rates for cargoes to the US East Coast declining by only one point to W121, helped by the opened arbitrage window to the US market. Aframax freight rates continued to decline on all the major short-haul trading routes, affected by the low level of employment. Rates dropped by 24 points to W180 within the Mediterranean route in a quiet market, while they softened by 16 points to W 154 on the route from the Mediterranean to NW Europe. In the Caribbean market, freight rates for Aframax cargoes to the US East Coast plunged by 33 points to W196 on low volume fixtures. Freight rates for 70–100,00 dwt tankers, on the route from Indonesia to the US West Coast, continued to decline significantly, dropping by another 36 points to W136.

Steady activity in the product tanker market continued to support freight rates in most trading areas. Monthly average long-haul spot freight rates from the Middle East to the Far East reversed the previous month's trend and rose by 10 points to W238, prompted by rising demand in the Asian market. Rates also improved on the short-haul routes from Singapore to the Far East and within the Mediterranean, increasing by 21 points to W306 and 47 points to W333, respectively. However, due to tighter product specifications in the USA and Europe, freight rates improved on the trading route between them, while they declined on the routes to these regions. Rates surged by 40 points to W355 on the route from NW Europe to the US East Coast, while they declined on the Mediterranean/NW Europe and Caribbean/US Gulf Coast routes by 66 points to W231 and by 20 points to W267, respectively.

World oil demand

Figures for 2000

World

According to the latest available figures, world oil consumption during 2000 grew by 640,000 b/d, or 0.8 per cent, to 75.76m b/d. This latest estimate translates into a downward revision of 50,000 b/d, compared with the figure presented in the previous report. Even though it is not our purpose to present all the changes introduced to the historical data on this occasion, it is important to mention that partial and total demand figures have been substantially adjusted for the year before 2000. Specifically, world demand for 1999 is now estimated to have risen by 1.41m b/d to average 75.13m b/d, compared with the previous figure of 1.27m b/d year-on-year growth and an average of 75.02m b/d. For 2000, the latest available data shows that demand in developing countries grew by only 230,000 b/d to average 18.68m b/d, instead of the 280,000 b/d growth presented in the last report. For the remainder of the regions, there have been no major changes to demand levels. On a quarterly basis, world demand experienced a decline of 460,000 b/d during 1Q to average 75.58m b/d, due, in part, to increased consumption in 4Q99, as a result of Y2K. For the remainder of the year, demand experienced positive growth rates of 1.2 per cent in 2Q, 2.2 per cent in 3Q and 0.5 per cent in 4Q.

Projections for 2001

For the present year, the projection for world oil demand has once again been revised down. World consumption of petroleum is now estimated to rise by 1.06m b/d, or 1.4 per cent, to average 76.83m b/d. On a regional basis, demand is projected to rise by 430,000 b/d in the OECD and by 480,000 b/d in developing countries, with the remaining 150,000 b/d originating in the 'other regions' (former CPEs). On a quarterly basis, according to the latest figures, world demand grew by 1.5 per cent, or 1.12m b/d, to average 76.70m b/d in 1Q. For the rest of the year, demand is projected to register further increases of 1.1 per cent in 2Q, 1.0 per cent in 3Q and 2.0 per cent in 4Q.

OECD

Having experienced a disappointing 0.3 per cent growth rate last year, OECD product deliveries are projected to post a higher rate in 2001, rising by 0.9 per cent, or 430,000 b/d, to average 48.27m b/d. Most of the growth is expected to take place in North America, with the lion's share originating in the USA. Inland delivery of petroleum products in North America in 1Q, according to the latest figures, grew by a solid 2.7 per cent, or 650,000 b/d, to average 24.30m b/d. The USA accounted for almost 85 per cent of the increase in demand in the region. US product deliveries rose by 2.8 per cent, or 550,000 b/d, to average 20.14m b/d. The remaining 100,000 b/d is the result of a rise in Canadian consumption (140,000 b/d), which capped a contraction in Mexican demand of 40,000 b/d. Demand in Western Europe remained on a declining path, posting a fall of 0.5 per cent, or 80,000 b/d, during 1Q. In contrast, the OECD Pacific countries displayed 0.9 per cent growth in the same period. According to the latest figures, demand for petroleum products grew by 1.5 per cent, or 90,000 b/d, in Japan. It is important to point out that consumption contracted by 0.7 per cent in South Korea, the second most important regional consumer, during 1Q.

For the remainder of the year, demand is projected to rise in North America, with most of the growth originating in the USA, and, to a lesser extent, Canada. Deliveries of petroleum products will continue to decline in Western Europe or,

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

	1Q	2Q	3Q	4Q	Year
1997	2.81	2.92	2.88	2.88	**2.87**
1998	2.77	3.02	3.18	3.20	**3.04**
1999	3.12	3.62	3.52	3.49	**3.44**
2000[1]	3.97	4.13	4.47	4.01	**4.14**
2001[2]	4.26	4.76	4.91	4.30	**4.56**

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

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

	1999	4Q00	2000	1Q01	April 01*	May 01*	May 01/ Apr 01
Algeria	766	841	808	825	802	810	8
Indonesia	1,310	1,286	1,280	1,253	1,223	1,215	–8
IR Iran	3,509	3,803	3,671	3,798	3,678	3,670	–8
Iraq	2,507	2,363	2,551	2,211	2,919	2,839	–81
Kuwait	1,907	2,207	2,101	2,142	2,022	2,010	–12
SP Libyan AJ	1,337	1,438	1,405	1,407	1,363	1,360	–3
Nigeria	1,983	2,129	2,031	2,131	2,056	2,000	–56
Qatar	641	726	698	716	689	670	–19
Saudi Arabia	7,655	8,703	8,248	8,285	7,950	7,855	–96
UAE	2,077	2,336	2,252	2,312	2,219	2,215	–4
Venezuela	2,808	3,001	2,897	2,979	2,866	2,825	–41
Total OPEC	**26,499**	**28,833**	**27,943**	**28,059**	**27,788**	**27,468**	**–321**

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

at best, remain flat, compared with last year. Within the region, the contraction in consumption will take place in the 'big four' economies; the latest figures point to this by showing a decline of 1.3 per cent in consumption during 1Q. With the exception of Germany, where demand rose by 2.7 per cent, France, Italy and the UK had negative growth rates. Our present estimate calls for zero growth in demand for the OECD Pacific countries. This projection is based on the present situation in the Japanese economy, which continues to show signs of weakening. GDP growth rate estimates for Japan have been revised down significantly and now stand at 0.1 per cent; likewise, economic growth rates in South Korea have been revised down systematically.

Developing countries

Oil demand growth in developing countries has been revised down. It is now expected to rise by 480,000 b/d, or 2.6 per cent, to average 19.17m b/d for the year. The estimated growth rate in consumption has been lowered for the Asian group of countries from the previous 3.2 per cent to 3.0 per cent. The fundamental factor behind the lower demand outlook is that Asian regional GDP is projected to grow at a lower-than-anticipated rate. These economies are highly export-dependent and are extremely reliant upon the health of their trading partners. Projections for the remaining regions of this group (Latin America, Middle East and Africa) have been adjusted to capture changes in regional economic indicators.

Other regions

Apparent demand for the former CPEs is projected to grow by 150,000 b/d, or 1.6 per cent, to average 9.40m b/d for 2001. Revisions to the trade and production data for 1Q show that apparent FSU demand grew by eight per cent, or 300,000 b/d, instead of the more optimistic 11 per cent presented in the previous report. For the remaining three quarters, we anticipate a decline in apparent consumption, due to a rise in the level of exports that will outpace any gain in production. During 1Q, net exports were 320,000 b/d higher than in 1Q00. The most up-to-date figures show that this trend continued in April and May, when total net exports surged to 4.63m b/d and 4.67m b/d, respectively. High international oil prices, the need for higher revenue, in order to service international loans, and the switch to natural gas continue to undermine internal consumption. Indigenous production and trade data for the first three months of the year showed a considerable drop in Chinese apparent consumption. According to the latest figures, apparent demand declined by 6.6 per cent during 1Q. Even though the decline seems huge, one should not forget that the comparison is made with 1Q00, when demand surged by 17 per cent to reach a 1Q record level. Latest available data shows a considerable recovery in total imports for April. Therefore, we are still optimistic about the demand outlook for the rest of the year; nonetheless, due to the size and the importance of China in the overall demand picture, we will continue to monitor closely further developments.

World oil supply

Non-OPEC

Figures for 2000

The 2000 non-OPEC supply figure has been revised up by around 20,000 b/d to 45.82m b/d, while the quarterly distribution figures have had similar directional moves of 10,000 b/d, 20,000 b/d, 40,000 b/d and 10,000 b/d to 45.83m b/d, 45.50m b/d, 45.71m b/d and 46.22m b/d, respectively, compared with the last report's figures. The yearly average increase is estimated at around 1.23m b/d, compared with the 1999 figure.

Expectations for 2001

The 2001 non-OPEC supply forecast figure has been revised down by around 80,000 b/d to 46.07m b/d, which is 250,000 b/d higher than the revised 2000 estimate. The 2001 quarterly figures have been revised up by around 20,000 b/d to 46.23m b/d, down by around 310,000 b/d to 45.66m b/d, down by around 40,000 b/d to 45.99m b/d and up by around 20,000 b/d to 46.39m b/d, respectively, compared with the previous report.

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

	December 29, 00	March 30, 01	May 4, 01	June 1, 01	Change May/Apr	June 1, 00
Crude oil (excl SPR)	**288.7**	**303.2**	**318.8**	**324.4**	**5.6**	**299.5**
Gasoline	193.8	193.0	200.0	210.3	10.3	208.9
Distillate fuel	116.1	104.0	103.1	108.1	5.0	105.4
Residual fuel oil	34.7	39.8	41.4	41.5	0.1	37.1
Jet fuel	43.9	40.1	40.8	41.6	0.8	42.0
Unfinished oils	87.1	101.3	97.3	94.8	–2.5	92.0
Other oils	165.8	142.1	160.7	179.3	18.6	171.4
Total	**930.0**	**923.5**	**962.0**	**1,000.0**	**38.0**	**956.2**
SPR	541.2	542.3	542.8	543.3	0.5	569.4

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

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

	December 00	March 01	April 01	May 01	Change May/Apr	May 00
Crude oil	**420.6**	**451.7**	**447.9**	**443.3**	**–4.7**	**432.1**
Mogas	152.9	158.3	157.7	153.8	–3.9	144.0
Naphtha	24.6	22.0	24.2	24.6	0.4	22.1
Middle distillates	342.8	330.8	324.1	328.5	4.4	318.3
Fuel oils	125.8	123.6	125.1	126.0	0.9	122.2
Total products	**646.2**	**634.7**	**631.0**	**632.9**	**1.9**	**606.5**
Overall total	**1,066.7**	**1,086.3**	**1,079.0**	**1,076.1**	**–2.8**	**1,038.6**

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

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

	September 00	December 00	March 01	April 01	Change Apr/Mar	April 00
Crude oil	**101.2**	**105.1**	**118.7**	**118.5**	**–0.2**	**108.4**
Gasoline	13.4	12.7	14.6	15.1	0.5	16.2
Middle distillates	43.5	40.3	31.4	34.0	2.6	30.6
Residual fuel oil	18.9	20.4	20.2	21.1	0.9	19.6
Total products	**75.8**	**73.4**	**66.3**	**70.2**	**3.9**	**66.4**
Overall total[2]	**176.9**	**178.5**	**185.0**	**188.7**	**3.7**	**174.8**

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

The FSU net oil export estimate for 2000 has been revised down by 10,000 b/d to 4.14m b/d, while the 2001 forecast has been revised up by 40,000 b/d to 4.56m b/d, compared with the last report (see **Table D**).

OPEC natural gas liquids

OPEC NGL data for 2000 and 2001 remains unchanged, at 2.91m b/d and 2.95m b/d, respectively.

OPEC NGL production — 1997–2001

	m b/d
1997	**2.81**
1998	**2.78**
1999	**2.84**
1Q00	2.91
2Q00	2.91
3Q00	2.91
4Q00	2.91
2000	**2.91**
Change 2000/1999	0.07
2001	**2.95**
Change 2001/2000	0.04

OPEC crude oil production

Available secondary sources indicate that, in May, OPEC output was 27.47m b/d, which was 320,000 b/d lower than the revised April level of 27.79m b/d. **Table E** shows OPEC production, as reported by selected secondary sources.

Stock movements

USA

US commercial oil stocks continued to register a further build in May, as they rose by 38.0m b, or 1.36m b/d, to stand at 1,000m b during the period May 4–June 1, a level not seen since September 1999. Most of the build took place in 'other oils', which surged by 18.6m b to 179.3m b, followed by gasoline, as it increased by 10.3m b to 210.3m b. Sluggish gasoline demand and increasing gasoline production were behind this build. Other major product inventories also showed increases, notably distillates, which rose by 5.0m b to 108.1m b, due to slower demand and despite a decline in distillate output. Rising imports pushed up crude oil stocks by 5.6m b to 324.4m b, despite a surge in refinery runs. Total stocks were 43.8m b, or about five per cent, above last year's level.

During the same period, the US Strategic Petroleum Reserve (SPR) moved up slightly, by 500,000 b, to 543.3m b (see **Table F**).

Western Europe

In May, commercial onland oil stocks in Eur-16 (EU plus Norway) continued to show a contra-seasonal draw, declining by 2.8m b, or 90,000 b/d, to 1,076.1m b. This draw resulted mainly from a decrease of 4.7m b to 443.3m b in crude oil stocks, due to lower imports and despite shrinking refinery runs, where the utilization rate fell by 3.94 percentage points to 87.02 per cent in May. A build of 1.9m b to 632.9m b in total major product inventories abated this draw. Middle distillates accounted for most of the product build, rising by 4.4m b to 328.5m b on the back of sluggish demand, as well as closed Atlantic arbitrage for Russian gasoil cargoes. Gasoline diminished the product build, declining by 3.9m b to 153.8m b, due to a cutback in gasoline output, as a result of stagnant refiners' margins, after the increase in prompt Brent prices. The overall level was 37.5m b, or about four per cent, higher than that observed a year ago (see **Table G**).

Japan

Commercial onland oil stocks in Japan registered a slight seasonal build of 3.7m b, or 120,000 b/d, to 188.7m b in April. This build occurred solely in total major product inventories, led by middle distillates, which rose by 2.6m b to 34.0m b, and followed by residual fuel oil, which moved up by 900,000 b to 21.1m b, and, to a lesser degree, gasoline, which increased marginally by 500,000 b to 15.1m b. The rise was diminished by a minor draw of 200,000 b to 118.5m b on crude oil stocks. The total level was 13.9m b, or eight per cent, above the year-earlier figure (see **Table H**).

Balance of supply/demand

In the last month, there have been minor upward revisions in the estimates for non-OPEC supply and world oil demand for 2000, resulting in figures of 48.7m b/d and 75.8m b/d, respectively, and in a difference of 27.0m b/d. The yearly average balance is 900,000 b/d, with quarterly distributions of –400,000 b/d, 2.1m b/d, 1.0m b/d and 900,000 b/d, respectively; this contains minor downward adjustments for 1Q, 3Q and 4Q. The 1999 balance has been revised down by more than 100,000 b/d to –1.2m b/d from last month's report (see **Table I**).

Both the non-OPEC supply and world oil demand forecast figures for 2001 have been revised down by less than 100,000 b/d to 49.0m b/d and 76.8m b/d, respectively, leaving an annual difference of 27.8m b/d, the same rounded figure as in the last report. The respective distribution forecasts for 1Q–3Q have been revised down by more than 200,000 b/d to 27.5m b/d, up by more than 300,000 b/d to 26.4m b/d and up by around 100,000 b/d to 28.1m b/d, while there is a minor downward change for 4Q, compared with the last report's figures. The balance for 1Q01 has been revised up by around 200,000 b/d to 500,000 b/d.

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

	1997	1998	1999	1Q00	2Q00	3Q00	4Q00	2000	1Q01	2Q01	3Q01	4Q01	2001
World demand													
OECD	46.7	46.8	47.7	48.2	46.6	48.0	48.6	47.8	48.8	46.8	48.3	49.2	48.3
North America	22.7	23.1	23.8	23.7	23.8	24.5	24.4	24.1	24.3	24.0	24.7	24.8	24.5
Western Europe	15.0	15.3	15.2	15.2	14.6	15.2	15.4	15.1	15.1	14.6	15.2	15.5	15.1
Pacific	9.0	8.4	8.7	9.4	8.1	8.3	8.8	8.7	9.4	8.1	8.4	8.9	8.7
Developing countries	17.6	18.1	18.5	18.2	18.8	19.1	18.6	18.7	18.6	19.2	19.3	19.5	19.2
FSU	4.4	4.3	4.0	3.7	3.6	3.5	4.2	3.8	4.0	3.5	3.4	4.1	3.8
Other Europe	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
China	4.0	3.8	4.2	4.7	4.4	4.9	4.7	4.7	4.4	4.7	5.2	5.0	4.8
(a) Total world demand	**73.4**	**73.7**	**75.1**	**75.6**	**74.2**	**76.3**	**77.0**	**75.8**	**76.7**	**75.0**	**77.0**	**78.6**	**76.8**
Non-OPEC supply													
OECD	22.1	21.8	21.3	22.2	21.8	21.7	21.8	21.9	21.8	21.3	21.5	21.7	21.6
North America	14.6	14.5	14.1	14.4	14.4	14.3	14.2	14.3	14.2	14.0	14.2	14.2	14.2
Western Europe	6.8	6.6	6.6	7.0	6.6	6.5	6.8	6.7	6.8	6.5	6.5	6.6	6.6
Pacific	0.7	0.7	0.7	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Developing countries	10.3	10.6	10.8	10.9	10.9	11.0	11.2	11.0	11.0	11.0	11.1	11.2	11.1
FSU	7.3	7.3	7.5	7.7	7.8	8.0	8.2	7.9	8.3	8.3	8.3	8.4	8.3
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.3	3.2	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Processing gains	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Total non-OPEC supply	44.7	44.5	44.6	45.8	45.5	45.7	46.2	45.8	46.2	45.7	46.0	46.4	46.1
OPEC NGLs	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
(b) Total non-OPEC supply and OPEC NGLs	**47.5**	**47.3**	**47.4**	**48.7**	**48.4**	**48.6**	**49.1**	**48.7**	**49.2**	**48.6**	**48.9**	**49.3**	**49.0**
OPEC crude oil production[1]	27.2	27.8	26.5	26.5	27.8	28.6	28.8	27.9	28.1				
Total supply	74.7	75.1	73.9	75.2	76.3	77.2	78.0	76.7	77.2				
Balance[2]	1.3	1.3	-1.2	-0.4	2.1	1.0	0.9	0.9	0.5				
Closing stock level (outside FCPEs) *m b*													
OECD onland commercial	2643	2725	2471	2445	2528	2566	2548	2548	2539				
OECD SPR	1207	1249	1228	1234	1232	1237	1210	1210	1210				
OECD total	3850	3974	3700	3679	3760	3803	3758	3758	3749				
Other onland	1030	1063	989	984	1005	1017	1005	1005	1003				
Oil on water	812	859	808	829	852	835	864	864	891				
Total stock	**5692**	**5896**	**5497**	**5492**	**5618**	**5655**	**5627**	**5627**	**5643**				
Days of forward consumption in OECD													
Commercial onland stocks	56	57	52	53	53	53	52	53	54				
SPR	26	26	26	27	26	25	25	25	26				
Total	82	83	77	79	78	78	77	78	80				
Memo items													
FSU net exports	2.9	3.0	3.4	4.0	4.1	4.5	4.0	4.1	4.3	4.8	4.9	4.3	4.6
[(a) — (b)]	25.9	26.4	27.7	26.8	25.7	27.6	27.9	27.0	27.5	26.4	28.1	29.2	27.8

Note: Totals may not add up due to independent rounding.
1. Secondary sources.
2. Stock change and miscellaneous.

***Table I** above, prepared by the Secretariat's Energy Studies Department, shows OPEC's current forecast of world supply and demand for oil and natural gas liquids.*

*The monthly evolution of spot prices for selected OPEC and non-OPEC crudes is presented in **Tables One** and **Two** on page 37, while **Graphs One and Two** (on pages 36 and 38) show the evolution on a weekly basis. **Tables Three to Eight,** and the corresponding graphs on pages 39–44, 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,
February to May 2001

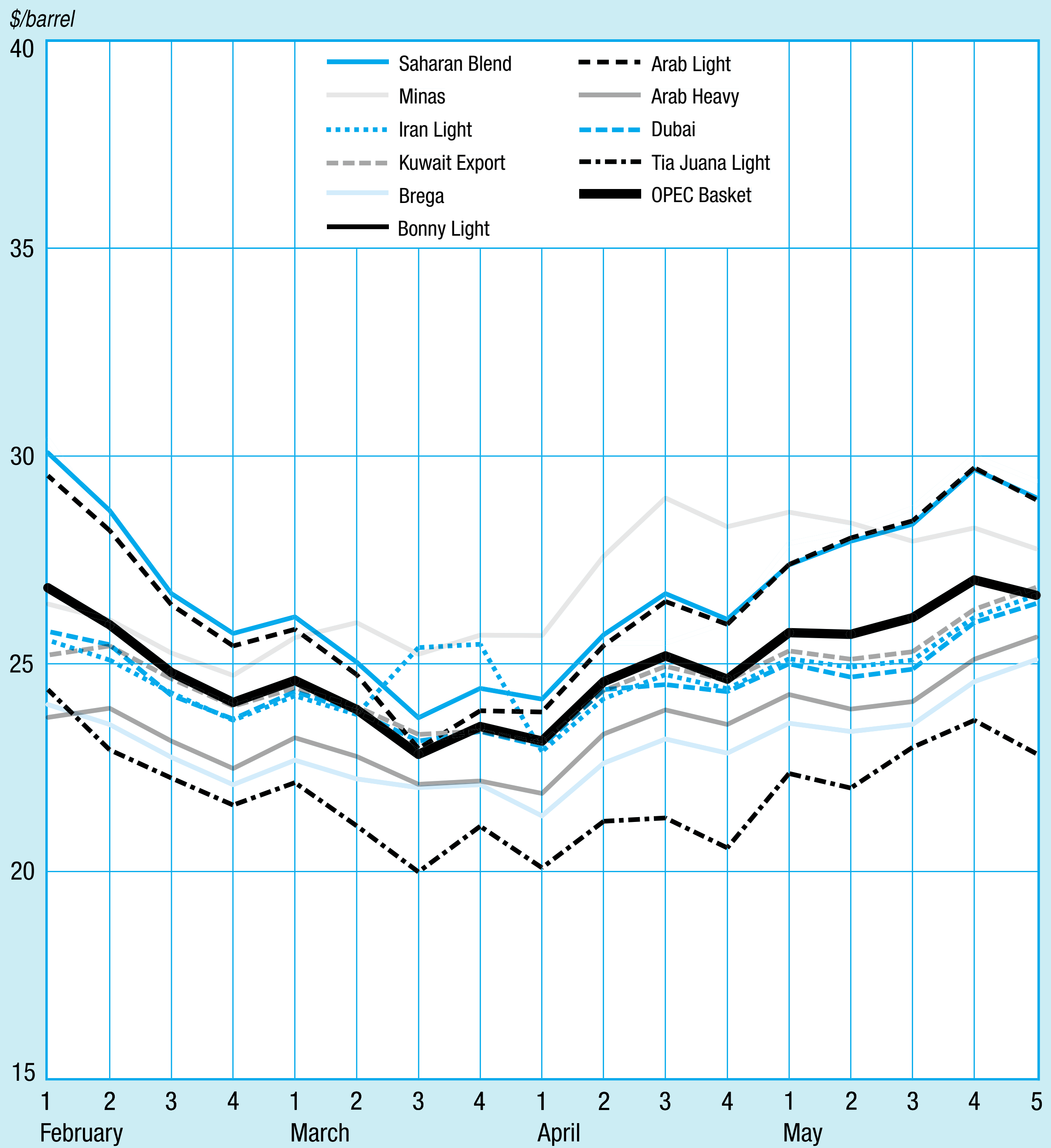


Table 1: OPEC spot crude oil prices, 2000–2001

($/b)

Member Country/ type of crude *(API°)*	2000 June 4Wav	July 4Wav	Aug 5Wav	Sept 4Wav	Oct 5Wav	Nov 4Wav	Dec 4Wav	Jan 5Wav	Feb 4Wav	Mar 4Wav	Apr 4Wav	May 1W	2W	3W	4W	5W	5Wav
Algeria																	
Saharan Blend *(44.1)*	29.94	28.76	29.25	33.18	31.19	33.06	26.11	26.08	27.80	24.82	25.65	27.38	27.95	28.36	29.68	29.00	28.47
Indonesia																	
Minas *(33.9)*	31.30	30.44	30.33	33.36	32.30	31.07	24.87	24.03	25.62	25.64	27.64	28.65	28.39	27.95	28.27	27.77	28.21
IR Iran																	
Light *(33.9)*	27.99	27.09	27.12	30.45	30.42	29.75	22.66	22.63	24.65	23.58	24.05	25.12	24.92	25.09	26.12	26.65	25.58
Iraq																	
Kirkuk *(36.1)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait																	
Export *(31.4)*	27.44	26.39	26.21	29.05	28.87	28.20	21.11	21.08	23.10	22.03	22.50	23.57	23.37	23.54	24.57	25.10	24.03
SP Libyan AJ																	
Brega *(40.4)*	30.14	29.36	29.44	32.64	30.98	32.99	25.40	25.93	27.79	24.69	25.54	27.90	28.20	28.75	30.00	29.40	28.85
Nigeria																	
Bonny Light *(36.7)*	29.86	28.75	29.06	32.65	30.67	32.86	25.47	25.43	27.40	24.35	25.43	27.39	28.03	28.44	29.72	28.95	28.51
Saudi Arabia																	
Light *(34.2)*	29.09	27.19	27.12	30.60	30.17	29.81	22.65	22.31	24.82	23.77	24.24	25.31	25.11	25.29	26.31	26.84	25.77
Heavy *(28.0)*	27.09	25.99	25.52	28.00	28.21	27.94	20.83	20.74	23.32	22.57	23.15	24.26	23.91	24.09	25.11	25.64	24.60
UAE																	
Dubai *(32.5)*	27.24	26.35	26.79	30.05	30.57	30.25	22.27	22.56	24.79	23.67	24.06	25.00	24.68	24.87	25.99	26.45	25.40
Venezuela																	
Tia Juana Light[1] *(32.4)*	27.99	26.32	26.84	29.33	28.34	30.01	23.11	23.18	22.79	21.08	20.79	22.36	22.01	22.99	23.64	22.84	22.77
OPEC Basket[2]	**29.12**	**27.94**	**28.30**	**31.48**	**30.42**	**31.22**	**24.13**	**24.06**	**25.41**	**23.70**	**24.38**	**25.75**	**25.71**	**26.11**	**27.02**	**26.65**	**26.25**

Table 2: Selected non-OPEC spot crude oil prices, 2000–2001

($/b)

Country/ type of crude *(API°)*	2000 June 4Wav	July 4Wav	Aug 5Wav	Sept 4Wav	Oct 5Wav	Nov 4Wav	Dec 4Wav	Jan 5Wav	Feb 4Wav	Mar 4Wav	Apr 4Wav	May 1W	2W	3W	4W	5W	5Wav
Gulf Area																	
Oman Blend *(34.0)*	27.74	26.83	27.24	30.55	29.88	28.97	22.76	22.43	24.29	23.26	23.82	25.03	24.93	25.10	26.04	26.64	25.55
Mediterranean																	
Suez Mix *(Egypt, 33.0)*	26.64	24.24	26.24	28.59	26.18	29.06	21.11	22.09	22.61	19.73	21.58	23.85	23.95	24.55	25.50	24.95	24.56
North Sea																	
Brent *(UK, 38.0)*	29.74	28.96	29.74	32.94	30.86	32.67	25.07	25.60	27.30	24.42	25.37	27.16	27.91	28.26	29.51	28.91	28.35
Ekofisk *(Norway, 43.0)*	29.85	28.44	28.57	32.75	30.77	32.66	25.50	25.51	27.49	24.34	25.38	27.33	27.98	28.33	29.69	28.91	28.45
Latin America																	
Isthmus *(Mexico, 32.8)*	29.45	27.74	28.75	31.19	29.73	31.47	24.40	24.80	24.63	22.60	22.86	24.17	23.80	24.86	25.55	24.70	24.62
North America																	
WTI *(US, 40.0)*	31.93	30.19	31.04	34.05	33.00	34.65	28.39	29.42	29.48	27.27	27.37	28.35	28.08	28.85	29.28	28.41	28.60
Others																	
Urals *(Russia, 36.1)*	27.39	24.75	27.00	30.30	28.04	31.23	24.06	24.40	24.78	21.72	23.60	25.61	25.90	26.28	27.64	26.89	26.46

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, February to May 2001

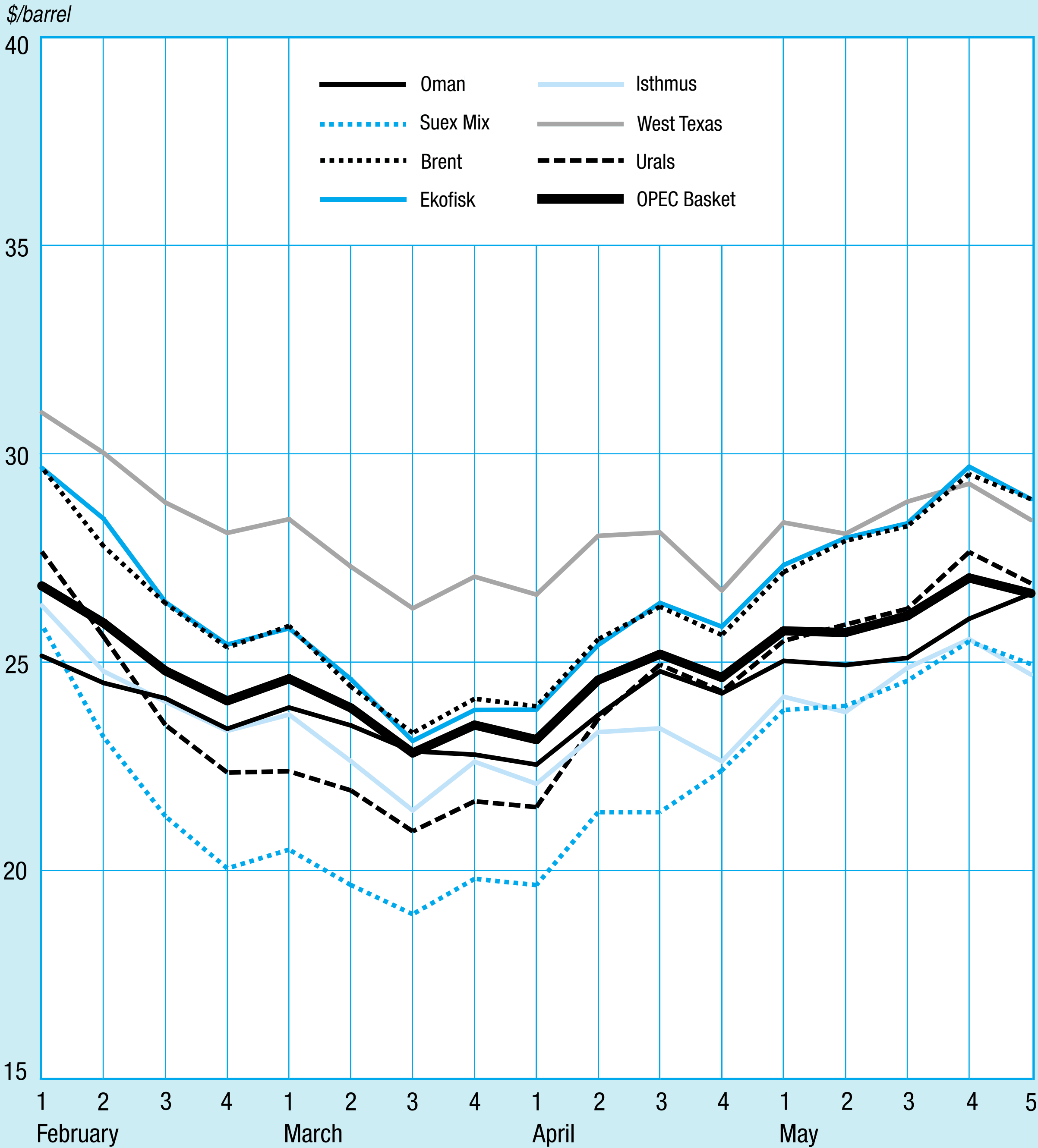


Table 3: North European market — bulk barges, fob Rotterdam *($/b)*

1999	naphtha	regular gas unleaded 87	premium gas unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
May	17.50	18.11	18.93	16.01	18.51	12.40	10.42
June	17.34	18.18	19.14	16.58	19.02	12.56	12.03
July	20.38	21.66	22.69	19.97	22.35	14.13	14.05
August	22.34	25.51	26.39	22.22	24.42	16.97	16.76
September	23.21	25.83	26.75	24.29	26.41	17.77	17.53
October	24.78	25.88	26.61	24.19	26.04	19.16	18.78
November	25.54	27.20	27.72	26.77	29.32	19.40	19.15
December	24.73	28.41	28.93	28.18	33.07	19.69	18.67
2000							
January	27.41	27.81	28.23	28.96	32.24	19.85	18.83
February	29.87	31.63	32.32	29.85	32.72	21.52	19.81
March	31.06	35.71	36.27	30.28	34.01	22.67	22.12
April	24.83	32.90	33.42	28.23	32.81	19.44	18.12
May	28.39	37.01	38.99	29.87	32.07	20.02	18.70
June	30.41	40.57	44.28	31.40	34.40	23.79	21.23
July	29.89	36.51	37.67	33.02	36.07	24.13	19.79
August	29.79	34.82	36.20	36.46	38.69	21.47	19.69
September	33.28	36.87	37.70	42.09	43.84	24.29	23.04
October	33.15	34.72	35.28	40.06	43.64	27.06	23.82
November	32.51	32.72	33.46	40.68	43.61	25.61	22.18
December	29.27	27.77	28.05	34.25	37.50	23.24	18.31
2001							
January	27.36	29.44	29.85	30.15	32.03	20.54	15.48
February	29.23	32.11	32.49	30.88	33.41	20.48	18.21
March	27.19	30.69	31.52	29.38	31.72	20.56	17.58
April	27.86	36.47	37.57	30.37	32.45	20.49	17.05
May	29.71	37.93	39.09	31.18	34.17	20.48	18.21

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

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

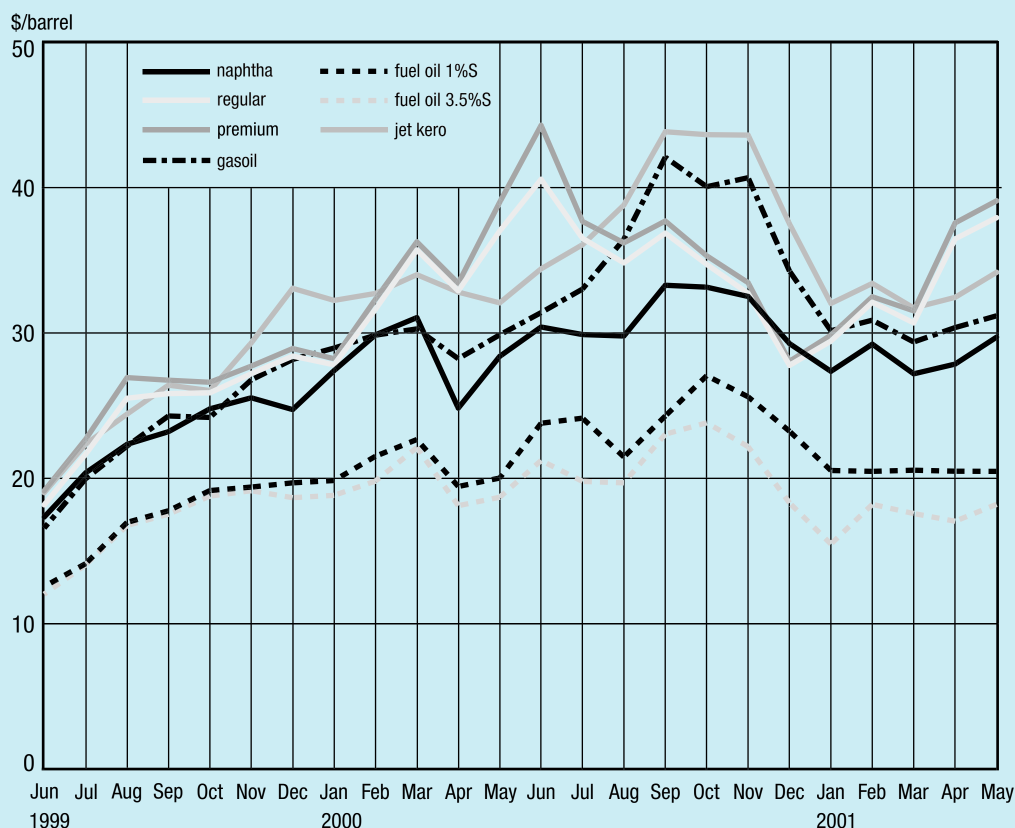


Table 4: South European market — bulk cargoes, fob Italy *($/b)*

1999	naphtha	gasoline premium unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
May	16.38	18.88	14.52	16.63	11.44	9.52
June	16.39	19.19	15.73	17.26	11.85	10.23
July	19.45	23.12	19.06	21.04	14.26	12.65
August	21.45	27.05	21.81	22.73	17.08	15.48
September	22.37	26.90	23.36	25.18	17.34	16.55
October	23.88	26.46	23.56	24.51	18.42	17.65
November	24.68	27.77	26.25	27.67	17.76	17.53
December	23.83	28.82	27.86	32.52	18.23	17.44
2000						
January	26.26	27.55	28.06	31.43	20.48	17.85
February	28.57	32.11	29.97	31.28	22.12	19.05
March	29.65	36.27	29.63	32.31	22.40	21.27
April	23.41	32.77	26.69	31.16	19.28	17.09
May	27.01	38.38	29.15	29.67	20.52	16.51
June	28.93	44.06	30.14	31.99	24.50	19.95
July	28.26	38.25	32.92	34.18	23.20	18.76
August	28.14	36.67	36.09	36.60	20.85	17.85
September	31.58	37.87	41.97	41.89	25.00	21.49
October	32.48	37.20	41.53	41.85	27.16	23.58
November	32.47	33.57	40.44	40.33	24.71	19.47
December	27.74	27.79	34.92	35.99	23.46	17.96
2001						
January	26.35	28.76	27.32	28.73	20.13	14.35
February	26.04	31.89	31.32	29.11	18.80	16.86
March	24.13	30.53	27.55	27.89	18.39	16.28
April	27.07	36.43	29.00	28.28	19.23	14.96
May	29.54	39.45	29.37	29.72	19.39	15.84

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

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

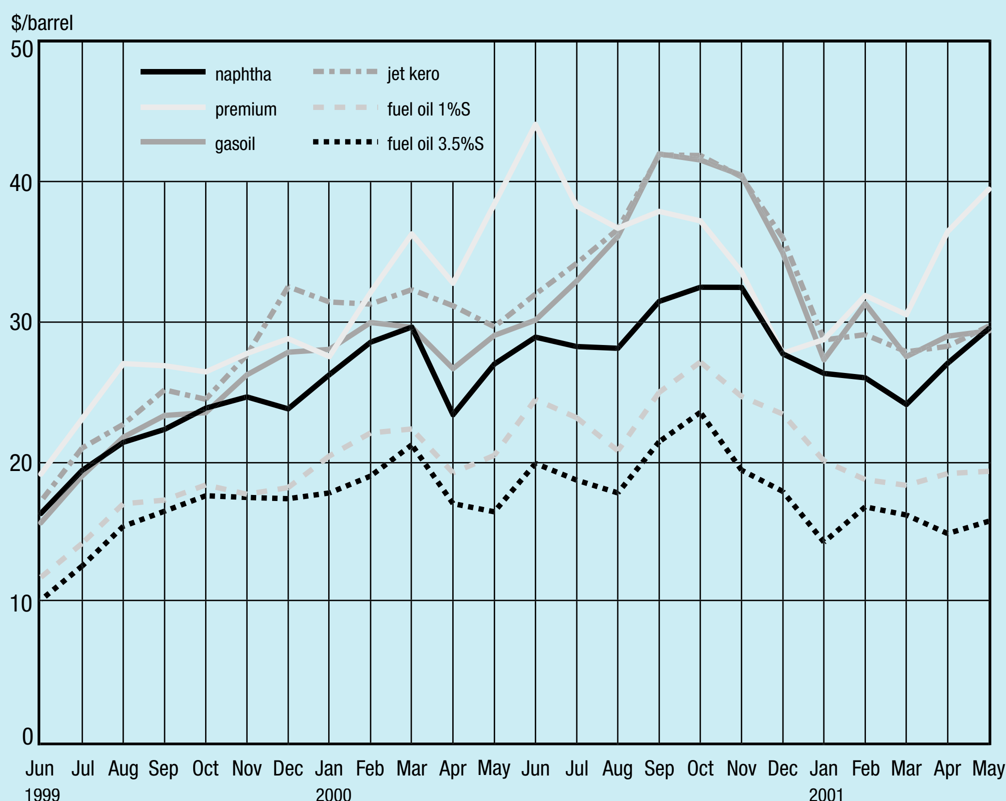


Table 5: US East Coast market — New York *($/b, duties and fees included)*

1999	gasoline regular unleaded 87	gasoil	jet kero	fuel oil 0.3%S LP	fuel oil 1%S	fuel oil 2.2%S
May	20.30	17.27	17.88	16.41	13.82	12.95
June	20.28	17.88	19.37	16.85	14.61	13.22
July	24.30	20.77	22.56	18.60	16.39	14.65
August	26.64	22.79	24.51	21.11	18.62	17.24
September	28.67	25.04	26.66	22.22	19.48	18.85
October	26.13	24.27	25.76	22.00	19.44	18.75
November	28.87	26.90	28.78	22.73	19.52	18.95
December	29.35	27.91	30.92	24.88	19.21	18.70
2000						
January	29.41	34.21	39.42	30.08	21.76	20.42
February	33.91	34.64	35.50	31.74	22.90	21.22
March	37.10	32.01	34.31	27.07	21.06	20.87
April	30.35	30.16	32.20	26.81	20.98	19.85
May	37.17	31.39	33.26	28.66	24.59	21.86
June	40.12	32.62	33.69	30.69	27.11	23.20
July	36.04	32.53	34.42	29.28	24.44	22.20
August	36.33	37.17	38.59	29.48	24.50	21.57
September	39.90	41.25	43.80	37.21	29.42	25.39
October	39.83	41.04	42.86	36.86	29.51	25.96
November	39.56	43.46	45.52	35.43	28.66	25.26
December	30.96	39.52	40.97	34.59	25.63	22.04
2001						
January	34.81	35.51	36.03	33.09	25.40	22.34
February	34.68	32.99	34.90	31.51	23.38	19.73
March	32.96	31.12	32.91	27.61	23.31	20.30
April	39.78	32.83	33.92	27.82	22.80	17.47
May	39.06	32.48	35.60	27.84	23.09	18.58

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

Graph 5: US East Coast market — New York

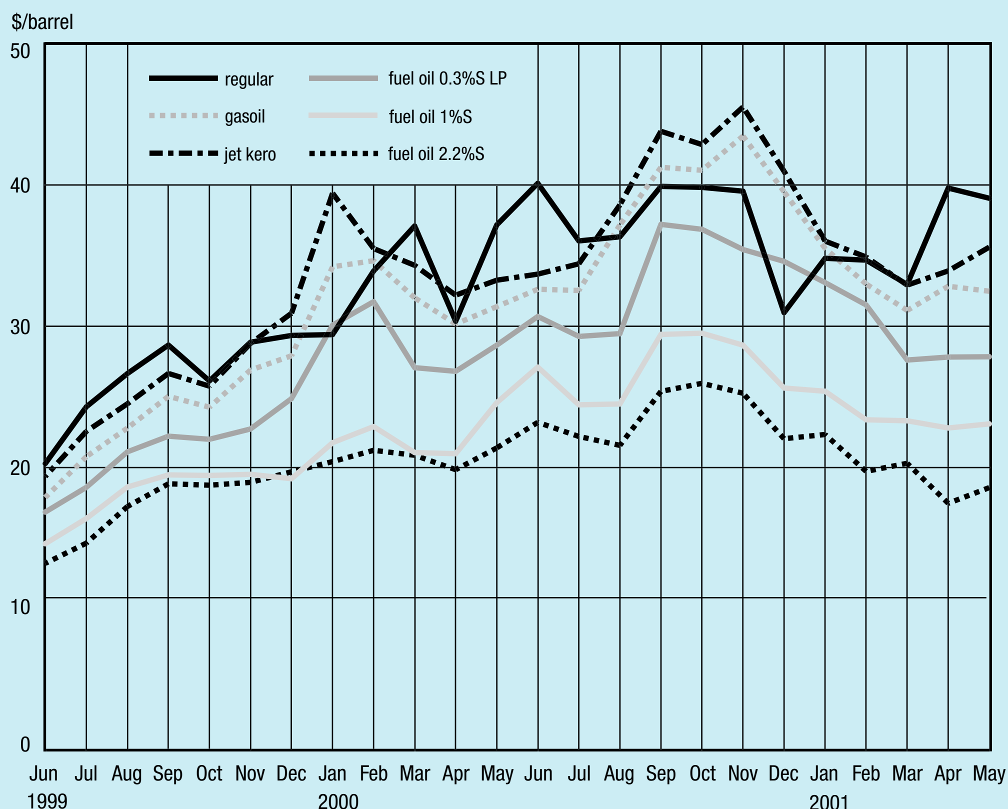


Table 6: Caribbean cargoes — fob *($/b)*

				fuel oil	
1999	**naphtha**	**gasoil**	**jet kero**	**2%S**	**2.8%S**
May	17.53	16.87	17.73	11.97	11.26
June	18.03	17.44	19.18	12.21	11.40
July	21.60	20.45	22.12	13.68	12.91
August	23.50	22.65	24.57	16.45	15.95
September	25.09	24.54	26.18	18.34	18.13
October	23.16	23.83	25.32	18.20	17.91
November	26.23	26.31	28.01	18.45	17.88
December	25.96	27.38	29.93	18.20	17.87
2000					
January	28.17	30.61	32.85	19.82	18.46
February	33.52	31.85	32.95	20.57	19.36
March	32.74	30.82	33.01	20.17	19.70
April	28.25	29.44	30.74	19.15	18.50
May	32.59	31.11	31.84	21.16	19.39
June	36.24	32.27	32.78	22.27	21.40
July	31.06	32.35	33.38	20.84	19.67
August	32.92	36.63	37.80	19.78	18.54
September	35.32	41.01	42.78	23.59	20.46
October	34.77	39.90	41.32	23.95	21.71
November	34.37	40.93	43.64	22.96	17.96
December	29.73	34.63	36.40	19.89	16.90
2001					
January	34.10	35.56	36.17	20.21	16.48
February	29.87	31.85	32.42	18.14	16.31
March	28.63	28.97	30.11	18.26	17.16
April	33.60	30.51	31.37	15.81	15.03
May	29.87	33.07	34.52	17.51	17.11

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

Graph 6: Caribbean cargoes — fob

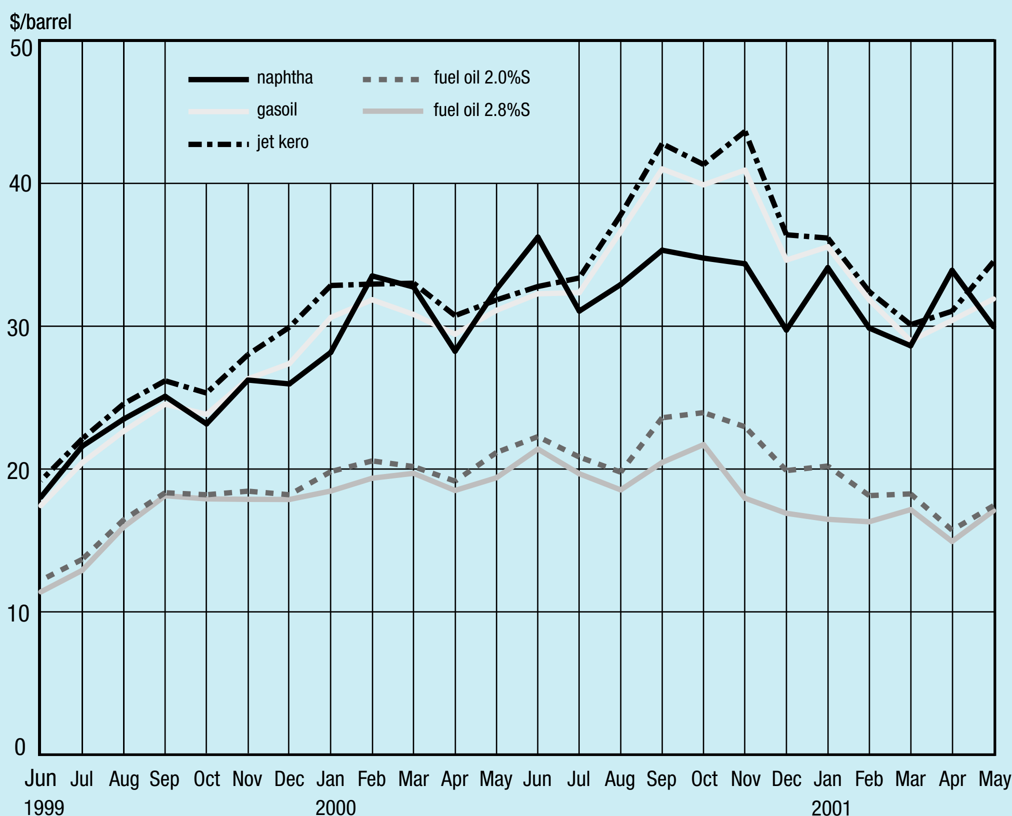


Table 7: Singapore cargoes *($/b)*

1999	naphtha	gasoline premium unleaded 95	gasoil	jet kero	fuel oil 0.3%S	fuel oil 180C	fuel oil 380C
May	17.42	18.58	16.99	17.81	14.02	12.65	12.48
June	17.69	18.49	17.19	18.82	14.17	12.58	12.49
July	20.75	22.63	19.22	22.10	15.50	14.45	14.46
August	23.16	25.99	21.30	24.81	17.23	17.03	17.27
September	24.49	26.86	23.04	26.37	18.91	18.42	18.83
October	24.70	24.78	23.60	25.90	20.46	19.98	20.46
November	25.86	25.88	24.74	27.56	21.23	20.68	21.19
December	25.03	25.46	25.63	29.53	21.47	20.47	20.98
2000							
January	25.02	28.36	28.14	31.30	21.58	19.66	19.95
February	27.09	31.16	29.90	31.14	23.43	20.76	21.15
March	29.08	32.58	32.94	32.37	25.85	24.66	24.69
April	25.01	28.01	26.73	27.99	24.54	22.13	22.39
May	27.27	31.90	28.12	29.09	26.62	23.62	23.60
June	28.13	33.08	30.69	31.23	26.78	25.30	25.31
July	27.80	36.05	31.86	33.25	25.45	22.00	22.09
August	30.19	38.31	37.46	37.98	27.08	21.57	21.64
September	34.53	35.05	40.13	42.21	28.44	24.81	24.87
October	33.50	33.03	38.96	43.30	26.77	26.35	26.55
November	30.43	32.96	34.85	39.88	26.50	24.36	24.49
December	25.52	29.97	29.61	32.92	24.45	19.78	19.74
2001							
January	25.50	30.02	28.41	29.70	22.54	18.37	17.99
February	27.83	31.33	27.57	30.48	22.68	19.91	19.69
March	27.43	29.88	26.83	28.72	22.43	20.08	20.04
April	28.14	32.76	29.80	30.25	22.60	20.48	20.47
May	28.89	32.64	30.79	30.74	23.72	22.02	22.07

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

Graph 7: Singapore cargoes

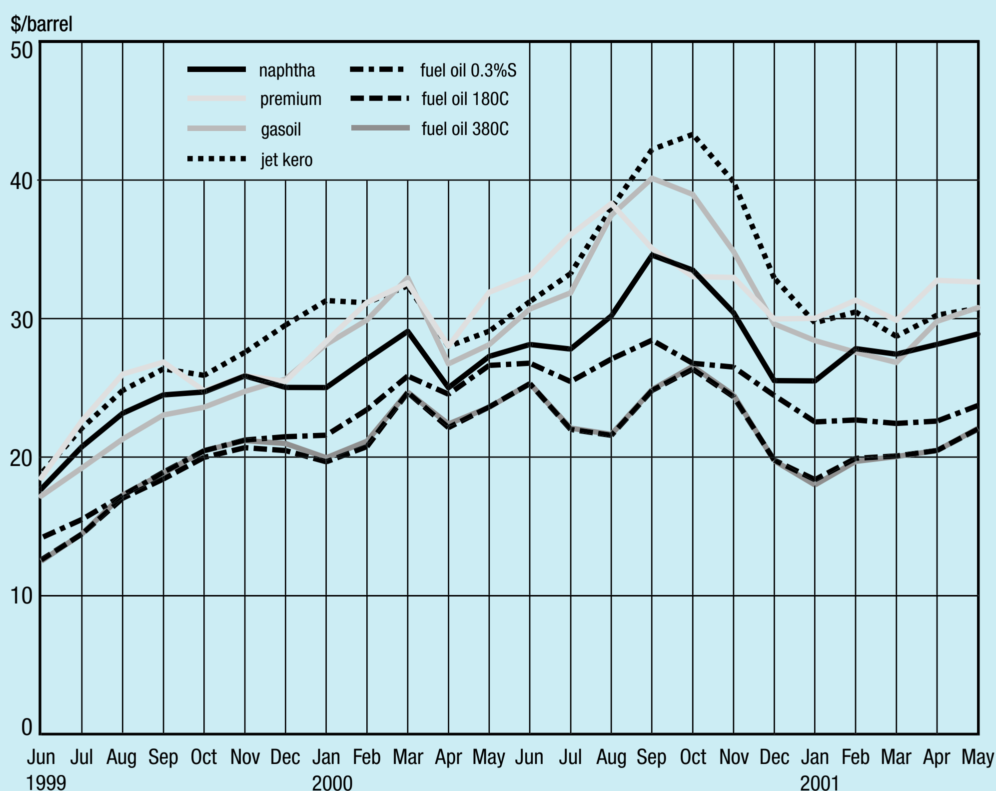
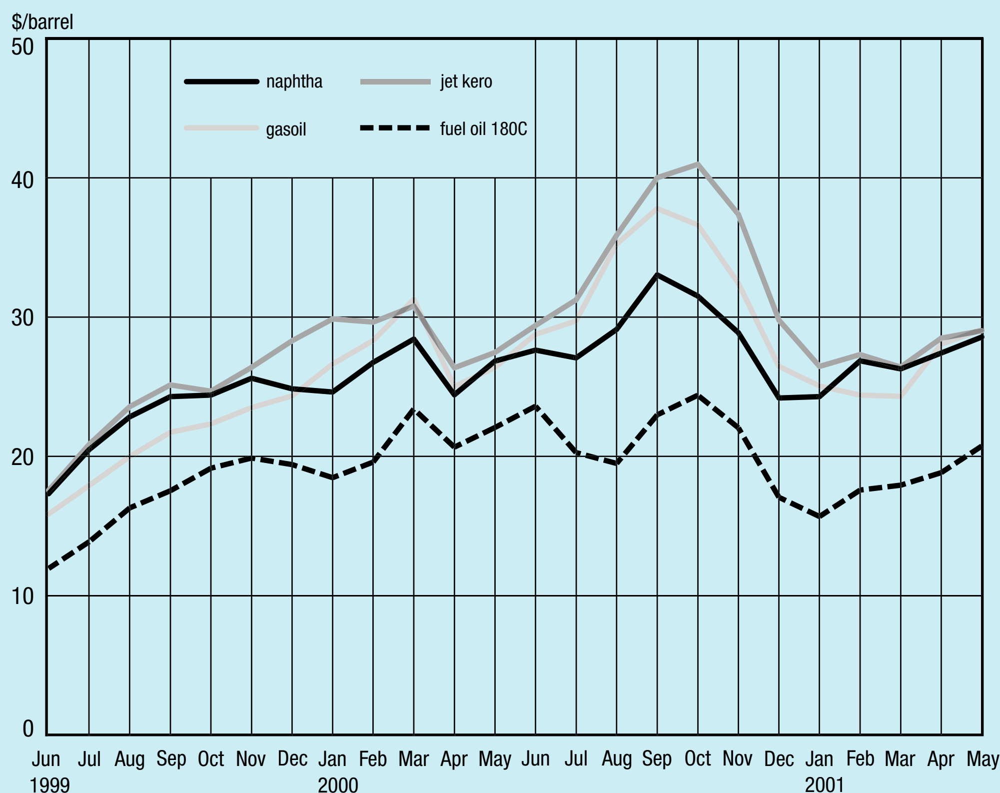


Table 8: Middle East— fob *($/b)*

1999	naphtha	gasoil	jet kero	fuel oil 180C
May	17.15	15.78	16.67	11.96
June	17.32	15.86	17.56	11.95
July	20.49	17.91	20.86	13.87
August	22.84	19.99	23.57	16.30
September	24.29	21.73	25.13	17.53
October	24.40	22.33	24.68	19.15
November	25.61	23.50	26.39	19.88
December	24.85	24.34	28.30	19.41
2000				
January	24.62	26.63	29.87	18.47
February	26.75	28.32	29.64	19.59
March	28.42	31.28	30.79	23.40
April	24.42	25.01	26.36	20.66
May	26.84	26.39	27.46	22.06
June	27.63	28.76	29.40	23.60
July	27.07	29.73	31.24	20.27
August	29.12	35.24	35.88	19.49
September	33.03	37.79	40.01	22.98
October	31.51	36.62	40.97	24.39
November	28.88	32.42	37.38	22.05
December	24.19	26.46	29.73	17.06
2001				
January	24.29	25.05	26.38	15.68
February	26.86	24.40	27.31	17.58
March	26.28	24.31	26.41	17.93
April	27.42	28.05	28.49	18.83
May	28.57	29.11	29.02	20.74

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

Graph 8: Middle East — fob



Saudi Arabia sets up company to operate GCC power grid

Dubai — Saudi Arabia has approved the establishment of the Gulf Electricity Grid Company, mandated to build and operate a power grid connecting the six Gulf Co-operation Council (GCC) member countries, it was announced last month.

According to a report in Dubai's *Gulf News*, the project, first proposed in 1992, now appeared to be taking proper shape.

The Dammam-based company has been set up with a capital of $1.3 billion, taking forward regional aspirations for a GCC electricity network. The firm's board has been incorporated and is due to hold its first meeting soon.

The project scope includes planning, design and construction, with early reports envisaging the first phase linking the northern states of Kuwait, Saudi Arabia, Bahrain and Qatar with an outlay of $870 million.

The second stage would connect the United Arab Emirates (UAE) and Oman, while the third phase would integrate the northern and southern networks. Industry sources said the first phase was expected to be completed within five years.

Each state would have a share in the company commensurate with the benefits they would derive from the scheme. Participating utilities would pay an annual commission.

Meanwhile, Norwegian company Statnett Entreprenor, which claims to be a pioneer in setting up regional power grids and the prime mover in establishing the Nordic grid linking Norway, Sweden, Finland and Denmark, has expressed an interest in being involved in the GCC power grid.

"We have extensive experience in the field, with our model having been copied in Europe and elsewhere," said Willy Hauge, who led a team to Statnett's first talks in the Middle East.

He said the company was also familiar with "electricity exchanges", pointing out that the group included Nord Pool, the Nordic Power Exchange.

Iranian Vice-President holds co-operation talks in Indonesia

Jakarta — Iran's First Vice-President, Hassan Habibi, has held talks in Jakarta with Indonesian President Abdurrahman Wahid on issues of mutual interest, it was reported last month.

At the meeting, Habibi expressed optimism about the future of Iran-Indonesian relations and underlined the need for both countries to seize every opportunity to broaden bilateral co-operation.

He said the ground should be prepared for active economic and trade ties, and to boost their industries and technological know-how in the field of airplane manufacturing.

The two nations would benefit from such mutual co-operation, he was quoted by the official Islamic Republic News Agency as saying.

Referring to the 11th Summit of the Group of 15 developing countries, which also took place in the Indonesian capital last month, he expressed hope that member states would take essential and successful steps to meet the interests of their nations.

Habibi stressed that in their talks with the countries of the North, the nations of the South should pay due attention to such important issues as the gap between the rich and the poor, unemployment, and insufficient access to telecommunications technology.

He expressed the hope that Iran and Indonesia would co-operate and take more serious steps in this respect.

The Indonesian President briefed the Iranian Vice-President on the current situation in his country and voiced Jakarta's readiness for economic, industrial and cultural co-operation with Iran.

He pointed out that ample grounds existed for bilateral co-operation in the fields of technology, commerce and culture.

Kuwaiti economy forecast to perform strongly in 2001

Kuwait — The year 2000 was a positive one for the Kuwaiti economy, which is expected to continue its excellent performance in the coming years, the Kuwaiti News Agency (KUNA) reported last month.

It noted that studies by international organizations, such as the World Bank, the International Monetary Fund, the Arab Monetary Fund, and various domestic studies, had concluded that the Kuwaiti economy performed well last year.

Positive indicators included growth in the country's gross domestic product, an improvement in the balance of payments and trade, as well as increased financial reserves.

A report from the Chamber of Commerce and Industry said that it was "optimistic in our view for the Kuwaiti economy in the coming few years.

"We believe there are strong components and firm elements for the whole economy, which are backed by a stable political regime, a good foundation, and efficient national expertise," said the report.

It pointed out that the biggest challenge was to liberalize, diversify and reform the economy, as well as boost the participation of the private sector.

The national economy had started to revive, which was reflected in the government's increase in spending on construction projects.

The fact that the government had offered many bids in many sectors provided liquidity for the market, the report pointed out.

AES to own 55 per cent of Qatari power project

Dubai — US power giant AES Corporation, which has been awarded the contract for a $750 million power and desalination plant in Qatar, will own a 55 per cent equity interest in the operation, the company has announced.

The plant, expected to be fully operational by May 2004, will be operated by AES, which is expected to contract a consortium to build the unit.

The remaining 45 per cent interest in the project will be held by the state-owned Qatar Petroleum, the Qatar Electric and Water Company, and the Gulf Investment Corporation, which is owned by the Gulf Co-operation Council (GCC) member countries.

Completion of the transaction was subject to the receipt of certain government approvals, according to a report in Dubai's daily *Gulf News*.

Under a long-term agreement, the entire power and water supplies produced at the plant will be purchased by Kahramma, the state-owned electric and water distribution organization.

Qatar Petroleum will supply natural gas to the power plant and will build a common seawater facility at the Ras Laffan industrial city for water supplies.

AES said it expected partial electricity deliveries from the plant to be available as early as March 2003.

The report quoted the Project Director for the Ras Laffan scheme, Tabish Gauhar, as expressing appreciation for the "fair and transparent bid process for this business."

He said the company was very pleased to have this opportunity in Qatar, an investment-grade country with one of the largest natural gas reserves in the world.

Nigerian President inaugurates independent power project

Abuja — Nigerian President, Olusegun Obasanjo, visited Port Harcourt last month to inaugurate the Eleme gas turbine project, built by the Rivers State government.

Rivers State Commissioner for Power, Reginald Wilcox, said that the Eleme turbine project was Obasanjo's 'baby', as the President had donated financing for the scheme.

He noted that the Eleme project, one of three gas turbine stations being built in the state, had already taken considerable financing, noting that more expenditure was anticipated.

The turbine plant now sited at Eleme was previously put in place by the now-defunct Oil Mineral Producing Areas Development Commission (Ompadec), but the facility was later donated to the Rivers State when Ompadec was wound down following its failure to live up to expectations.

Wilcox noted that the gas turbine being installed to service Port Harcourt city would be completed later in the year, pointing out that a test run of the facility could be carried out in July.

Concerning the relationship between the Rivers State government and the state-owned National Electric Power Authority, following the successful take-off of the turbine project, the commissioner said that the state government had been in dialogue with officials of the power firm.

The Rivers State government is the first state in Nigeria to launch an independent power project, to help boost the country's ailing power supply.

The Lagos State government also has an ongoing private power project, which is being carried out by US firm Enron and is slated for inauguration later in the year.

Russia to convert Algerian debt into oil investments

Algiers — Russia has agreed to convert part of Algeria's public debt into investments, especially in the oil and gas sectors, it was announced last month at the end of a three-day visit to Algeria by Russian Deputy Prime Minister, Ilya Klebanov.

He was quoted by the Algerian News Agency (APS) as saying that a part of Algeria's debt with Russia would be converted into investments in Algeria's industrial enterprises.

Klebanov added that discussions were now being undertaken on the restructuring of this debt, although he did not disclose the amount to be converted.

He indicated that the conversion would be carried out through the setting up of Algerian-Russian companies, initially in the oil and gas sectors.

He also announced that an understanding had been reached between the Algerian state oil and gas company, Sonatrach, and Russia's Gazprom in co-ordinating natural gas exports.

During Klebanov's visit to Algeria, Russian Deputy Energy Minister, Alexei Miller, held discussions with Algerian Energy and Mines Minister, Dr Chakib Khelil.

The talks, which were also attended by officials from Sonatrach and the Russian firms Lukoil, Gazprom and StroyTransgaz, led to the establishment of a working group, which will be in charge of the setting up of joint projects in the energy sector.

The group, which will also look at ways of boosting co-operation, will meet twice a year — in Algiers and Moscow — and will be chaired by the Energy Ministers of the two countries.

US firm is selected for private power project in Saudi Arabia

New York — United States firm CMS Energy and its equity joint-venture partner, the Saudi-based Al-Zamil Group, have been named the preferred bidder for the Sadaf cogeneration power project in Saudi Arabia, it was announced last month.

Sadaf is a 50:50 joint venture between the Saudi Arabian Basic Industries Corporation (SABIC) and Shell Chemicals.

The project will be the first privately owned, independent power plant in Saudi Arabia, and the facility will be fuelled by natural gas supplied by Sadaf.

The cogeneration scheme will supply 230 megawatts of power generation and 510 tonnes/hour of steam production capacity, under a 20-year energy conversion agreement.

"This opportunity to work with Sadaf is significant for CMS, since it positions the company as an important player in forthcoming private-sector power development in the Kingdom of Saudi Arabia," said CMS Energy's Vice-President of Development, Joe Tomasik.

Iran's power generation capacity to increase by 36,000 mw

Tehran — Iranian Energy Minister, Habibollah Bitaraf said last month that around 36,000 megawatts of electricity would be added to the total capacity of the country's power plants in the next three years.

Speaking on the opening day of the Sixth International Electricity Exhibition, Bitaraf said that this was in line with the policies of the government's third five-year economic development plan.

He noted that the latest economic plan envisaged an increase in national energy generation capacity to 142 billion kilowatt hours by 2004, compared with 117bn kWh last year.

Per capita investment in the power industry topped $350 million up to the end of the second economic plan (1995-2000), he noted.

Bitaraf added that his Ministry was following a policy to link Iran's power grid to all neighbouring countries during the latest plan period.

More than 400 Iranian and foreign companies attended the five-day exhibition in the Iranian capital.

Venezuela's BCV sees 3.5 per cent GDP growth in first quarter

Caracas — Venezuela's economy is showing new signs of recovery this year, with the country's gross domestic product (GDP) growing at 3.5 per cent in the first quarter, up from one per cent during the same period last year, according to the Central Bank of Venezuela (BCV).

"The macroeconomic indicators recorded for the first quarter of this year show an improvement, compared with the same period the previous year," said the BCV in its latest report on the nation's economy.

The Bank also reported a $357 million surplus in the nation's balance of payments for the January-March period.

Commenting on specific aspects of the nation's economy, BCV said that gross national product (GNP) in the non-petroleum sector grew by 3.6 per cent in the first quarter, compared with one per cent during the same period of 2000.

First-quarter growth in the manufacturing sector was 4.6 per cent, while the construction sector posted 9.1 per cent growth, communications 16.2 per cent, and commerce 4.5 per cent.

"The growth in the construction sector was due to a higher rate of contracts completed by the state oil industry, the construction of government housing and roadway infrastructure projects, and the reactivation of demand for construction by the public sector," the report noted.

"There was a high rate of growth in the telecommunications sector, due to the increase in basic telephone and cellular services," it added.

Regarding the petroleum sector, the BCV said there was a "real growth" of 2.9 per cent during the period under review, compared with a 0.6 per cent decline in the same period last year.

It also pointed to a first-quarter deficit of $1.01 billion, a decline of about $430m, compared with the $1.44bn deficit posted during the first three months of 2000.

Arab countries look at setting up free trade area

Algiers — Ten Arab countries completed talks in Rabat, Morocco, last month on the possibility of setting up an Arab free trade area, according to the Moroccan News Agency (MAP).

The meeting, held at Morocco's invitation, was attended by the Foreign Ministers of Algeria, Egypt, Jordan, Libya, Mauritania, Morocco and Tunisia, as well as representatives from Palestine, Syria, and Lebanon.

Four of these countries — Egypt, Jordan, Morocco and Tunisia — are already bound at bilateral level by accords setting up free trade areas.

Egypt, Morocco and Tunisia are also bound to the European Union (EU) by association accords, while similar agreements between the EU and Algeria and Syria are under negotiation.

Also last month, Morocco hosted a two-day forum on Mediterranean partnerships. The event was attended by Foreign Ministers from 11 Mediterranean countries.

The gathering, an informal body for dialogue and the exchange of views on Euro-Mediterranean partnerships, was staged in the northern Moroccan city of Tanger.

Saudi Arabia discovers huge deposits of silica in Tabuk

Riyadh — Saudi Arabia has discovered huge quantities of silica deposits, estimated at millions of tonnes, in the Kingdom's northern region of Tabuk, it was reported last month.

The Minister of Petroleum and Mineral Resources, Ali I Naimi, said in a statement carried by the Saudi Press Agency (SPA) that the deposits stretched over an area of more than 40 km.

He pointed out that the Kingdom had been intensifying its efforts to establish a mineral industry in the long term by continuing exploration works and attracting investments in the sector.

SPA quoted the Minister as pointing out that the new site contained silica oxide. Silica is used in the manufacture of glass, ceramics and abrasives, in the chemical, electronic and construction industries.

Saudi Arabia's annual silica needs were estimated at 600,000 tonnes, according to the SPA report.

Iran and Iraq agree to set up power transmission line

Tehran — Iranian Deputy Energy Minister, Masoud Hojjat, said last month that Iran and Iraq had reached agreement to establish a power transmission line between the two countries.

Hojjat, who headed an Iranian delegation on a four-day visit to neighbouring Iraq, was quoted by the Islamic Republic News Agency (IRNA) as saying that the expansion of Iran's electricity network to neighbouring countries had been one of his Ministry's programmes during the past few years.

Parts of the executive operation concerning the plan had been jointly carried out by Iran and its partners, including Turkey, Armenia, Turkmenistan, and Azerbaijan, he added.

Iranian and Iraqi experts and officials had concluded talks on the establishment of an energy transfer line between the two countries, he noted, adding that the project would go onstream after the two sides' senior officials approved the move.

Around 115 billion kilowatts of energy were generated in Iran during the past year, ending on March 20, out of which 1,000 megawatts could be exported to other countries, Hojjat said.

Iraqi electricity officials visited Iran last year to review bilateral co-operation. During their stay, they discussed the expansion of a joint electricity network with Iran.

Meanwhile, under a contract signed by Iran and Azerbaijan, Iran is to supply up to 50 MWh of electricity to Imishli, for a period of four months. In return, Azerbaijan will supply 50-170 MWh of electricity to Iran for an eight-month period.

The deal terminates a contract signed by Iran for the sale of electricity to the Autonomous Republic of Nakhichevan. Last December, Iran restored electricity supplies to Nakhichevan, after the republic paid the first instalment of a $45 million debt to Iran.

Tehran had cut electricity to Nakhichevan at the end of last October, saying that Baku had paid just $1m for electricity supplies over a three-year period.

Nigeria allocates $100m to buy aircraft from Indonesia

Jakarta — The Nigerian government has allocated $100 million to purchase aircraft from Indonesia, the latter country's Industry and Trade Minister, Luhut Pandjaitan, said last month.

The deal was a component of bilateral co-operation agreements signed by Indonesian President, Abdurrahman Wahid, during his visit to Nigeria in March and would be concluded by Nigerian President Olusegun Obasanjo's visit to Indonesia this month, he said.

The aircraft would be sold by PT Dirgantara Indonesia, formerly known as PT Industri Pesawat Terbang Nusantara, one of the few aircraft-manufacturing companies in south-east Asia.

Luhut did not disclosed the number of planes to be sold under the bilateral deal, but Nigerian officials said the Dirgantara aircraft suited the country's requirements.

"The aircraft purchase is just the beginning. We plan to buy more from Indonesia," noted the Chairman of the Nigerian Chamber of Commerce and Industry, Alfons Doodoh.

He said that the country's shopping list, aimed at boosting bilateral trade between the two countries, included textiles, electronics and farm products.

Egypt to acquire stake in Saudi petrochemical firm

Dubai — The Egyptian General Petroleum Corporation (EGPC) has signed a memorandum of understanding to take a 10 per cent stake in the Saudi Egyptian Petrochemical Company (SEPCO), in which it will invest $22 million, it was announced last month.

With a total investment of $550m and a production capacity of 300,000 tonnes/year, SEPCO is expected to become the largest polyester producer in the region.

Based at Al Amerya, in the Governorate of Alexandria, SEPCO was co-developed by the Jehan Holding Group, a leading Saudi investment group, and Midroc. It is expected to begin commercial production in the first quarter of 2003.

SEPCO is expected to generate average annual sales and net cash flow of $400m and $80m, respectively, and generate around 6,000 direct and indirect jobs.

Deutsche Bank has been retained as the global financial advisor and is responsible for shaping the company's financial structure and debt package.

Sigma Capital, SEPCO's lead placement agent, worked with EGPC to clinch the deal, which includes the latter supplying gas on a long-term basis.

Egypt's Minister of Petroleum, Samh Fahmi, commented: "The textile market is an important driver for the Egyptian economy. We are proud that the country has been so successful in attracting such large-scale projects, able to compete on a world scale."

According to a report in Dubai's *Gulf News*, the Egyptian textile industry employed a third of Egypt's labour force, but the garment industry still relied heavily on imported fabrics.

SEPCO is expected to significantly reduce the country's dependency on imports. Its projected production includes 150,000 t/y of partially oriented yarn and textile chips, used in apparel, home textiles, rugs and various industrial operations.

It will also comprise 50,000 t/y of staple fibres, used as cotton blend and wool for textile manufacturing, and 100,000 t/y of polyester resin, used in packaging.

OPEC Fund signs loans worth over $48m in May

In May, the OPEC Fund for International Development signed nine agreements for loans totalling $48.57 million with eight developing countries in Africa, Asia and the Caribbean.

No 28/2001
Vienna, Austria, May 17, 2001

OPEC Fund, Palestine sign agreement to encourage investment

An agreement for the encouragement and protection of investment has been signed between the OPEC Fund for International Development and the Palestinian Authority. Drawn up within the framework of the Fund's Private Sector Facility, the convention was initialled by HE Faisal Aweidah, Ambassador of the Palestinian Mission in Austria, and by HE Dr Y Seyyid Abdulai, Director-General of the OPEC Fund.

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

Palestine has a population of 2.8 million people, growing at a very high rate. GNP per capita was estimated at approximately $1,800 in 1999, owing to the large inflow of remittances from Palestinian workers outside Palestine and international aid. The degree of poverty contrasts with positive social indicators. The health level of the Palestinian people is favourable, with low infant mortality and better than average life expectancy. Literacy levels are also high, with more than 95 per cent of all school-age children receiving formal education. The country's private sector continues to grow, and the government has encouraged foreign private investment by providing many concessions to the domestic private sector as well as to joint ventures with foreign investors. Recent developments in the Palestinian economy have been driven by two major sets of events: the rapid emergence of public institutions, and the political and security situations, which have particularly caused severe economic disruptions.

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No 29/2001
Vienna, Austria, May 22, 2001

OPEC Fund extends debt relief to Benin under HIPC initiative

The OPEC Fund for International Development has signed an agreement with the Republic of Benin for the provision of debt relief within the framework of the Enhanced Heavily Indebted Poor Countries (HIPC II) Initiative. Endorsed by the Interim and Development Committees of the World Bank and International Monetary Fund in September 1996, the Initiative represents a united effort by the international community to address the external debt problems of the world's heavily indebted poor countries. Specifically, it aims to reduce the debt of eligible countries to sustainable levels, subject to satisfactory policy performance, in order to ensure that adjustment and reform efforts are not put at risk by continued high debt and debt service burdens. As the Initiative requires participation by all relevant creditors, debt relief efforts entail coordinated actions by the international finance community, including multilateral institutions.

Thirty-six countries are expected to qualify for assistance under the Enhanced HIPC Initiative, of which 29 are in sub-Saharan Africa. To date, 22 countries have been approved to receive assistance within its framework. Benin has recently reached its completion point under the Initiative, ie, the time at which it is decided that the country has met the conditions for assistance.

In terms of the net present value (NPV) of assistance to be provided at the completion point, HIPC assistance for Benin will amount to $265 million. This assistance will provide Benin with relief on its external debt burden and reduce the strain on national budgetary resources, thus freeing up resources to help accelerate structural reforms and finance needed social programmes.

The OPEC Fund has been involved in development activities in Benin for over two decades, providing balance of payments support, financing commodity

imports programmes and assisting projects in the sectors of energy, transportation, agriculture, national development banks, multi-sectoral, education and water supply and sewerage. The country has also benefited from grant assistance to cover its subscription to the Common Fund for Commodities, and to support projects in the water supply and sanitation sector. Under the new agreement, financing in the amount of $2.67 million will be made available to ease Benin's debt burden.

The agreement was signed in Vienna by HE Issa Kpara, Ambassador of the Republic of Benin to Germany, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

No 30/2001
Vienna, Austria, May 22, 2001

OPEC Fund extends $4.8m to Chad for road rehabilitation project

The OPEC Fund for International Development has signed an agreement with the Republic of Chad for a loan of $4.8 million towards the upgrading of the Am Timan-Haraze Mangueigne road, a strategic corridor that connects the country's southern agricultural regions to the capital city N'Djamena. Once rehabilitated, the transport of inputs and produce will be greatly facilitated for thousands of farming communities.

Agriculture plays a key role in Chad's economy, providing livelihoods for over three-quarters of the country's 7.5 million inhabitants, most of whom live in the rural regions in the south. Possessing no railroad, Chad is heavily reliant on its 32,000 km road network for the transport of agricultural goods and for linking its widely-dispersed population with social services. However, only around 263 km of the roads are paved, with the rest consisting of poorly-maintained earth or track. Severe flooding during the rainy season renders these roads impassable, halting income generation and jeopardizing food security, placing additional hardship on a country where over half of the inhabitants live below the poverty line.

These problems are particularly felt in the isolated prefecture of Salamat where, despite its enormous agricultural potential, development is severely constrained due to the deteriorated main road that connects the communities to markets and commercial centres in N'Djamena. Heavy rains regularly leave the area cut off for eight months at a time, often compelling farmers to sell their crops locally at very low prices, and leaving many without access to even the most basic facilities.

Under the project, a 162 km section of the Am Timan-Haraze Mangueigne road will be reinforced with a concrete base/sub-base and given a clay/laterite surface. A six-metre wide carriageway with a 1.15 m shoulder on either side will also be installed. Rain gates will be constructed to protect villages during heavy downpours, and drainage works consisting of a network of concrete and metal pipes built to curb flooding on the roads.

Over 187,000 people in Salamat, as well as thousands from outlying regions, will benefit from safer, cheaper transport of agricultural goods, and enjoy improved access to hospitals, schools and workplaces.

The OPEC fund has previously extended eight loans to the Republic of Chad, comprising one for balance of payments support, and seven project loans in the education, water supply and sewerage, transportation and agriculture sectors. The country has also benefited from direct Fund grants, such as a grant to cover its subscription to the capital of the Common Fund for Commodities, a grant to finance a control programme against AIDS, and an emergency assistance grant to help cope with the effects of drought.

The agreement was signed in Vienna by HE Bintou Malloum, Ambassador of the Republic of Chad to Germany, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

OPEC Fund loan:
$4.8m

Lending terms:
Interest rate of one per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, with a grace period of five years.

Borrower:
Republic of Chad.

Executing agency:
Project Implementation Unit, under aegis of the Rural Civil Works Directorate, Ministry of Agriculture, in cooperation with the Ministry of Public Works, Transport, Town Planning/ Housing.

Implementation period:
Three years.

Appraising agency:
OPEC Fund.

Loan administrator:
OPEC Fund.

Co-financier:
Government of Chad.

Total cost:
$5.4m

Project description:
The project comprises the following:
— upgrading 162 km section of road with a concrete base/sub-base and clay/ laterite surface;
— construction of a 6 m wide carriageway with 1.15 m shoulders on each side;
— installation of gabions and reinforced concrete and metallic pipes for drainage works; and
— road markings and signs.

No 31/2001
Vienna, Austria, May 22, 2001

Ghana benefits from $4.1m loan from Fund for sanitation project

The OPEC Fund for International Development has signed a $4.1 million loan agreement with the Republic of Ghana to help finance the second phase of an ongoing sanitation and ecological restoration project in Accra's Korle Lagoon. Once completed, the capital's one million-strong population will be safeguarded against numerous health hazards, and the lagoon's fragile ecosystem restored to its natural state.

Ghana's water demand, as in most Sahelian countries, far outstrips its supply. Renewable water sources are declining, and less than half of the population has

access to safe sanitation. Accra is especially problematic since, due to an inadequate sewage system, drains have become convenient disposal points for all waste, which in turn flows into low-lying lagoons and lakes. For this reason, the Korle Lagoon has become one of the most heavily polluted basins in the country. Since it can no longer empty into the sea due to a deteriorated, blocked sea-outfall pipe, untreated sewage has stagnated, contaminating the beaches and virtually destroying all marine life. Polluted groundwater has created serious health hazards for nearby residents, particularly during flooding, causing numerous water-borne illnesses.

Under the project, steps will be taken to create a more effective water disposal system by constructing sewage pre-treatment plants and pumping stations, and installing a new 1.5 km sea-outfall pipe. The entire lagoon area will be cleared of weed overgrowth and dredged, thereby preventing flooding and siltation. Severely polluted areas will be capped with topsoil and clay, and landscaped with grass and shrubs, thus helping restore the lagoon and allow for the reintroduction of marine life.

Once the system is fully functional, the population will benefit from the rehabilitated environment through improved health and better living conditions.

This loan represents the 14th lending operation between the OPEC Fund and the Republic of Ghana. Earlier initiatives include one for balance of payments support and thirteen project loans in the transportation, national development banks, multi-sectoral, water supply and sewerage, health and education sectors.

The agreement was signed in Vienna by HE Kobina Wudu, Ambassador of Ghana to Switzerland and Permanent Representative to the United Nations, Geneva, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

OPEC Fund loan:
$4.1m

Lending terms:
Interest rate of one per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, including a grace period of five years.

Borrower:
Republic of Ghana.

Executing agency:
Hydrological Department, Ministry of Works and Housing.

Implementation period:
Three years.

Appraising agency:
OPEC Fund.

Loan administrator:
Kuwait Fund for Arab Economic Development (Kuwait Fund).

Co-financiers:
Kuwait Fund; Arab Bank for Economic Development in Africa; Government of Ghana.

Total cost:
$26.14m

Project description:
The project comprises the following:
— construction of a sea outfall pipe, pumping stations and pre-treatment plants; and
— design, supervision and training services.

No 32/2001
Vienna, Austria, May 22, 2001

Guinea receives $5m loan from Fund to help finance road project

The OPEC Fund for International Development has signed a $5 million loan agreement with the Republic of Guinea to help finance rehabilitation of the Tombo-Gbessia highway, a heavily-used road in the capital, Conakry. Once completed, the transportation demands of this rapidly growing city will be more adequately met, thus facilitating economic activity and decreasing vehicle-operating costs by reducing travel time and lessening the risk of traffic accidents.

Guinea relies strongly on its road network, which carries the majority of passenger and heavy vehicle traffic. However, despite progress made by Government towards rehabilitating the 13,620 km network, most of the infrastructure remains unpaved. Moreover, conditions have deteriorated considerably due to inadequate maintenance and under-funding. These shortfalls are especially felt in Conakry, with its major seaport and busy Gbessia International Airport drawing in ever-growing volumes of traffic. Passing through the city is the Tombo-Gbessia highway, which experiences an average vehicle count of 60,000 per day.

Under this extensive rehabilitation project, the capacity of the 10.7 km highway will be enlarged by widening certain portions, adding overpasses and upgrading the surface to asphalt standard. The installation of drainage works will prevent flood damage during the rainy season and ensure the road's durability. In order to reduce the number of accidents, a wide-array of safety features such as lane markings, traffic signs and guard rails will be constructed.

This newly-renovated road will improve communications between Conakry and other parts of the country and open up additional linkages to international markets, thereby boosting the economy. Road users will benefit directly from safer, more efficient travel and cheaper transportation costs. Other positive aspects of the project include providing poor farming communities in remote regions better access to commercial areas and social services.

Guinea has been the recipient of 15 previous OPEC Fund loans, four of which were extended for balance of payments support, and 11 for project loans in the education, water supply and sewerage, agriculture and transportation sectors. The country has also received a technical assistance grant in the water supply and sewerage sector and one emergency grant to help alleviate food shortages, as well as a grant to cover its subscription to the capital of the Common Fund for Commodities.

The agreement was signed in Vienna by HE Elhadj Oumar Kouyate, Secretary of State for Planning of the Republic of Guinea, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

OPEC Fund loan:
$5m

Lending terms:
Interest rate of 1.25 per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, including a grace period of five years.
Borrower:
Republic of Guinea.
Executing agency:
Ministry of Public Works and Environment.
Implementation period:
Four years.
Appraising agency:
Kuwait Fund for Arab Economic Development (Kuwait Fund).
Loan administrator:
Kuwait Fund.
Co-financiers:
Kuwait Fund; Saudi Fund for Development; Arab Bank for Economic Development in Africa; Agence française de Développement; Government of Guinea.
Total cost:
$73.5m
Project description:
The project comprises the following:
— upgrading a 10.7 km stretch of road to an asphalt surface, as well as construction of overpasses and extensive drainage works;
— acquisition of land; and
— design and supervision.

No 33/2001
Vienna, Austria, May 22, 2001

OPEC Fund extends $4m loan to Jamaica to support education

The OPEC Fund for International Development has signed a $4 million loan agreement with Jamaica in support of a wide-scale initiative aimed towards strengthening its primary education system. Goals are to improve the quality, efficiency and availability of schooling, placing high priority on fostering more equality in the provision of instruction for children from poor communities.

With a net enrollment rate in 1999 of 93 per cent, and almost universal literacy, Jamaica's education indicators rank high among its Latin American neighbours. However, despite these promising statistics, educational opportunities are still unequally distributed. Scholastic achievement is considerably poorer for children from low-income families, and the number of children completing secondary school in poor communities or rural regions is much lower than in more affluent urban areas.

Under this initiative, a multi-faceted scheme will be implemented to address these shortfalls. Components have been designed to raise the quality of instruction and strengthen the institutions involved in educational administration, management and planning. Curricula will be revised and updated, new textbooks and materials developed and strategies prepared to boost school attendance. A four-year literacy enhancement programme will be offered in 80 low-performing urban schools, and professional development schemes, revised teacher certification standards and new instruction methodologies introduced. Civil works components include the construction, expansion and rehabilitation of 14 primary and 'All Age' schools, providing places for almost 7,000 pupils. All schools will be furnished and equipped with the latest teaching materials and ongoing maintenance programmes will insure that the schools remain in good condition.

The project will pave the way for thousands of youngsters to become equipped with the basic skills needed to move on to higher education, giving them a far greater chance of obtaining better employment opportunities in the future.

The OPEC Fund has previously approved 11 other loans for Jamaica, including four for balance of payments support and seven project loans in the transportation, multi-sectoral, energy and education sectors. In addition, several technical assistance grants have been extended in the areas of renewable energy and agricultural research, and one grant went towards a training programme in elderly care.

The agreement was signed in Vienna by HE Ransford Smith, Ambassador of Jamaica to the United Nations, Geneva, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

OPEC Fund loan: $4m
Lending terms:
Interest rate of 2.5 per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, with a grace period of five years.
Borrower:
Jamaica.
Executing agency:
Ministry of Education and Culture.
Implementation period:
Five years.
Appraising agency:
Inter-American Development Bank (IDB).
Loan administrator:
IDB.
Co-financiers:
IDB; Government of Jamaica.
Total cost:
$39.5m
Project description:
The project comprises the following:
— provision of technical assistance, materials, equipment and instructor training;
— purchase of textbooks;
— implementation of four-year literacy programme and professional development programmes;
— rehabilitation, furnishing and construction of new schools; and
— implementation of school maintenance programme.

No 34/2001
Vienna, Austria, May 22, 2001

Irrigation project in the Sudan gets $10m loan from the OPEC Fund

The OPEC Fund for International Development has signed a $10 million loan agreement with the Republic of the Sudan to help finance an initiative to rehabilitate the Gezira irrigation network. The project aims to increase the amount of cultivable land, thereby boosting food security and raising incomes among the country's deprived rural communities.

One of the Sudan's greatest assets is a rich agricultural potential, with over two-thirds of its land suitable for crop production. In addition to employing over three-quarters of the labor force, agriculture is the source of virtually all of the Sudan's exports, thereby playing a major role in the country's economy. Arable land is estimated at 85 million hectares, of which 17m are cultivated, crops being either rain-fed or irrigated from water supplied by the Nile River and its tributaries. The Gezira scheme is the largest of its kind, comprising one-half of the two million hectares of land currently under irrigation. Due to a deteriorating infrastructure, however, which dates back to the early 1900s, output is inconsistent. Blockages due to silt accumulation and over-proliferation of weeds are a source of flooding, which damages crops and, in turn, jeopardizes the livelihoods of many.

Under the project, around 600,000 cubic metres of canal systems will be de-silted to improve water flow and avoid stoppages. Some 2,000 water control regulators will be rehabilitated, hydraulic and pumping mechanisms refurbished, and ten weed-control mechanisms put into place. This initiative is expected to produce enough extra water flow to accommodate additional cultivation of 25,000 hectares of cotton, or 42,000 ha of sorghum or wheat. Higher yields of these primary cash crops will allow those in the Gezira region to enjoy increased revenues, thereby raising living standards and improving food security for thousands of families.

The Sudan has been the recipient of 15 previous OPEC Fund loans, four of which were extended for balance of payments support, four which financed commodity imports programmes and seven project loans in the energy, transportation and agricultural sectors. Fund grants went to help the Sudan cover its subscription to the Common Fund for Commodities, to finance emergency assistance programmes, to meet the costs of research in the area of wind erosion and sand transport, to build and maintain primary schools, to implement rural water supply and sanitation schemes, and to rehabilitate district health facilities.

The agreement was signed in Vienna by HE El Zubier Ahmed El Hassan, State Minister of Finance for the Republic of the Sudan, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Gezira irrigation rehabilitation.
Sector:
Agriculture.
OPEC Fund loan:
$10m
Lending terms:
Interest rate of one per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, including a grace period of five years.
Borrower:
Republic of the Sudan.
Executing agency:
Ministry of Irrigation and Water Resources.
Implementation period:
30 months.
Appraising agency:
OPEC Fund.
Loan administrator:
OPEC Fund.
Co-financier:
Government of the Sudan.
Total cost:
$12m
Project description:
The project comprises the following:
— de-silting and repairing approximately 600,000 cu m of canal systems;
— rehabilitation and reconstruction of 2000 water control regulators;
— installation of new pumps;
— supplying ten weed-control mechanisms; and
— consultancy services.

No 35/2001
Vienna, Austria, May 22, 2001

OPEC Fund supports road rehabilitation project in Tajikistan

The OPEC Fund for International Development has signed a $4 million loan agreement with the Republic of Tajikistan in support of an initiative to rehabilitate an 80 km stretch of the Dushanbee-Khulyab road, which is situated in the southerly-located Khatlon Oblast, as well as some 150 km of outlying rural roads. Once completed, the movement of agricultural goods, inputs and people will be greatly facilitated for the region's 2.1 million-strong population.

Roads provide a vital means of transport for Tajikistan by supporting the country's agricultural sector and providing rural populations access to marketplaces and social services. However, although most of Tajikistan's 26,000 km road network is paved, the greater part was constructed in the 1950s and has well surpassed its life expectancy. Additionally, damage incurred by natural disasters and poor maintenance has brought the system to a state of advanced deterioration. This situation especially compromises the villages in remote rural regions, the majority of which rely on agriculture for both sustenance and income generation, particularly in Khatlon Oblast, where one third of the country's population reside. Unless urgent measures are taken to upgrade crucial rural stretches, poverty levels in this region will continue to worsen.

In response to this growing need, the most damaged sections of the Dushanbee-Khulyab road will be upgraded, placing particular emphasis on repairing and strengthening embankments and bridge-protection structures against avalanches and landslides, as well as installing drainage facilities. Another component of the scheme entails improving some 150 km of badly-deteriorated local and rural roads, by filling potholes, grading dirt surfaces, building drainage facilities and surfacing various sections with gravel.

The transportation of agricultural goods will become faster and cheaper, thereby boosting economic activity, and access to education and health facilities will be easier. Living standards will also be improved by the creation of both temporary and permanent jobs during the project's implementation.

This is the third loan made by the OPEC Fund to Tajikistan. Earlier loans have supported projects in the education and health sectors. The country has also benefited from a technical assistance grant

in the area of water supply and sewerage.

The agreement was signed in Vienna by HE Safarali Najmuddinov, Minister of Finance of the Republic of Tajikistan, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Road rehabilitation.
OPEC Fund loan:
$4m
Lending terms:
Interest rate of one per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, with a grace period of five years.
Borrower:
Republic of Tajikistan.
Executing agency:
Ministry of Transportation.
Implementation period:
3½ years.
Appraising agency:
Asian Development Bank (AsDB).
Loan administrator:
OPEC Fund.
Co-financiers:
AsDB; Government of Tajikistan.
Total cost:
$28.9m
Project description:
The project comprises the following:
— rehabilitation of an 80 km stretch of the Dushanbe-Khulyab road;
— repair and strengthening of embankment bridge protection structures;
— installation of drainage facilities; and
— improvement of approximately 150 km of local, rural and farm roads.

No 36/2001
Vienna, Austria, May 22, 2001

Tajikistan gets $4m loan from OPEC Fund for road improvement

The OPEC Fund for International Development has signed a $4 million loan agreement with the Republic of Tajikistan to help finance rehabilitation of the Shkev-Zigar road, a 38.5 km stretch located in the Gorno-Badkhsan Oblast in the southwestern portion of the country. Once renovated, the region's economy will receive a boost through cheaper and improved transportation of agricultural goods to markets and commercial centers, and remote rural populations will have better access to social services.

Landlocked and comprising primarily of steep, mountainous terrain, Tajikistan relies primarily on its 26,000 km road network for transport. Although the majority of the roads are paved, most are over 30 years old and badly deteriorated, a problem exacerbated by damage caused by the country's harsh climate, recurring natural disasters and inadequate maintenance. Traversing several passes that reach elevations of over 4,500 metres, the Shkev-Zigar road is often inundated with heavy snowfall that causes road closures for over 2½ months per year, effectively isolating outlying villages. Vehicle operating costs are high since traffic must be diverted through longer, more circuitous routes.

Under this initiative, the Shkev-Zigar road will be resurfaced to all-weather bitumen standard, with a 7 m wide carriageway and 2.5 m shoulders on either side, and drainage works to prevent flooding. Eight bridges in lengths varying from 12 to 66 m will also be constructed. After the road is completed, the movement of agricultural products and basic commodities will be greatly facilitated, boosting food security and enabling the small agricultural communities to reach marketplaces. Additional benefits include numerous employment opportunities that will be created both during and after the project's implementation.

Tajikistan has been the recipient of three other OPEC Fund project loans in the health, education and transportation sectors. The country has also been the recipient of a technical assistance grant in the area of water supply and sewerage.

The agreement was signed by HE Safarali Najmuddinov, Minister of Finance of the Republic of Tajikistan, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Shkev-Zigar road.
Sector:
Transportation.
OPEC Fund loan:
$4m
Lending terms:
Interest rate of one per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, including a grace period of five years.
Borrower:
Republic of Tajikistan.
Executing agency:
Ministry of Transport.
Implementation period:
2½ years.
Appraising agency:
Kuwait Fund for Arab Economic Development (Kuwait Fund).
Loan administrator:
Kuwait Fund.
Co-financiers:
Kuwait Fund; Saudi Fund for Development; Government of Tajikistan.
Total cost:
$33.95m
Project description:
The project comprises the following:
— upgrading 38 km road to all-weather bitumen standard, including a 7 m wide carriageway and 2.5 m shoulders on both sides;
— construction of drainage structures, safety works, balconies and bridges; and
— consultancy services.

No 37/2001
Vienna, Austria, May 22, 2001

Vietnam receives $10m OPEC Fund loan for electrification project

The OPEC Fund for International Development has signed a $10 million loan agreement with the Socialist Republic of Vietnam for the second phase of an elec-

trification project aimed at expanding services in rural and mountainous areas of the Quang Nam-Da Nang province. Upon completion, some 45,000 households in thirteen districts will have access to a reliable power supply.

Vietnam possesses relatively abundant sources of energy, including coal, fuelwood, charcoal and hydropower. However, the distribution of electrical power between rural inhabitants and urban dwellers is unequal. Additionally, only around half of the rural households are connected to electrical services, leaving some 25 million people without power.

The Quang Nam Province, together with its provincial capital, Da Nang City, has a population of around 1.5 million people, and electrical coverage remains one of the lowest in the country. Unreliable energy sources have brought many financial hardships to this primarily agricultural region, where the inhabitants must run power-driven irrigation equipment and other machinery on expensive and less efficient sources such as diesel engines, oil and batteries.

Under the current electrification scheme, some 445 km of high voltage transmission lines will be connected and integrated into the existing electrical network and 361 substations will be installed with voltage levels conforming to the requirements of each district. Transformers have been selected that will meet the load demand forecasted for 2005. Over 570 km of low voltage lines will be installed to insure the delivery of electricity to the end user with a minimal loss of power.

Access to electrical power will substantially raise the quality of living for the inhabitants of Quang Nam-Da Nang province, helping to boost productivity and save costs in operating their small businesses, thereby reducing poverty and ensuring food security for thousands of communities.

The OPEC Fund has previously approved eight loans for Vietnam. Of these, two financed commodity imports programmes and six others went towards projects in the agriculture, education, energy, national development banks and health sectors. Fund grants went to meet emergency requirements to help victims of a typhoon and to finance a rural water supply programme.

The agreement was signed by HE Hoang Van Nha, Ambassador of Vietnam to Austria, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Rural electrification — phase II.

Sector:
Energy.

OPEC Fund loan:
$10m

Lending terms:
Interest rate of one per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 20 years, including a grace period of five years.

Borrower:
Socialist Republic of Vietnam.

Executing agency:
People's Committee; Rural Electrification Board of Quang-Nam Province-Da Nang City.

Implementation period:
Three years.

Appraising agency:
OPEC Fund.

Loan administrator:
OPEC Fund.

Co-financiers:
Beneficiaries; Government of Vietnam.

Total cost:
$10.92m

Project description:
The project comprises the following:
— installation of 444.87 km of high voltage lines (22 kV) and 570.54 km of low voltage distribution lines (0.4 kV);
— purchase and installation of conductors, fittings and protection equipment, poles and associated structures and foundations;
— provision of 361 substations with a total capacity of 41,690 kV;
— wiring of households with PVC covered copper conductors, fixed house wiring, power outlets and fluorescent tube fittings; and
— design and supervisory services.

No 38/2001
Vienna, Austria, May 22, 2001

Loans totalling $48.57m extended by the OPEC Fund

Nine agreements for loans totalling $48.57 million were signed between the OPEC Fund for International Development and eight developing countries in Africa, Asia and the Caribbean.

The loans were extended to four least-developed countries, namely Benin, Chad, Guinea and the Sudan, and other developing countries, ie, Ghana, Jamaica, Tajikistan and Vietnam.

All eight of the loans will help finance public sector projects in the agriculture, energy, education, water supply and sanitation and transportation sectors. The ninth loan has been extended to Benin as debt relief within the context of the Enhanced Heavily Indebted Poor Countries (HIPC II) Initiative.

All eight projects will be co-financed by the concerned governments and by a number of international development institutions, including OPEC aid agencies such as the Kuwait Fund for Arab Economic Development, the Arab Bank for Economic Development in Africa and the Saudi Fund for Development. Other contributors include the Agence française de Développement, the Inter-American Development Bank and the Asian Development Bank.

The majority of project loans carry interest at rates ranging from one per cent to 1.25 per cent, while the loan for Jamaica has an interest rate of 2.5 per cent. All loans have a maturity of 20 years and include a grace period of five years.

As of the end of April 2001, cumulative lending of the OPEC Fund, for project and programme financing, balance of payments support and HIPC debt relief, stood at $4.6 billion. A further $53.2m had been extended in support of private sector operations. Total commitments, inclusive of grants and contributions to other international institutions, had reached $5.9bn and benefited 108 countries. Total disbursements had amounted to $4.0bn.

No 39/2001
Vienna, Austria, May 30, 2001

Former D-G Dr Shihata dies at the age of 63

It is with deep regret that the OPEC Fund announces the passing of former Director-General, Dr Ibrahim F I Shihata, on May 28, 2001, in Washington DC, USA, after a long illness.

Born in Egypt in 1937, Dr Shihata was Director-General of the OPEC Fund from its inception in 1976 until July 1983. It was under his stewardship that the fledgling institution known as OPEC Special Fund evolved from a temporary facility into the long-standing and highly regarded development aid institution it is today.

Dr Shihata was a graduate of Cairo University Law School (1957), and of Harvard Law School where he obtained a Doctorate of Juridicial Science in 1964. He served as Legal Counsel of the Kuwait Fund for Arab Economic Development, and was Associate Professor of International Law (Cairo). After his tenure at the OPEC Fund, during which time he also served as an Executive Director at the International Fund for Agricultural Development, Dr Shihata went on to serve as General Counsel for the World Bank and Secretary-General of the International Centre for Settlement of Investment Disputes. Dr Shihata retired in 2000 as Senior Vice-President and Special Adviser to the World Bank's President. He is author of a large number of books on different aspects of international law and finance. Dr Shihata was also a member of the Boards of the Vienna Institute for International Development, the WTO Association in London, and was an honorary fellow of the Institute of Advanced Legal Studies in London.

At the OPEC Fund, Dr Shihata will be remembered for his unwavering commitment and invaluable contribution towards the alleviation of poverty in the South. Throughout a long and illustrious career, he effectively inspired his colleagues to work towards improving the lot of the poor and disadvantaged. His loss will be felt keenly by all his friends and associates who have long esteemed him for his integrity of character and his devotion to his work.

April/May

Secretary General's diary

Visit to meet with senior management of MOL (Hungarian Oil and Gas), Budapest, Hungary, April 6, 2001.

A *Conference of African Energy Ministers* was organized by the Algerian Ministry of Energy & Mines, and held in Algiers, Algeria, April 23–27, 2001.

The Second International Oil Summit was organized by ENSPM Formation Industrie, and held in Paris, France, April 25, 2001.

The *2001 Dundee International Oil and Gas Policies Conference* was organized by the University of Dundee, and held in Dundee, Scotland, UK, April 30–May 4, 2001.

Official Invitation by the Government of the Russian Federation to visit the Russian Federation, Moscow, May 10 – 15, 2001.

The *12th Montreux Energy Roundtable* was organized by Montreux Energy and held in Montreux, Switzerland, May 28–30, 2001.

Secretariat missions

A meeting on *Improving Oil Data Transparency* was organized by the IEA/OECD, and held in Bangkok, Thailand, April 2–3, 2001.

A *Regional Thematic Experts Group Meeting in Preparation for the World Summit on Sustainable Development & Experts Group Meeting on the Development of a Harmonised Regional Environmental Impact Assessment for ESCWA Member States* was organized by UNEP/Regional Office for West Africa and held in Beirut, Lebanon, April 9–13, 2001.

A *Member Country Visit* upon invitation of the Nigerian Ministry of Petroleum Resources to Abuja, Nigeria, took place from April 6–18, 2001.

The *Ninth Session of the Commission on Sustainable Development (CSD-9*) was organized by the United Nations, and held in New York, USA, April 16–27, 2001.

A course on *Fundamentals of Upstream Petroleum Economics* was organized by the Petroleum Economist and held in Surrey, UK, April 17–20, 2001.

The *III International Oil and Gas Congress: Decades of Russian Oil and Gas: From the Past to the Future,* was organized by the Russian Union of Industrialists and Entrepreneurs (Employers), Moscow, and held in Salzburg, Austria, April 23–24, 2001.

An *UCLA — Advanced Program in Human Resource Mangement* was held at the Collins Center for Executive Education, Los Angeles, CA, USA, April 23–27, 2001.

A training course on *Trading Oil on International Markets* was organized by Invincible Energy/IP, and held in Cambridge, UK, April 23–27, 2001.

A seminar on *International Petroleum Fiscal System Analysis and Design* was organized by the University of Dundee, and held in Dundee, Scotland, UK, May 14–18, 2001.

The *Third United Nations Conference on the Least Developed Countries* was organized by UNCTAD, and held in Brussels, Belgium, May 14–20, 2001.

Forthcoming OPEC Meetings

The *34th Meeting of the Ministerial Monitoring Sub-Committee (MMSC)* will be held at the OPEC Secretariat, Vienna, Austria, on September 25, 2001.

The *117th Meeting of the Conference* will be held at the OPEC Secretariat, Vienna, Austria, on September 26, 2001.

The OPEC Anniverary Seminar on *OPEC and the Global Energy Balance: Towards a Sustainable Energy Future,* will be held in Vienna, Austria, on September 28–29, 2001. Details can be obtained from: CWC Associates Ltd, Elizabeth McLaughlin, The Business Design Centre, 52 Upper Street, London N1 0QH, UK. Tel: +44 (0)20 7704 0308; fax: +44 (0)20 7704 8440; e-mail: emclaughlin@thecwcgroup.com; Web site: www.thecwcgroup.com.

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The 1999 edition of the OPEC Annual Statistical Bulletin (ASB), which has established itself as the standard reference work on the oil and gas industries of OPEC Member Countries, is now available from the Secretariat.

Compiled by a team of statistical experts, the ASB contains an unrivalled wealth of data covering the period until end-1999 on the oil and gas sectors of OPEC's 11 Member Countries, as well as comprehensive coverage of the rest of the world.

For ease of reference, the ASB is divided into five sections, which are:

1

Summary tables and basic indicators

Basic economic indicators in OPEC Member Countries (GDP, population, trade, etc) from 1979-99. Side-by-side comparisons of fundamental information on the oil and gas industries of OPEC Member Countries and the rest of the world cover the same period.

2

Oil and gas data

More detailed information on the hydrocarbon industries of OPEC and non-OPEC countries, including oil and gas reserves, exploration and production output and consumption of refined products, exports and imports. Most tables cover 1995-99.

3

Transportation

A breakdown by size of the oil tanker and liquid gas carrier (LPG) and LNG) fleets of OPEC Member Countries and the rest of the world, as well as freight rates for 1995-99. Also includes data on oil, gas and product pipelines in OPEC Member Countries.

4

Major oil companies

Data on the operations of six oil majors: BP Amoco, ExxonMobil, TotalFinaElf, Royal Dutch/Shell, Chevron and Texaco. Tables show revenue, operating costs, taxation, net income and much more.

5

Prices

Monthly average prices of the OPEC Reference Basket of crudes and its components for 1997-99 and annual averages for 1990-99, plus selected major crudes (OPEC and non-OPEC) for the same periods. Spot refined product prices and a breakdown of the composite barrel are also featured.

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