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

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

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This month's cover ...

shows San Francisco, California, which has been badly affected by an energy crisis, resulting in rolling blackouts (see Forum on page 7).
Photo courtesy NASA.

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Gorse Hill, Woking, UK, **June 5–8, 2001**, *Fundamentals of the Energy Industry.* Details: Petroleum Economist Ltd, 15/17 St. Cross Street, London EC1N 8UW, UK. Tel: +44 (0)20 7831 5588; fax: +44 (0)20 7831 4567 or 7831 5313; e-mail: jones@petroleum-economist.com; Web site: http://www.petroleum-economist.com.

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Riyadh, Saudi Arabia
May 29–30, 2001

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Kyoto: the way forward

The US President's recent remarks on Kyoto have highlighted the need for a fresh approach to the environmental debate

When US President George W Bush made it known recently that he did not support the Kyoto Protocol, he no doubt expected that he would have to endure some criticism for his stance. But he could scarcely have imagined the force of the critical hurricane that would be unleashed. Nation after nation queued up to decry the President's position on Kyoto as thoughtless and a threat to the future of the Earth. The United States, they claimed, was arrogant, aloof, and prepared to sacrifice the long-term health of the planet — which affects us all — in pursuit of its own short-term economic interests.

But in truth, much of the outrage that was expressed by the other industrialized nations following the President's pronouncement was, as the popular journalistic cliché on the topic of global warming has it, mere hot air. For although it is true that the US is nowhere near meeting its target for greenhouse gas emission reductions (as set out in the Protocol), most of the industrialized countries who were so eager to criticize the US on the grounds of environmental recklessness (Germany and the UK excepted) are also well wide of the mark as regards their own emission reduction targets, and their politicians are only too aware of this fact. A case, perhaps, of the European pot calling the American kettle black?

One of the main justifications that has been advanced by the US for not supporting Kyoto is that the treaty would harm its economy. It is, however, by no means new to observe that implementation of the Kyoto Protocol would cause economic damage to one particular country or group of countries. It is precisely this point which OPEC has been making for years, and which was made again recently by the Organization's Secretary General, HE Dr Alí Rodríguez Araque *(see the statement on page 19 of this magazine).*

Numerous studies, both by OPEC itself and other independent bodies, have demonstrated conclusively that, were the Kyoto Protocol to be implemented as it stands, the countries whose economies would be hardest hit would be the oil-exporting developing nations. The consequent reduction in oil demand growth would slice hundreds of billions of dollars off the revenues of OPEC's Member Countries, dramatically reducing their ability not only to meet the needs of their growing populations, but also to commit substantial amounts of investment to the future of the oil industry.

In terms of the losses that would accrue from the implementation of the Protocol, it would be particularly unfair if it were a group of developing countries that were to suffer most in this regard. After all, it is not the actions of the poor nations of the South that have led to the current environmental situation. Most of the world's greenhouse gas emissions have stemmed from the rich countries during their long process of industrialization. It is therefore only fair that these nations should be the ones to bear the cost — although, as we have recently seen, not all of them seem willing to do so.

President Bush's pronouncements, therefore, may in fact have served a useful purpose: that of refocusing attention on the need to come up with a viable alternative to Kyoto, one that is realistic, one that will not treat any nation or group of nations unfairly, and one that can be agreed upon by all parties. Indeed, as indicated recently by US Energy Secretary Spencer Abraham, the President has already signaled the need for new thinking by setting up a task force that will report on every aspect of the energy situation — including Kyoto. But it is not just the United States that can benefit from a fresh approach. Everybody can.

What is now needed is for all sides involved in the debate to get together and agree upon a comprehensive way of addressing the problem of preserving the environment for ourselves and for future generations, while at the same time not placing obstacles in the way of the economic growth that is the only way for the developing nations of this world to lift themselves out of poverty. It is a huge challenge. One that will require flexibility from all sides. But it is a challenge to which the world can — and must — rise.

Are the world's oil resources limited? An OPEC point of view

*Will structural resource constraints affect the world's ability to meet growing oil demand in the future? The Director of OPEC's Research Division, **Dr Shokri Ghanem***, offers an optimistic view on this often-posed question.*

In the early decades of the last century, scientists were predicting the demise of oil and coal. Later, it became accepted that coal was a rather abundant resource and it was no longer thought necessary to make forecasts about when it would be exhausted. Then attention again became focused on the question of oil resources, posing the question: "Are we running out of oil?"

In this area, a number of studies, including some in recent years, give a rather pessimistic view of long-term oil-supply projections. For example, *The End of Cheap Oil* in the March 1998 issue of *Scientific American* pointed to a resource-based decline in conventional world oil supplies around 2003-2005, thus leading to sharply rising prices in the near future.

Another warning of a similar nature had come in 1977, when the Massachusetts Institute of Technology published a two-year study stating in its conclusion that "world oil production is likely to level off before the year 2000 — perhaps as early as 1985 — even if energy prices rise 50 per cent above current levels in real terms".

Earlier, there had been the Club of Rome's 1972 book *The Limits to Growth*, whose doomsday scenarios for some key commodities were widely discussed, in particular, the prediction that we would soon run out of oil. This list could be easily extended with some other studies.

These gloomy predictions, of course, never materialized. However, the widely-debated views of geologists Colin Campbell and Jean Laherrère, the authors of the *The End of Cheap Oil,* have developed into a discussion platform between two major groups: the 'pessimists' and the 'optimists'. Based on analytical criteria and the levels of ultimately recoverable reserves (URR)[1], there are a wide variety of opinions, with some pessimists arguing that the peak in world conventional oil production could be within the next decade, while the resource optimists see this peak coming as much as 30 years later.

I also share the view that oil, like any other physical resource, is finite, but the question of when and where the peak is going to occur is closely related to the estimated size of ultimately recoverable reserves of conventional oil, coupled with technological advances, oil price developments and the rate of oil demand growth. These are all-important constraints determining when the peak will be reached. Over the years, technological advances have also played a key role in reserves appreciation at a much lower cost, notwithstanding the fact that with higher oil prices, additional resources have become available. Three-dimensional seismology, horizontal and directional drilling, and deep water-production systems are all examples of major technological breakthroughs in this field. Thus, changes in technology have increasingly enabled us to tap resources which were once either unrecoverable or uncommercial.

Private investment

The opening up of new areas, and the accessibility of private investment in these areas, will also contribute to the expansion of prospective resources far beyond earlier projections. This applies in particular to countries with resource-rich crude oil endowments that were denied access to new technology and foreign investment for many years because of sanctions (eg, Libya, Iran).

The oil resources are in place. The issue is rather a question of technology and the economic conditions, for example, prices, tax regimes, market structure, and so on, that will decide on the level of its availability. Technological developments and price adjustments will always bring about solutions that withstand the risk of resource constraints. I believe that experience to date encourages us to hold such an optimistic view. As an example, let us examine the development of proven oil reserves during the last 20 years.

At the beginning of the 1980s, proven oil reserves in the world were put at 636 billion barrels. Over the following two decades, around 403bn b of crude were produced, catering to rising world oil

* *Based on a presentation given by **Dr Ghanem** to the Austrian Society for Petroleum Sciences, Vienna, Austria, on March 21, 2001.*

1. *The total size of the URR is widely used as an important factor to determine the peaking date and level of conventional oil production, which has become known as 'Hubbert bell curve'.*

needs. At the same time, however more oil was discovered than the volumes produced, namely a net addition of 415 billion barrels to world oil reserves. Thus, last year, world oil reserves stood at over one trillion barrels, enough to satisfy the world's needs for nearly 40 years at the present rate of consumption. If we take into account the size of recoverable global oil reserves, this number could even be doubled.

Similar arguments also hold true for natural gas reserves. As at December 31, 1998, global proven natural gas reserves were put at around 15.9 trillion cubic metres, representing a 38 per cent increase over 1988 levels, of which the OPEC Members had a significant share. In this respect, the issues of security of oil supply and scarcity of reserves become less relevant, especially when we consider the benefits of technological advances and the abundant oil supply surrounding us for many decades to come.

Let us now turn to oil market prospects for the next two decades, using some of our findings based on the Secretariat's projections generated by the OPEC World Energy Model (OWEM), a large-scale econometric model. Before doing so, here is a brief description of the assumptions upon which the model's reference case is based.

First, the perception of the potential evolution of oil market fundamentals leads us to assume a 'soft landing' for oil prices, with nominal prices settling in the low 20s (in $/b) over the first decade of the 21st century, then staying constant in real terms at $18/b for the rest of the forecast period up to 2020.

Economic reforms

The second assumption is that following a quick recovery from the 1998 economic crisis in several regions of the world, and reflecting world trade and productivity gains from economic reforms, an average world economic growth rate of around 3.3 to 3.4 per cent is expected. The rates assumed here form the benchmark, but the uncertainties associated with future economic growth paths should be taken into consideration. This is admittedly one of the areas which constitutes a major difficulty in assessing potential energy-market developments.

The third assumption is that the value assumed for autonomous energy efficiency improvements, at around one per cent per annum, although crucial to evolving patterns of demand, should be considered as subject to much uncertainty.

Finally, OPEC has also followed a neutral assumption in energy taxation and regulatory policies. The nominal energy taxes, already in place, will show growth rates similar to that of inflation rates.

'Changes in technology have increasingly enabled us to tap resources which were once either unrecoverable or uncommercial.'

Growth in oil demand is basically a reflection of increasing energy requirements stemming from higher population, development aspirations and economic progress. Although natural gas, coal and renewables will play an important role in meeting global energy demand, oil is still expected to retain a strong comparative advantage in the transportation sector, preserving its dominant share in the primary energy mix over the next twenty years.

In the reference case, we expect world oil demand to increase at an annual average rate of 1.5 per cent, or 1.4 million barrels/day, over the period to 2020, with corresponding growth rates of 1.8 per cent and 1.3 per cent during the following ten-year periods up to 2010 and 2020 respectively. Total world oil demand is, therefore, expected to exceed 103m b/d by 2020, a somewhat lower level than given in other forecasts, such as the International Energy Agency (115m b/d) or the US Energy Information Administration (117m b/d).

Increasing demand

During this period the major incremental demand will be seen in the non-OECD area, accounting for 70 per cent of the 27m b/d total increase in demand. The declining share of the OECD in global oil demand (55 per cent in 2020) will be compensated by a major increase in the Asia Pacific region (from 12 per cent in 1998 to 18 per cent in 2020).

While non-OPEC oil production is expected to stabilize at around 49m b/d, the major contribution to rising oil demand should come from the OPEC Member Countries. Taking the low and high price scenarios into account, the bulk of these incremental oil requirements — between 24m b/d and 34m b/d — is expected to come from the OPEC Countries. Up to 2020, these projections would put OPEC crude oil production in the range of 55m b/d to 65m b/d, reflecting the comparative advantage enjoyed by our Members, with their huge, low-cost reserves base.

The expansion in OPEC crude oil production will also lead to a growing market share for the Organization, increasing from around 40 per cent to over 50 per cent. Similarly, the incremental oil imports required from the OPEC area, in order to match the rising oil requirements in other regions, would in return necessitate considerable capacity expansion, which translates into investment totalling many billions of dollars.

This conclusion is also supported by other studies. The IEA, for example, underlines the need for "significant and sustained capital investment"; while the EIA emphasizes the growing importance of OPEC and Middle East supply that "will require major capital investments, which could depend on the availability and acceptability of foreign investments". Since Member Countries are increasingly involved in co-operation with other oil com-

panies to invest more in upstream operations and stimulate exploration and production activities, supply should be assured.

However, there are mounting uncertainties on the other side of the equation, namely, future oil demand prospects. My concerns in this regard are directly related to the potential impact of environmental measures based on current discussions and negotiations in the international fora.

The Kyoto Protocol foresees that Annex I Parties will, as agreed, lower overall greenhouse gas emissions to below 1990 levels between 2008 and 2012. Although it is not clear how and through which policy instruments and measures this target is going to be reached, we have nevertheless analyzed the likely impacts of the so-called 'green taxation' on oil demand prospects under the Kyoto Protocol scenarios.

Enormous losses

The results of these scenarios imply an actual fall in OPEC oil production compared to the reference case of between 4m b/d to 10m b/d in 2010. Annualized revenue losses vary accordingly between $22bn and $63bn, equivalent to a welfare loss of between 1.7 per cent and 3.5 per cent of GDP. It is important to emphasize the level and the impact of such policies on oil demand growth, and their consequences for production levels that would bring pronounced economic disadvantages for the OPEC Countries.

Despite continuing uncertainty in the coming years, investment in the oil industry will, in any case, be a highly crucial element for all of us, requiring enhanced co-operation in an environment of rapidly-changing industry dynamics. Looking at the large, low-cost reserve base of the OPEC Member Countries with their comparatively low market shares (77 per cent of world reserves versus 41 per cent of global production), it would make economic sense to have more investment channelled into these highly-productive regions. In that regard, co-operation and partnership are growing as more Member Countries announce projects involving foreign oil companies.

'Despite continuing uncertainty, investment in the oil industry will be a highly crucial element.'

Optimistic stance

In conclusion, I would once more like to reiterate my optimistic stance regarding the availability of oil resources as technological advances will continue to support a large oil reserve base for many years to come.

However, what is more pressing is the need to secure large-scale investments in time to satisfy the growing oil demand in coming years. We are conscious of this daunting task, and that is why OPEC has become more cautious about its production policy, and strives to maintain prices at around $25 a barrel in order to ensure continued investment for supply security.

This is at the centre of our present efforts to sustain market stability at prevailing price levels, not only in the short-term, but also in the long-term. It is something that OPEC wants to achieve together with the oil industry by sharing these responsibilities.

California dreaming?

Speaking the unspeakable about electricity deregulation

A trenchant critic of electricity deregulation, ***Professor Ferdinand E Banks**** *examines how misguided enthusiasm for the workings of the free market has created an energy crisis that has brought darkness to the 'sunshine state' of California.*

Many years ago, at a very pleasant seaside conference in Portugal, the late Fred Schweppe of the Massachusetts Institute of Technology portrayed the spot-price electricity marketplace as an institution where a utility (electricity seller) and its customers were bosom partners working to minimize the price at which electricity was sold to all categories of buyers.

As a resident of Sweden, I do not look forward to personally co-operating with any electric utility in or near Sweden, because until the great deregulation wave was set in motion about six years ago, we already had access to an extremely dependable supply of electricity that was produced at perhaps the lowest cost in the world, and whose price to both industries and households was very reasonable.

I can also mention once again that despite their attempts to portray themselves as public-spirited inheritors of Swedish engineering brilliance, the long-run goal of the ladies and gentlemen in the executive suites of the newly-deregulated electricity industry is to sell as much electricity as possible outside Sweden, where its price in some places is double that in the latter country.

Until the great California fiasco, it was almost impossible to find any technical economics literature about the shortcomings of deregulated electricity, for the very simple reason that the editors of scientific periodicals in economics did not feel that it was in their interest to carry reports that impugned the activities of an industry whose sales to consumers in the US alone amounts to about $250 billion per year. As Ezra Mishan once pointed out in a widely-neglected paper, these reviews are perhaps the least read in the entire academic world, but even so many of us would like to think it possible for our students to obtain as much genuine insight from 'learned journals' as they can cull from short articles in the *Wall Street Journal* or *Financial Times.*

Before the bad news in California surfaced, many persons were of the opinion that both electricity and natural gas deregulation were functioning as smooth as silk. This has never been the case! The Scandinavian exchange Nord-Pool is often cited as a jewel in the deregulation crown, but in truth deals have been hatched in that establishment which can only be called bizarre.

As for the situation in the UK, shortly after deregulation began to accelerate, the newly-privatized utilities were subjected to a ferocious public attack as profits, dividends, share prices and executive salaries went into orbit, and the increased volatility of electric prices portended that they could follow.

As I stressed in my energy economics textbook, the way things were supposed to work was that thousands of jobs that could only exist in a 'non-competitive' environment would be liquidated, leading to greater efforts by those still in employment, which might bring about an increase in profits that could be translated into higher dividends and share prices (and perhaps some higher salaries), as well as reduced (real) electricity prices.

And, at the alpine heights of pure theory, there might be an improved macroeconomy due to these lower prices that would facilitate the reabsorbtion into employment of the persons who had been 'retrenched'.

While the pink slips were being dispensed throughout the UK, a further boost to profits fortuitously resulted from a slide in the price of the fuels used to produce electricity (ie, gas, oil and coal), but even so the marvelous 'efficiency gains' promised by Professor Stephen Littlechild (the UK electricity regulator) generally failed to materialize.

A logical question at this point is why should anything else have been expected? Littlechild's programme for a restructuring of the industry in order to increase competition did not make sense in any serious classroom in the world in which mainstream economic theory was taught. Instead, as with the Swedish entrance into the European Union (EU), deregulators and re-regulators and their booster clubs

* *This is an extended version of a paper presented by **Professor Banks** at the 22nd International Meeting of the International Association for Energy Economics (IAEE), Rome, Italy, June 9–12, 1999, and published in the proceedings of the conference. The author teaches economics at Uppsala University, Sweden.*

worked overtime to convince the losers in the deregulation game that they were actually winners.

The sad truth is that as with the Swedes and the EU, many of the losers have bought this misapprehension, but I find it impossible to sympathize with them. They should have understood that virtually none of 'their' favorite economists were capable of understanding what could go wrong when complex electric networks are disrupted by crank ideas about 'competition' and 'efficiency', unless those dedicated scholars possessed at least an elementary background in electric circuit analysis: for all its mathematical sophistication, an overwhelming portion of the theoretical work on electric deregulation does not apply at all to real-world markets.

Furthermore, even if we can overlook their lack of acquaintance with, for example, Kirchoff's law, the modeling of the electric contract market by many UK economists — which amounts to a purely economics endeavor — is nothing short of scandalous, and if there were such a thing as 'natural justice', most of the publications on deregulation originating in the UK would be on the desks of the serious fraud authorities — they are strictly money-making propositions. This is only incidentally the case in Scandinavia, because with certain exceptions the Swedish and Norwegian economists riding the deregulation gravy train hardly understand the lowest-level economics concepts about which they write and speak with neither expertise nor confidence.

The driving force behind the deregulation crusade was — and perhaps still is — certain political and economic ideas of the 'Reaganomics' variety, which are based on supplanting government and regulators by corporate elites and the financial markets, and firmly placing shareholders ahead of customers and employees. Many shareholders like myself were unimpressed by these ambitions, just as we are less than amused by the serial mental lapses of our political masters that inexorably led to the latest "regulatory failure", to use an expression introduced by the *Financial Times* (March 8, 1995) to describe one of Professor Littlechild's classic blunders.

The positive side of the present situation is that perhaps everywhere in the world, alert voters and/or shareholders may learn something from it. When the German electricity sector was deregulated in February 1999, with all restrictions foolishly abolished in a single move, a madcap price war followed that had a staggering impact on the power sellers. Despite an outbreak of ruinous competition, producers continued their bombastic talk about gaining a larger slice of the electric market, but even so share prices continued to fall.

'The positive side of this situation is that people everywhere in the world may learn something from it.'

Industry background

With the exception of the lunatic fringe of academic economists and their acolytes, electric power was once considered a natural monopoly. Consequently, in return for an exclusive franchise, electric utilities were obligated to serve, with a high degree of reliability, all existing and future customers. In other words, the provision of electricity was to some extent regarded as a public service. Prices, in general, would be regulated on a cost-plus basis. Under that system, the worsening strain on electricity supply that we are now witnessing, and the growing confusion of legislators and their experts, could have been held at bay indefinitely.

The events bringing about a change in that situation in the US have been outlined in a brilliant article by Thomas J Overbye — a recipient of the IAEE Power Engineering Society's outstanding young engineers award — and presented in *American Scientist* (May–June, 2000).

Until the early 1970s, electric rates were decreasing, while the demand for electricity was increasing at between seven and ten per cent per year. Few engineers or economists felt inclined to challenge, publicly, the concept of natural monopolies, and as Overbye points out, the system of vertical monopoly — ie, a single owner for the generation and transmission, and perhaps distribution of electricity — provided "a stable basis for building an extensive and fairly reliable system."

Trouble appeared with the first energy price shock, which reduced macroeconomic growth rates, and in addition increased the price of fossil fuels employed in generating electricity. New capacity continued to come on line, while electricity demand slowed. This, of course, was not the end of the world, but various 'wannabes' felt that they could profit by painting it as such. Among other things they focused on what they called the 'waste' created by monopoly/vertical integration, although any intelligent person familiar with the price of electricity, its reliability, and the modest electric reserve margin should have refused to entertain this unsubstantiated bunkum.

Many economists who believed in increasing returns to scale were then convinced that it was a good career move if they changed their minds, and a small but influential clique of energy professionals arrived at the fantastic conclusion that it was economical to purge the supply side of the electricity sector of all or most of its monopoly elements, and thereby obtain a facsimile of the competitive market that is taught to almost all first year economics students.

One of the truest believers turned out to be Professor William W Hogan of the Kennedy School of Government (Harvard University), who in a Royal Society for the Encouragement of the Arts lecture, suggested that "England and Wales made a mistake in setting up too few competing

generators, so competition is slow in coming through entry."

"Slow" is not the word that I would have used had I been fortunate enough to give this lecture, since Professor Littlechild takes a back seat to no man or woman when it comes to unleashing his competitive urges: given the opportunity he would deregulate and 'fragment' every electric sector in every country on the face of the globe. His so-called slowness was the simple result of not being able to re-regulate the UK electric sector without an enormous misallocation of resources.

Misallocation in what sense? In the sense that a too hasty introduction of unrestrained competition could have resulted in a large stock of embarrassingly visible 'stranded' (or superfluous) power stations that attained this footing because their output could be procured more inexpensively from other firms — perhaps a foreign firm without a genuine interest in taking part in the deregulation game, such as Electricité de France (EdF). This is what happened to a certain extent in Germany.

In addition, as a president of EdF (Gilles Menage) once remarked, the kind of complete deregulation favored by Littlechild and by the EU's Energy Directorate would have resulted in a downgrading of social considerations (such as providing universal services), as well as removing the right of authorities to intervene on strategic (ie, macroeconomic) grounds.

The Swedish government, of course, would love to give up any and all rights that they are in possession of for a friendly pat on the back from their colleagues in Brussels. However, the self-esteem of French politicians and civil servants is on a completely different level, which explains why they still export inexpensive electricity from their nuclear plants, and merrily continue to ignore a directive from the EU to open their interior market to competition.

Professor Hogan also told his audience that: "for most business purposes, financial contracts could stand in the place of physical transactions, with only a final settlement at the price revealed in the spot market."

In some cases this is probably right, but where electricity and natural gas are concerned, it is completely wrong! This is the kind of 'wisdom' that gives economics a bad name, because as an observer in Texas recently remarked: "If Enron is holding 600 futures contracts instead of six billion cubic feet (of gas) in storage, you can't heat your home with that." (*Forbes*, January 22, 2001).

As I have pointed out in my textbook, and in a few dozen articles and lectures, the kind of financial contracts that Hogan is thinking about — futures and options — are and will probably remain a distinguished non-starter where electricity and gas are concerned.

'Futures and options are and will remain a non-starter as far as electricity and gas are concerned.'

Sometimes the desire to see things in deregulation that are not there is almost as touching as it is pathetic. According to an executive of a very successful international firm, "The Scandinavian market is very sophisticated and open-minded. The Nordic power market is a model for both the rest of Europe and the US."

That is strange, as I would have thought that the exact opposite was true. Deals have been concluded on Nord-Pool which made no economic sense at all, and on at least one occasion trading has had to be suspended because the price structure of paper transactions was completely out of line with that displayed in the physical market. In point of fact, the most exquisite asset of Nord-Pool at the present time is the bemusement and lack of sophistication of its clientele.

Where deregulation and various commandments from the EU's 'Central Committee' are concerned, the situation has deteriorated to a point where these Nord-Pool patrons have joined many of their less affluent countrymen in displaying a remarkable ability to maintain their composure in the face of virtually any outrage. Just as they have accepted at face value the fairy tale that Sweden will gain economically and socially from being a part of the EU, they also elect to believe the preposterous claim that very inexpensive Scandinavian electricity will be made even cheaper by deregulation.

Instead the likelihood is that Swedish industry and households will face higher electricity prices because of the limited Swedish electric supply, a very large 'Baltic Ring' demand, and the inane bureaucratic meddling from jet-setting EU officials. In addition, some people in Sweden will be taught a badly needed but unwelcome lesson in applied economics, particularly about trying to manage risk with derivatives instead of long-term contracts for electricity.

The present contribution is unashamedly rich in denial, but what I will not dispute is that beauty is in the eye of the beholder. Several years ago, Hazel O'Leary — then the US Secretary of Energy — called the Pakistani energy policy "the best energy policy in the whole world".

This was an expression of her sincere belief that Pakistan's independent power producers, with healthy loans from financial institutions, the International Monetary Fund and World Bank, etc, would give the Third World a demonstration of the beauty of privatized power in a competitive setting. Without going into details, I can note that those of us who are familiar with the resulting botch — and that includes many top executives from the entire international financial community — have come to the conclusion that it was possibly the worst energy policy ever conceived or conceivable.

According to the former US Energy

Secretary, Bill Richardson, "America is a superpower, but it's got the grid of a Third World nation." *(Wall Street Journal,* May 11, 2000). What he should have said was that the US had the grid of a superpower before the onset of deregulation, since a large part of the present deficiencies are the result of a deregulation that has distorted the previous supply-demand equilibria (based, for example, on optimal dispatching), and in the process promoted the kind of uncertainties that reduced investment in new capacity.

Everyone who has studied economics at any level should find it easy to comprehend that when electricity use increases by 23 per cent since 1992, but capacity only rises by six per cent, then the crucial electric reserve margin is in the danger zone, and entire geographical regions are vulnerable to disruptions caused by equipment breakdowns and human error.

As indicated by Gregory Palast *(The Observer,* August 20, 2000) when California's state senate voted to introduce "the miracle of market competition to electricity, they wrote right into the law that domestic prices would fall by at least 20 per cent." Instead, on a number of occasions, the price spiked by several hundred per cent over that of the previous year, and the legislator who sponsored the original deregulation law joined a consumer boycott (that featured thousands of consumers refusing to pay their electric bills). This kind of price escalation has become commonplace. In the UK, for example, sudden increases in costs have led to the temporary closing of energy intensive industries, while in the US Midwest, it is easy to detect occasions when the spot market electricity price doubled or tripled.

"The answer (to the California contretemps) is straight out of Econ 101: free markets improve reliability and lower prices." *(Business Week,* August 28, 2000.) This is certainly true much of the time, but I prefer to ignore that kind of enlightenment when it comes to the present subject. In the courses that I have taught all over the world in international finance, and in my forthcoming finance textbook, I have never hesitated to present myself as a devotee of the efficient markets hypothesis (EMH). Put simply (when considering stocks, bonds, etc), individuals are not bigger than the market.

I have often had some reservations about this approach where non-financial assets are concerned, but it is useful to observe what happened in Australia when the government sold off some electric assets: the market immediately wrote these assets down to a tenth of their sales price. What happened was an unadorned application of the EMH, although it might not be explained in the Econ 101 textbook referred to above.

'Electricity remains the ultimate perishable commodity, since it cannot be stored.'

The value of those electric assets was based on their efficient integration into a comprehensive electric supply network. When fragmented, economics and/or technical viability was reduced, perhaps drastically, and so *(ceteris paribus)* the money value of the assets had to decline. Of course, it might have been possible to avoid so drastic an outcome if, as in the UK, an electric power pool had been available of the type that the deregulatory body OFGEM has labeled a playground for price-fixing and collusion.

Some comments on this subject in the *Financial Times* (August 22, 2000) are well worth a raised eyebrow or two. According to Amity Shlaes, the "power crisis" in California is the result of not giving private initiative sufficient elbow room. I seem to remember Al Capone having the same opinion about bootlegging. Shlaes says that: "Worldly players such as Enron have large derivatives departments, and are nimble traders in the secondary markets."

I would never deny that Enron has proved to be a brilliantly managed corporation, but it will take more than brilliance or agility to make sure that its involvement with futures and options stays out of deep trouble — at least, as long as electricity remains the ultimate perishable commodity, in that sizable quantities of it cannot be stored for a millisecond. As a result, it features a potential for highly volatile price movements that are reinforced by the illiquidity that can suddenly appear in any market for derivatives.

"People get burned on a daily basis," an observer noted of the Australian market, by which he meant that anyone seeking price insurance via derivatives trading could be faced by terrifying margin calls and option premiums. But even so, for all its difficulties, this market is being touted as a model for Asian countries that are considering the adoption of a 'pro-competitive' electric sector. Even the Philippines — over-populated and, outside of certain enclaves, desperately poor — has been declared a beautiful candidate for reform.

Needless to say, a follow-Australia syndrome would be more appetizing right now than one having to do with imitating California, although it reduces to the same thing. Electricity prices in Australia have vibrated between zero and several thousand dollars per megawatt hour, and the only explanation is deregulation.

In *The Economist* (October 7–13, 2000) there was a short discussion of the candidates for the Nobel prize in economics. One of the highlights of this curiously pretentious essay was a tale about how Professor Gary Becker (of the University of Chicago) received the prize only after "a flood of nominations forced the Stockholm cabal to act."

Gary Becker's politics and that of the Stockholm "cabal" were perfectly in harmony: he was therefore a certainty for the prize. As for his work, it deals with things like the economics of marriage, consuming and 'swinging' drugs, education, etc, and he has published extensively on these topics. His work on drugs and the other subjects mentioned above is a dismal joke perpetrated on those of us who teach the 'dismal science'.

I can also reveal that *The Economist's* experts have concluded that Professors George Akerlof and Michael Spence should be leading candidates for the prize next year. I have held professorships and research positions all over the world, and consider myself an outstanding teacher of economics and finance, but the only work by Akerlof with which I am familiar has to do with buying used automobiles — some of which he has decided to call 'lemons'. As for Spence, I seem to remember being told many years ago that he has something to teach me, but even so I can hardly conceive of a situation in which I would be interested in finding out what it is.

Now for the physics and engineering. Suppose that I heard that the Martians had landed at Åre or Riksgränsen, and were snowboarding down slopes reserved for skiing. Although I would not willingly turn to the excruciatingly irrelevant work of the above mentioned economists for counsel, I might be tempted to examine once again (US) Department of the Army Field Manual FM 6-40 (Field Artillery Gunnery) because I know that diligent application of the physics (ie, ballistics) in that volume is precisely what is needed to convince these undesirables from outer space to go back to where they came from — or at least to pay Courchevel or Kitzbühl a visit.

The approach (or logic) being used above can be applied to the theoretical and empirical economics pertaining to the electric market, and in particular the electric contract market. The main fault I find with these materials is that they are distracting. It is distracting, as well as frustrating, to spend hours or months pouring over highly mathematical articles and end up with less than nothing; and I personally consider it demeaning to be engaged in consuming or producing that kind of work. It also needs to be made clear that no successful economic model of any financial market, anywhere in the world, has ever been constructed, nor should it be expected that one can be constructed of a complete electric product or paper market. It may, however, be possible to construct 'partial' models in which some aspects of these markets can be successfully studied.

The theoretical key to a successful deregulation of both the electricity and gas market is the opportunity for 'arbitrage' — buying cheap in one market (or region) and selling dear in another.

Even economists without a background in electrical circuit analysis must consider this extremely simple, especially when they observe extensive inter-regional electric grids; but anyone who is sufficiently interested in this topic to carefully examine Thomas Overbye's paper, should come to understand that this is not the case. Electricity is different, and different in the sort of way that prevents the formulation of the elementary arbitrage rules that we employ in the economics classroom!

'Electricity is different in a way that prevents the formulation of elementary arbitrage rules.'

California dreaming?

Overbye notes that states like California with a strong environmental movement, high electric rates and plentiful alternative sources of power, "have been the first to jump on the bandwagon." It is this eagerness which explains blackouts, brownouts, large rises in electric prices, and the huge debt now facing some utilities in that state. Equally spectacular, but less noticed, the lights went out in the centre of Auckland (New Zealand) in the middle of 1998, and stayed out for a month. Perhaps it is a coincidence, but the last time I taught in Australia, I heard the New Zealand deregulation agenda described as the most thorough in the world.

These two debacles are worth pondering, because it may only be a matter of time until this kind of event happens repeatedly in the larger urban areas of many Third World countries, and for that matter anywhere that utility managers face the sort of co-ordination problems that begin by having to match supply to a growing demand while keeping standby capacity at a minimum. As for environmentalists, they often construe deregulation as a blow against what they call 'monopoly', and so we find, for example, Stephen Littlechild and Amory Lovins in the same bag. This is what the French call a *mésalliance.*

Most proponents of deregulation have started to harp about full reform instead of what they interpret as the half-way nature of present arrangements. The next time you hear this, tell them to examine what full reform meant for German utilities, and what it will mean in the future if the French continue to expand their nuclear sector.

My strong objections to deregulation are related to the increasing amounts that I pay for electricity. I am somewhat less concerned with the attempt by various well-connected economists to revoke some of the fundamental principles of mainstream economics. As P Jasinski and G Yarrow of the Regulatory Policy Centre (Oxford University) observe "Electricity is an industry unlikely ever to be characterized by anything approximating perfect competition."

References

Banks, Ferdinand E, (2001): 'Global Finance and Financial Markets', World Publishing Company: London, New York, and Singapore.

— (2000): 'Energy Economics: A Modern Introduction', Kluwer Academic Publishing: Boston, Dordrecht, and London.

— (2000): 'Oil, electricity deregulation, and nuclear energy', Petromin (Asia), March.

Overbye, Thomas J, (2000): 'Re-engineering the Electric Grid', American Scientist, May-June.

114th OPEC Conference agrees to cut production by one million barrels/day

No 3/2001
Vienna, Austria, March 16, 2001

Opening address to the 114th Meeting of the OPEC Conference by HE Dr Chakib Khelil, President of the Conference and Minister of Energy and Mines, Algeria

Welcome to the 114th Meeting of the OPEC Conference. Since we last met in January, there has been one change among the Heads of Delegation, with HE Dr Adel K Al-Sabeeh replacing HE Sheikh Saud Nasser Al-Sabah as Minister of Oil for Kuwait. Let us, therefore, welcome HE Dr Al-Sabeeh to the OPEC Conference and say how much we look forward to his participation in our discussions. At the same time, I should like to express our gratitude to HE Sheikh Al-Sabah and to wish him every success in the future.

I should also like to greet the high-ranking officials who are attending this Meeting as official observers, on behalf of the following countries: Angola, Kazakhstan, Mexico, Oman and Russia. Their presence here underlines the depth of their commitment to co-operate with OPEC and other like-minded oil-producing nations, in order to ensure reliable, low-cost oil supply to the

Algeria's Minister of Energy & Mines and President of the Conference, HE Dr Chakib Khelil (centre), flanked by OPEC Secretary General, HE Dr Alí Rodríguez Araque (right) and the Chairman of the Board of Governors, HE Abdulla H Salatt of Qatar (left), pictured as the Conference is about to get under way.

market, achieve stable oil prices on a sustainable basis and maintain an open, fruitful dialogue with our clients. Excellencies, we are privileged to have you here among us and we appreciate your effective participation in stabilising oil prices. Welcome to our Conference. I am sure that, while we are here, we shall have many opportunities to exchange views on matters of concern to all of us in the market.

Today's Meeting is the first regular one we have held since the 40th anniversary of our Organization in September. The two intervening Extraordinary Meetings, which took place in November and January, were called with the specific purpose of reviewing OPEC's production agreement in the light of the prevailing market conditions. Both Meetings were successful in this regard. Not only did they underline their effectiveness in achieving the desired price stability in the market, but, of equal importance, they did this in a visible and credible manner. In other words, they sent a clear message to the market that OPEC was monitoring the situation carefully and professionally, that it was always mindful of the need to ensure that demand was fully met and that it was prepared to take precautionary measures, whenever necessary, to help restore order and stability to the market. Such a measure was, indeed, taken on January 17, when our Conference agreed to adjust the Organization's overall production level by 1.5 million barrels per day, with effect from February 1.

Since the January Meeting, prices have weakened, but nevertheless remained within the range of $22–$28 per barrel for OPEC's spot Reference Basket of seven crudes. This demonstrates the effectiveness of the Organization in achieving price stability. Put simply, this price range allows the market to breathe, by accommodating reasonable fluctuations in supply and demand, at the same time as keeping prices within limits which have already found much acceptance from the key players of the industry. Despite this — and measured in year 2000 US dollars — the price of oil today is about 40 per cent of its average trend level of 20 years ago.

At today's meeting, we shall be reviewing the oil market outlook, to determine whether adjustments are required to OPEC's production agreement. Seasonal factors will obviously play a part

Top: The United Arab Emirates' Minister of Petroleum and Mineral Resources, HE Obaid bin Saif Al-Nasseri (right), discusses a point with Saudi Arabia's Minister of Petroleum and Mineral Resources, HE Ali I Naimi (left).

Centre: The Iranian and Iraqi Ministers, HE Bijan Namdar Zangeneh (left) and HE Dr Amer Mohammed Rasheed (right) deep in conversation.

Bottom: Iraq's OPEC Governor, Dr Mussab H Al-Dujayli (left) is pictured here with the Director of OPEC's Research Division, Dr Shokri Ghanem.

in this, as will the global economic prospects. There is also the need to ensure that stable low-cost oil supplies from OPEC will continue today to contribute positively to sound economic growth in consuming countries and the world at large — just as they have done in the past. After all, economic growth in the short term is driven by consumer confidence and OPEC aims to reinforce this confidence by ensuring stable prices.

At gatherings like this, there is too often the tendency to become excessively focused on topical issues of particular concern to us. Sometimes, however, it can be beneficial to all of us if we just pause for a moment and look upon our recent achievements.

Top: OPEC Secretary General, HE Dr Alí Rodríguez Araque (left) welcomes the Head of the Delegation of Kazakhstan, HE Dr Sagynbek T Tursynov (right). Looking on (centre) is the Head of OPEC's PR & Information Department, Farouk U Muhammed, mni.

Centre: Algeria's Minister of Energy & Mines and President of the Conference, HE Dr Chakib Khelil (left), chats to the Head of the Angolan Delegation, HE Desidério da Graça Verissimo e Costa (right).

Bottom: Saudi Arabia's Minister of Petroleum and Mineral Resources, HE Ali I Naimi (left) makes a point to the Russian Federation's Deputy Fuel & Energy Minister, HE Alexei B Miller (second right).

With the 40th anniversary celebrations now behind us, OPEC can reflect upon a good start to the 21st century. We held a successful Second Summit of OPEC Heads of State and Government in Caracas in September; there, our Member Countries reaffirmed their commitment to the guiding principles of our Organization, as well as taking an in-depth look at the likely path the industry will follow in the years ahead. Two months later, in Riyadh, the producer-consumer dialogue received a boost, with the level of participation by industrialised countries reaching new heights at the Seventh International Energy Forum. This fitted in well with the steady rise in OPEC/non-OPEC co-operation that has become apparent in recent years, with the resultant joint action enabling us to effectively tackle the series of oil price issues that began in the late 1990s. Then there has been the successful introduction of the oil price range, to which I referred earlier. And finally, there has been the realisation by the general public in many consuming client countries that the blame for high petrol prices should not lie with OPEC, but instead with their own governments for imposing excessive levels of taxation. Once again, we call upon these governments to rethink their distortionary fiscal policies, insofar as they unfairly affect oil product prices for their citizens; at the very least, they could stop apportioning blame to OPEC for high prices, when their tax systems allow levels of revenue that are four times as high as

the revenue received by our Member Countries.

The positive achievements of solidarity and co-operation during the first year of the new century have set us off in the right direction for meeting the new challenges that lie before us. OPEC's forecasts show the world oil requirement rising by just over a third in the first two decades of this century; the process of ensuring that the oil needs of our client countries are met throughout this period concerns all of us in the industry today. We must strengthen the industry's capacity to readily accommodate the incremental rises in demand as they occur in the years ahead. While OPEC has a special responsibility for this, because of its strong, competitive reserve base, all parties in the industry should be involved — OPEC and non-OPEC, producers, consumers and investors. Non-OPEC producers, for their part, have a special responsibility in helping OPEC achieve stable oil prices. Without their co-operation, a repeat of the 1998 oil price collapse remains a likely outcome, with disastrous consequences for all concerned: here again, I repeat, for producers, consumers and investors. Only through co-operation with all partners can we ensure that the huge investment that is required will indeed be in place in a timely manner.

Moreover, in meeting such a formidable challenge, we must acknowledge that we are operating in a rapidly evolving geopolitical landscape, in an era of globalisation and the information technology revolution, and in the face of a possible detrimental impact on oil producers of the climate change negotiations and world trade talks. The challenge therefore requires us to be even more vigilant than usual, if we are to successfully identify and react to the new situations, as they manifest themselves in the months and years ahead.

As in the past, OPEC is committed to rising to this challenge. But we can only do this to maximum benefit if our efforts are accompanied by the willing participation and effectiveness of all parties in the industry, in a spirit of solidarity, co-operation, dialogue, trust and transparency.

Thank you for your attention.

Top: Algeria's Minister of Energy & Mines and President of the Conference, HE Dr Chakib Khelil (right), in conversation with Kuwait's Minister of Oil, HE Dr Adel K Al-Sabeeh (centre), and Ambassador to Austria, HE Nabeela Abdulla Al-Mulla (left).

Centre: OPEC Secretary General, HE Dr Alí Rodríguez Araque (right) welcomes Libya's Chairman of the National Oil Corporation, HE Ahmed Abdulkarim Ahmed.

Bottom: The Nigerian Delegation was headed by Presidential Advisor on Petroleum and Energy, HE Dr Rilwanu Lukman (left), and included Ambassador to Austria HE Abdulkadir Bin Rimdap (centre) and ECB Representative, Mohammed S Barkindo (right).

Venezuela's Minister of Energy and Mines, HE Alvaro Silva Calderon (second left) explains a point to (next to him) OPEC Secretary General, HE Dr Alí Rodríguez Araque, watched by Venezuela's OPEC Governor, Edgar Rodriguez (right) and Economic Commission Board Representative, Dr Gloria Mirt (left).

No 4/2001
Vienna, March 17, 2001

114th Meeting of the OPEC Conference

The 114th Meeting of the Conference of the Organization of the Petroleum Exporting Countries (OPEC) convened in Vienna, Austria, on March 16 and 17, 2001, under the Chairmanship of its President, HE Dr Chakib Khelil, Minister of Energy & Mines of Algeria and Head of its Delegation.

The Conference expressed its pleasure at the presence of high-level representatives from Angola, the Republic of Kazakhstan, Mexico, the Sultanate of Oman, the Russian Federation, and fellow oil-producing countries, whose strong support for a reduction in production is welcomed by the Organization. The Conference also reiterated its call on other non-OPEC producers to co-operate in efforts to stabilize the market through an appropriate adjustment in production.

The Conference reviewed the Secretary General's report, the report of the Economic Commission Board, the report of the Ministerial Monitoring Sub-Committee (MMSC), and various administrative matters.

The present weaker world economy and the traditional sharp downturn in demand associated with the second quarter both clearly point to the need for a correction in oil supply, and the Conference has taken the decision to stabilize the oil market.

Having reviewed the current market situation, the Conference agreed to reduce production by one million barrels per day, with effect from April 1, 2001, making individual Member Country output levels as follows *(in barrels per day):*

Country	Output decrease	New output level
Algeria	32,000	773,000
Indonesia	52,000	1,255,000
IR Iran	146,000	3,552,000
Kuwait	80,000	1,941,000
SP Libyan AJ	54,000	1,296,000
Nigeria	82,000	1,993,000
Qatar	26,000	627,000
Saudi Arabia	324,000	7,865,000
UAE	88,000	2,113,000
Venezuela	116,000	2,786,000
Total	**1,000,000**	**24,201,000**

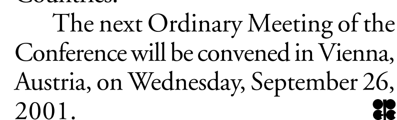
Member Countries strongly emphasized their firm commitment to the agreement and each stressed its commitment to continue to maintain full compliance. The Conference agreed that market conditions should continue to be closely monitored and that, should prices remain persistently outside ac-

ceptable levels, immediate action to stabilize the oil market will be taken. The Conference further decided to hold an Extraordinary Meeting of the Conference on June 5 and 6, 2001, in Vienna, Austria, in order to review the situation.

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.

The Conference passed Resolutions that will be published on April 17, 2001, after ratification by Member Countries.

The next Ordinary Meeting of the Conference will be convened in Vienna, Austria, on Wednesday, September 26, 2001.



Top: The Head of the Mexican Delegation, HE Ing Juan Antonio Bargés (seated, second right) addresses the Conference, with (seated to his left) the other Mexican delegates, Dr Lourdes Melgar and Pablo Espresate, and (right) Oman's Ambassador to Austria, HE Salim Mohammed Al Riyami.

Centre: Qatar's Minister of Energy and Industry, HE Abdullah bin Hamad Al Attiyah, is surrounded by reporters.

Bottom: Indonesia's Minister of Energy and Mineral Resources, HE Dr Purnomo Yusgiantoro (seated centre) answers journalists' questions. Nearest the camera is Indonesia's Ambassador to Austria, HE Rhousdy Soeriaatmadja.

Left: HE Dr Khelil (second left) answers a question at the press conference. He is flanked by HE Dr Rodríguez Araque (second right), Mr Muhammed (right) and OPEC News Agency Editor, Fernando J Garay (left).

Below: The press room was, as ever, packed with journalists.

Below: Gathered for the traditional group photo are (l-r) HE Abdulla H Salatt, HE Alvaro Silva Calderon, HE Bijan Namdar Zangeneh, HE Dr Amer Mohammed Rasheed, HE Dr Chakib Khelil, HE Dr Purnomo Yusgiantoro, HE Dr Rilwanu Lukman, HE Ali I Naimi, HE Obaid bin Saif Al-Nasseri, HE Dr Adel K Al-Sabeeh, HE Abdullah bin Hamad Al Attiyah, HE Ahmed Abdulkarim Ahmed and HE Dr Alí Rodríguez Araque.

OPEC Secretary General urges broader perspective on global warming

Press Release No 5/2001
Vienna, March 30, 2001

The recent statement by United States President George W Bush questioning the viability of the Kyoto Protocol is seen by the OPEC Secretary General, Dr Alí Rodríguez-Araque, as an indication of the need to see the issue from a broader perspective.

"Although the concern we all share for the environment and worries about global warming have a firm grounding, sometimes realities are stronger than our goodwill," said Rodríguez.

"The rigid, mechanical application of policies that may be fair, on many occasions could collide with reality, making such policies unfeasible the way they were designed.

"For instance, in the case of OPEC, if the Kyoto Protocol commitments were applied as established, they would mean losses of up to $63 billion per year for the Organization's Member Countries.

"Losses on such a large scale would clearly be unsustainable for the economies of OPEC Member Countries and other oil-producing nations," he said.

For the OPEC Secretary General, President Bush's assertion that it is necessary "to find new ways of thinking about greenhouse gases", comes in response to the economic damage that the implementation of the Kyoto Protocol could bring, not only to oil exporters but to the world economy at large.

"It thus shares the essence of OPEC's concern on the issue," he noted.

Nonetheless, Dr Rodríguez pointed out that the United States, with four per cent of the world's population, is the largest polluter in the world, both in absolute and per capita terms.

He said it was generally recognized that the US accounted for approximately 25 per cent of global greenhouse gas emissions.

OPEC Secretary General pays courtesy call on Austrian President HE Dr Thomas Klestil

As part of the process of familiarizing themselves with their new surroundings, it is traditional for senior diplomats posted abroad to make courtesy calls on senior government officials of their host country.
Thus, on March 1, 2001, the OPEC Secretary General, HE Dr Alí Rodríguez Araque, who took up his post at the start of January this year, paid a courtesy call on the President of the Federal Republic of Austria, HE Dr Thomas Klestil, at the Hofburg in Vienna.
Prior to his meeting with the Austrian President, Dr Rodríguez had already met with other senior members of the Austrian Government.

Above: OPEC Secretary General, HE Dr Alí Rodríguez Araque (left) in discussions with the Austrian President, HE Dr Thomas Klestil.

Right: HE Dr Klestil (left) and HE Dr Rodríguez share a lighter moment.

January–March

OPEC Meetings

The *31st Meeting of the Ministerial Monitoring Sub-Committee* was held at the OPEC Secretariat, Vienna, Austria, on January 17, 2001.

The *113th (Extraordinary) Meeting of the Conference* was held at the OPEC Secretariat, Vienna, Austria, on January 17, 2001.

The *102nd Meeting of the Board of Governors* was held at the OPEC Secretariat, Vienna, Austria, on February 12–14, 2001.

The *95th Meeting of the Economic Commission Board (ECB),* was held at the OPEC Secretariat on March 12–13, 2001.

The *32nd Meeting of the Ministerial Monitoring Sub-Committee* was held at the OPEC Secretariat on March 15, 2001.

The *114th Meeting of the Conference* was held at the OPEC Secretariat, Vienna, Austria, on March 16–17, 2001.

Secretary General's diary

The *Annual Meeting 2001* of the World Economic Forum was held in Davos, Switzerland, January 28–30, 2001.

A luncheon address was presented at the *IP Week 2001,* London, UK, February 19–22, 2001.

An official visit was paid to India, and was organized by the Indian Ministry of Oil & Natural Gas, New Delhi, India, March 19–22, 2001.

Secretariat missions

A seminar on *I Costi Dell'Energia* (The Cost of Energy) was held at the University of Pisa, Pisa, Italy, January 22, 2001.

A lecture was presented to the *Engineering Society of Denmark (IDA),* Oil and Gas Group, Fredriksberg, Denmark, January 22–23, 2001.

Training courses on *An Introduction to Futures* and *Energy Futures Workshop* were organized by the International Petroleum Exchange, London, UK, on January 23–26, 2001.

The *IPI World Congress* and the *50th General Assembly* were organized by the International Press Institute, and held in New Delhi, India, January 26–29, 2001.

The *International Gas Economics Seminar* was organized by ENSPM/IFP, and held in Paris, France, February 13–16, 2001.

A Meeting on *Energy Modelling for Policymakers* was organized by the International Energy Agency, and held in Paris, France, March 1–2, 2001.

A *High-level Meeting on Energy for the Preparation of the Regional Round Table on Energy at the United Nations LDC-III,* was organized by UNIDO, and held in Vienna, Austria, March 14–16, 2001.

A training course on *Managing Human Resources* was organized by the Management Center Europe, and held in Istanbul, Turkey, March 19–23, 2001.

The *Russian Oil & Gas Summit* and the *Caspian Oil & Gas Summit* were organized by The Energy Exchange, and held in London, UK, March 20–21 & 22–23, 2001.

A visit to UNCTAD was arranged, and took place in Geneva, Switzerland, March 22–23, 2001.

A training course on *Economics of the Oil Supply Chain* was organized by the Institute of Petroleum, and held in Cambridge, UK, March 26–30, 2001.

Forthcoming OPEC Meetings

The *103rd (Extraordinary) Meeting of the Board of Governors* will be held at the OPEC Secretariat, Vienna, Austria, on May 3, 2001.

A *Brainstorming Session on OPEC Public Relations* will be held at the OPEC Secretariat, Vienna, Austria, on May 4–5, 2001.

The *33rd Meeting of the Meeting of the Ministerial Monitoring Sub-Committee (MMSC)* will be held at the OPEC Secretariat, Vienna, Austria, on June 4, 2001.

The *115th (Extraordinary) Meeting of the Conference* will be held at the OPEC Secretariat, Vienna, Austria, on June 5–6, 2001.

The *104th Meeting of the Board of Governors* will be held at the OPEC Secretariat, Vienna, Austria, on August 28, 2001.

The *96th Meeting of the Economic Commission Board (ECB),* will be held at the OPEC Secretariat on September 17, 2001.

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

The *116th 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.

The *3rd (Annual) Multi-Disciplinary Training Course for Member Countries' Trainees* will be held at the OPEC Secretariat, Vienna, Austria, in October 2001.

The *3rd Informal Brainstorming Session* will be held at the OPEC Secretariat, Vienna, Austria, in November 2001.

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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 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"

Iran's oil production capacity to get significant boost as three new fields come onstream over next few years

Tehran — Iran's oil production capability is expected to receive a significant boost when a three-year project to develop three oil fields in the region is completed, according to a report in the daily *Iran* newspaper last month.

The paper quoted the head of the Lavan region, Mahmoud Farman-Ara, as saying that the total production capacity of the three fields — Salman, Resalat and Balal — could add as much as 240,000 barrels/day to the country's current output potential.

The development of the Salman field, with a initial projected capacity of 80,000 b/d, had been awarded to the Iranian company, PetroIran, under an $800 million buy-back deal.

The total production capacity of the field was now expected to reach 130,000 b/d after the execution of the plan, Farman-Ara said, adding that some 500m cu ft of gas would also be extracted.

The gas taken from the field would be transferred to the port of Assaluyeh through a 240-km pipeline, which was currently under construction.

Additional crude output

Farman-Ara also noted that around 70,000 b/d of oil would be produced at the Resalat and Reshadat fields, up from 10,000 b/d currently, once they were developed under other projects.

In addition, once the offshore Balal oil field, currently being developed by the French giant TotalFinaElf under a buy-back deal, started operating, another 40,000 b/d of crude would be produced.

In a related development, Italy's ENI was reported to be buying a 38.25 per cent stake in the Balal oil field project from TotalFinaElf.

A TotalFinaElf official in Paris was quoted by the *Middle East Economic Digest* as saying that the French company was looking to reduce its original 85 per cent stake in the field because it was too high. The 15 per cent stake held by Canada's Bow Valley Energy is unaffected.

The Balal project, estimated to be worth $300m, was originally awarded in early 1999, but has been delayed by a dispute over the costs of rehabilitating a derelict 98-km pipeline from the field to facilities on Lavan island.

The dispute has since been resolved and the work was now on schedule, said TotalFinaElf. The first development well would start to be drilled soon.

The Anglo-Norwegian firm, Kvaerner, has the detailed engineering contract. The platforms and other facilities are being built by a local firm in partnership with Sembawang of Singapore.

Buy-back projects

It is understood that ENI, which is already working with TotalFinaElf on the Dorood offshore field, will be entitled to 9,000 b/d of Balal's 40,000 b/d output under the buy-back formula.

In a separate development last month, Canada's Tracer Petroleum announced that it has been invited by a major Iranian *bonyad*, or foundation, to participate in a large offshore oil field appraisal and development project.

Due to the limitations of a confidentiality agreement signed between the company and the bonyad, Tracer said it was unable to release the name of the field at this time.

It said its technical staff and consultants had completed their due diligence on the technical information of the project that was made available to them.

The firm had come to a positive conclusion to pursue the appraisal and development of the field in a joint venture with the bonyad.

The company described the scheme as a potentially very significant project with minimum estimated recoverable reserves of 400m barrels and production potential of over 100,000 b/d.

It had commenced discussions with a number of potential partners from within the oil industry to join it in the project.

Tracer said it was also in talks with possible sources of project financing and other forms of debt financing for the scheme.

Construction of West African gas pipeline due to begin in 2002

Abuja — Construction work on the planned West African gas pipeline is now scheduled to begin in 2002 and not this year, according to a source at the secretariat of the Economic Community of West African States (Ecowas).

The project will enable Nigeria to sell gas currently being flared at its oil fields to its neighbours — Benin, Togo and Ghana — to power their electricity plants and industries.

The Ecowas source said that although the project was originally scheduled for completion next year, the environmental impact assessment was yet to be completed and would not likely be ready in time for work to begin this year.

"Taking into account the timetable for the environmental impact assessment, it is anticipated that 2002 is now a more likely date for the start of construction, after completion of detailed engineering, as well as meeting environmental requirements," the source said.

The consultation process would be completed to the satisfaction of communities through which the pipeline would run before construction would begin, he added.

Public education programme

An active programme on public education on the project had been launched, while a programme for extensive stake-holder consultation had been drawn up.

In March last year, some non-governmental environmental organizations and communities in Ghana, Nigeria and Togo rejected the proposed plan.

They alleged that Chevron and Shell, the two firms due to carry out the project, had not been operating in an environmentally friendly manner in the past.

Phase one of the project was originally slated to export about 50 million cubic feet/day of gas to Benin, Togo and Ghana by the year 2002.

The amount is expected to increase to about 160m cu ft/d of gas by the year 2018.

The first heads of government agreement on the project was signed in Lagos in September 1995 and several other preparatory accords have been signed since then.

The latest feasibility study on the project was conducted by German consulting firm Pipeline Engineering, which concluded that the scheme was viable.

It recommended that the most economic route was an onshore/offshore pipeline extending from the existing pipeline linking Escravos in the Niger Delta to the Lagos industrial district offshore, all the way to Ghana.

It is believed that the project will enhance Ghana's long-term energy goals, which require integration of electricity grids and development of cheaper gas resources.

Ghana is expected to account for the purchase of about 84 per cent of the gas to be supplied in the project, under a plan involving three power plants at Tano, Takoradi and Tema.

The Takoradi power plant would be conserving between 15,000 b/d and 20,000 b/d of crude oil used in its operations by taking 60m cu ft/d of gas from the project.

About 120m cu ft/d of gas, or 6.8 per cent of the 1.75bn cu ft/d of gas being flared in the Niger Delta, would be sold to the three recipient countries from the scheduled take-off date.

Benefits from the project will include the creation of 18,000 jobs, a reduction in greenhouse gas emissions, and the saving of $500m on the energy bills of the countries involved.

Qatar close to new deal with Italy's Edison Gas for supply of LNG

Doha — Qatar is close to signing a long-term deal with the Italian energy group, Edison Gas, for the supply of 3.5 million tonnes/year of liquefied natural gas, officials said last month.

"Negotiations with the Italian group have reached an advanced stage and we are likely to sign a deal within weeks," Ibrahim Al-Ibrahim, Economic Advisor to the Emir of Qatar, Sheikh Hamad Bin Khalifa Al-Thani, was quoted as saying by the local *Gulf Times* newspaper.

Stiff competition from Russian gas and cheaper LNG imports from the Mediterranean have so far kept Qatar, with the world's third-largest gas reserves, on the sidelines in Europe.

In the early 1990s, Qatar was involved in an LNG project with Italy's Snamprogetti, but the scheme collapsed in 1994 after the two sides failed to reach a price deal. However, the tide now looked set to turn, the paper reported.

"The Italian deal will pave the way for us to penetrate the European gas market," Al-Ibrahim said, adding that Qatar was also working with Spain to lock in a medium-term deal for about 2m tonnes/year of LNG.

Spain imported around 2m t/y of Qatari LNG on short-term contracts during 1999-2000. Qatar was negotiating another deal for five to six years, Al-Ibrahim noted.

"Our innovative pricing formula and flexible contract terms have helped us win new markets. Backed by our enormous reserves, we do not want prices to be too high, or too low," he said.

Qatar is aiming to export 30m t/y of gas by 2007 and derive more than half of its revenue from LNG sales, instead of crude oil. Currently, its two major LNG projects, QatarGas and RasGas, export around 12m t/y of gas.

Saudis discuss investment in natural gas sector with several oil majors

Riyadh — Saudi Arabia has held a new round of negotiations with the international oil majors that it has invited to invest in the Kingdom's gas sector, reported the official Saudi Press Agency (SPA) last month.

The plan could eventually attract more than $100 billion in foreign investment from the majors, according to Saudi estimates.

SPA said that the team in charge of conducting the negotiations with foreign firms was headed by the Foreign Minister, Prince Saud Al Faisal, and included the Minister of Petroleum & Mineral Resources, Ali I Naimi. They held talks with oil giants ExxonMobil, BP Amoco, Chevron and Royal Dutch/Shell.

"The meeting was positive and fruitful and came at an important phase in the negotiations which aimed to assess the progress made and to discuss the next steps," Prince Saud said.

"The Kingdom aims to start signing memorandums of understanding with the companies selected in the month of April," he added.

Prince Saud stressed that the Kingdom was seeking to attract major and urgent investments to enhance economic infrastructure, improve growth levels, provide new employment and training opportunities for citizens and attractive opportunities to employ Saudi capital.

Among other companies involved in the negotiations are US firms Phillips Petroleum, Texaco, Conoco, Enron/Oxy Corp and Marathon Oil, as well as Italy's ENI.

The ten shortlisted companies were due to have submitted written responses by the middle of February before giving their presentations to the team of Saudi negotiators, which also included the Ministers of Finance & National Economy, Industry & Electricity and Planning.

100,000 b/d oil refinery backed by UAE opens in central Pakistan

Pakistan — The Abu Dhabi-based International Petroleum Investment Company (IPIC) has inaugurated the $866 million Parco refinery at Mahmoud Kout in central Pakistan.

The ceremony was attended by Pakistan's Chief Executive, General Pervez Musharraf, the United Arab Emirates Minister of Petroleum & Mineral Resources, Obaid Bin Saif Al-Nasseri, and a number of IPIC and Parco managers, as well as UAE and Pakistani officials.

IPIC Chairman, Sheikh Mansour Bin Zayed Al Nahyan, said the 100,000 barrels/day facility was a landmark in the history of the company and a source of pride.

"The implementation of the project according to the projected timetable and

budget will encourage further expansion in energy operations and strengthen Parco's position as a successful partner of IPIC," Al Nahyan was quoted by the official Emirates News Agency as saying.

The Minister stressed that the implementation of the refinery was an enormous challenge for Parco, which is a joint venture between the governments of the UAE and Pakistan.

"It is indeed a great achievement and a cause for celebration to build on time and within budget such a complex, modern and large 100,000 b/d refinery in a remote area like Multan," he said.

"The refinery, in conjunction with the Parco pipeline, which is still to come, has the potential to transform the lives of many more people, by giving them access to reliable, high-quality sources of power, heating and transport fuels," the Minister added.

Parco has started building an 820-km pipeline from the port of Qasim to Mahmoud Kout at a total cost of $480m. The pipeline will carry 8.9m tonnes/year of petroleum products, and is scheduled to be completed by December 2002.

"Projects such as this, which are the building blocks of social change, give societies the means to move from an agricultural to an industrial base, and to thereby improve the lives of millions of people," Al-Nasseri went on.

IPIC Managing Director, Mohammed Al Khaili, said the project had created 600 direct jobs, in addition to many indirect positions.

"The refinery secures over 50 per cent of Pakistan's energy demand and saves $75m a year from the oil import bill. It will stimulate the local economy in the next few years," he said.

Qatar, Denmark's Maersk Oil to further develop Al Shaheen oil field

Doha — Qatar has agreed with Danish firm Maersk Oil on a plan to further develop the offshore Al Shaheen oil field, according to Energy and Industry Minister, Abdullah Bin Hamad Al Attiyah.

Al Attiyah said last month that the plan involved an investment of $1.2 billion and was aimed at increasing the field's production capacity to 200,000 barrels/day by the year 2003, from 112,000 b/d at present.

The Minister said the development plan had been worked out by Maersk and the state-owned Qatar Petroleum and would start immediately. Work would involve drilling 40 new production wells and 20 wells for water injection.

Additionally, 14 production wells would be turned for water injection, he said, adding that production platforms and associated gas pooling centres would be set up and appraisal wells would be drilled.

He added that the plan was aimed at increasing the production capacity of the Al Shaheen field in a way that would also increase its life span.

Maersk Oil started production from Al Shaheen in 1994. The field is located in block 5 offshore, in the eastern part of the country.

KOC shortlists five firms for construction of new storage and export unit

Kuwait — The Kuwait Oil Company (KOC) has shortlisted five US firms to compete for a contract to build new oil storage and export facilities at Ahmadi, the *Middle East Economic Digest* reported last month.

The winner of the engineering, procurement and construction contract, worth some $869m-918m, is expected to be announced in September. The project, for which US firm Parsons Engineering has prepared the basic design, will take 32-36 months to complete.

The contract involves construction of 17 storage tanks, each with a capacity of 500,000 barrels; a booster station with four pumps; the laying of 4-5 gravity lines, each 20 km long, with a 48-inch diameter; construction of three submarine pipelines, of 20-25 km each; three calm buoys; and a control station. It also calls for related civil, electrical, mechanical and instrumentation works.

The project is expected to be completed by 2005, when KOC plans to add another 1.5 million barrels/day to its current oil production capacity. KOC is the upstream subsidiary of the state-owned

In brief

Brunei awards deep-water contracts

SINGAPORE — Brunei is expected to award new deep-water production-sharing contracts early in 2002, with bids closing by November this year, it was announced last month. The move could yield as much as 4.5 billion barrels of oil equivalent, according to Kim Morrison, Head of Regional Geology at the Brunei-based Fletcher Challenge Energy Borneo. To jump-start the new round of exploration, the Sultanate had signed a contract with seismic survey company PGS to shoot 3-D data, he noted, adding that 70 per cent of the survey had been completed. The 3-D survey would have the key prospects fully delineated and almost drill-ready by the time companies submitted their bids, which were due by November 4 this year. Morrison also pointed out that 28 companies had attended the launch of deep-water blocks J and K in January, reflecting the high level of interest in Brunei's offshore concession acreage, which was now being leased under production-sharing contract terms.

Ecuador plans to boost output

QUITO — Ecuadorean oil firm Petroproduccion, a subsidiary of the national oil company, PetroEcuador, has attained positive results from its initial exploration work at the Paradise oil fields, in the Amazon region. After drilling the Pardiso II well, company estimates showed that national production would be increased by 3,100 barrels/day of light 27° API crude. The drilling marks the beginning of a development programme by Petroproduccion, under which it plans to drill 23 wells, of which 11 will be vertical completions, six horizontal and the other six directional wells.

US introduces new energy bill

NEW YORK — A controversial new energy bill has been introduced in the United States Congress after being delayed because of problems making it acceptable to both sides. "Today is the first step in ending America's dependence on other nations to power our progress," said Senator Frank H Murkowski, Chairman of the Senate Energy Committee, at the introduction of the National Energy Security Act 2001. "Each day, more than eight million barrels of crude oil must come in from foreign shores. That is a dangerous strategy by anyone's measure," he added. The bill is a comprehensive package of proposals, including a plan to promote alternative fuel vehicles and encouraging increased production of traditional sources of energy, including opening up the previously off-limits Arctic National Wildlife Reserve to oil exploration. It will also seek to advance cleaner technologies for energy sources.

In brief

EBRD may finance Baku-Ceyhan pipeline
BRUSSELS — The European Bank for Reconstruction and Development (EBRD) has announced that it may help finance the $2.7 billion oil pipeline linking Turkey to the Caspian Sea, provided that BP Amoco can convince it of the benefits. Recently-revised BP Amoco engineering estimates show that the line could be profitable. The proposed pipeline would transport one million barrels/day of oil from the Azerbaijani port of Baku on the Caspian Sea to the Turkish port of Ceyhan on the Mediterranean. EBRD participation in the project hinges on whether transporting Caspian oil through the Baku-Ceyhan pipeline proves to be cheaper than alternative routes through the Black Sea. A group of companies interested in the Baku-Ceyhan pipeline have formed the Main Export Pipeline Company (Mepco), led by Azeri state oil company Socar with a 50 per cent share.

Russia's Lukoil plans downstream expansion
BRUSSELS — The Russian oil exploration and production firm, Lukoil, has announced that it is planning an "aggressive expansion" of its downstream businesses in Europe and the United States. "We are holding negotiations with seven world oil majors about our planned projects," said a Lukoil spokesman. The company is planning to purchase a 150,000 barrels/day refinery in the US that will be supplied by Lukoil's giant Timan Pechora field in Russia. The transport route will include an oil terminal at Varandei, on the Barents Sea. "Our enormous reserves and growing crude oil production are forcing us to expand our downstream operations in Europe and the US," said the spokesman. "We cannot afford to rely on crude exports alone and downstream expansion is important if we are to guard against fluctuations in the world market," he added.

Higher oil prices mean more investment
LONDON — Despite a fall in oil production in the United Kingdom of 8.1 per cent in 2000, strong profits and a healthy cash flow are expected to lead to increased investment in the British oil and gas industry, according to a survey by the Royal Bank of Scotland. The Bank's latest *Oil and Gas Index* shows that despite UK oil production in 2000 being at its lowest level since 1993, its value has remained stable over the year. "Higher prices and the depreciation of sterling against the US dollar have offset the falls in output," the Edinburgh-based bank commented. The report showed that UK oil production grew last December by 66,000 barrels/day to 2.39 million b/d. Meanwhile, gas production during 2000 reached record levels, and demand continued to grow strongly.

Kuwait Petroleum Corporation (KPC).

Kuwait currently produces an average of 2.1m b/d of crude, with plans to increase production capacity to 3.5m b/d over the next four years.

The majority of this increase will come from the four northern oil fields to be developed as part of Project Kuwait. KPC is aiming to enlist international oil companies in the project to increase output from the fields to 900,000 b/d from the current 450,000 b/d.

In addition, gathering centres 25 and 28 are expected to be commissioned by June this year, adding another 250,000 b/d capacity.

In a separate development, KOC was reported to have discovered light crude in the Al-Sabriya field, in northern Kuwait. The *OAPEC Bulletin* said that the field's production capacity could be 15,000 b/d of oil and 45m cubic metres of natural gas.

The magazine, published by the Organization of Arab Petroleum Exporting Countries, noted that initial tests indicated that the field had reserves of 200m b.

Algerian state oil firm Sonatrach will not be affected by privatization

Algiers — The Algerian national oil company, Sonatrach, will not be affected by the country's privatization programme, the Energy & Mines Minister, Dr Chakib Khelil, was quoted as saying last month by the local daily *El Moudjahid*.

"It is not a question of the privatization of Sonatrach, but a separation of functions between the state and Sonatrach, which will remain public property," he said.

The Minister pointed out that the draft privatization bill separated what belonged to the state and what belonged to Sonatrach, and what finally belonged to the partner.

"We simply want more investments and more jobs through various measures," he stressed, pointing out that there were "true possibilities in the field for external investments in the sectors of refining, distribution, and petrochemicals".

This, he added, meant "more jobs and assistance for the development of communities, in which investments are implanted, and inevitably more financial resources for the state and the public treasury".

In a separate development, data released by Sonatrach showed that last year, the company discovered hydrocarbons estimated at 10 billion barrels of oil equivalent.

The figures showed that Sonatrach exploited 82 fields in the period, of which three were new. Sonatrach drilled 28 wells last year, of which nine led to discoveries.

The company's production of liquefied natural gas stood at 46 million tonnes, while liquefied petroleum gas output was put at 8.4m t.

The study also noted that Sonatrach marketed 144m tonnes of oil equivalent in 2000, while more than 60bn cubic metres of gas were exported.

Venezuelan President inaugurates Petrozuata's new upgrading plant

Caracas — A state-of-the-art plant to upgrade extra-heavy crude oil extracted from the Orinoco oil belt in eastern Venezuela, has been formally inaugurated by President Hugo Chavez.

The $3 billion plant is owned and operated by Petrozuata, a strategic association involving state oil firm PDVSA and Conoco of the United States.

Accompanying Chavez at the inaugural ceremony were the Energy and Mines Minister, Alvaro Silva Calderon, the President of PDVSA, General Guaicaipuro Lameda, and Conoco President, Archie Dunham.

Petrozuata, in which Conoco holds a 50.1 per cent stake and PDVSA 49.9 per cent, is one of four strategic associations that were formed to produce, upgrade and export extra heavy crude oil from the Orinoco oil belt.

The plant, which is located at the Jose industrial complex in Anzoategui State, is equipped with the most modern technology. It has a capacity to process some 120,000 barrels/day of extra heavy crude, which will be converted into some 103,000 b/d of lighter synthetic crude for export.

In the process, the plant also will pro-

duce some 145 tonnes/d of sulphur and 3,000 t/d of coke.

Speaking at the ceremony, President Chavez not only underlined the importance of the plant itself, but also the role that the oil price recovery had played in making the project viable.

"If oil had been at $8/b over the past two years, what would Petrozuata have done? Can you exploit the Orinoco oil belt with a price of $8/b?" he asked rhetorically.

He went on to note that oil investors could be sure that "we are not going to let the price of oil drop to $20/b or $22/b. We want it to stabilize in the order of $25/b, and we will achieve it because OPEC is more solid than it has been in the last 30 or 40 years."

For his part, Conoco President Archie Dunham pointed to the successful relationship between his company and PDVSA in ventures such as Petrozuata.

"We believe so strongly in Venezuela that we have named it our third core area, after the United States and Europe," said the Conoco boss.

Swedish firm Lundin Oil awards development deals for Libyan oil field

New York — Lundin Oil of Sweden has announced the achievement of another significant step in the development of its En Naga North and West field in Libya.

International Petroleum Libya Ltd (IPLL), a wholly-owned subsidiary of Lundin, and operator of the En Naga development in area NC177, has awarded two engineering, procurement, installation and construction contracts for the construction of processing facilities and a 94.5-km pipeline.

The pipeline will connect the En Naga development with the existing pipeline network, which will transport the produced oil to export facilities on the Mediterranean coast.

The President of Lundin Oil, Ian H Lundin, commented: "The award of these contracts is a significant step towards bringing the En Naga field into production.

"We can now expect, with a reasonable degree of certainty, the achievement of first oil before year-end and we look forward to achieving our first production in Libya, together with our partner, the National Oil Corporation."

The En Naga North and West field was discovered by IPLL in 1998. It contains certified proven and probable reserves of over 100 million barrels of oil.

Lundin Oil is a Swedish independent oil company with exploration and production activities in eight different countries worldwide.

Indonesian government must raise fuel prices, says Finance Minister

Jakarta — Indonesia's Finance Minister, Prijadi Praptosuhardjo, said last month that the government must stick to its plan to raise fuel prices by April 1 this year to avoid further strain on the country's finances.

"In my view, we must raise fuel prices by 20 per cent in April, because if we don't, we will burden the state budget," Praptosuhardjo said after a plenary session of the House of Representatives.

The Indonesian news agency Antara had earlier reported that, under the 2001 state budget, which has already been passed by the House, fuel oil prices would be increased by April.

However, the Finance Minister appeared to hint that this was by no means certain, when he said that he did not know "what decision the government will eventually take in this matter".

The country's Co-ordinating Minister for Economic Affairs, Rizal Ramli, had said previously that the government had yet to decide on whether or not to raise fuel prices.

At the same time, Energy & Mineral Resources Minister, Dr Purnomo Yusgiantoro, said that the government was still studying the possible impact of higher fuel prices on the socio-political situation in Indonesia.

Under the 2001 state budget, fuel oil subsidies would be slashed by 45 trillion rupiahs, and therefore the commodity's price would have to be raised by 20 per cent to cover the cut.

In brief

Unocal to invest $1.48bn in Thailand
BANGKOK — Unocal of the United States has announced a fresh $1.48 billion investment in Thailand over the next five years, especially on natural gas projects. The programme started this year with a $380 million investment in two key projects: the gas and condensate development at the North Pailin phase II development in the Gulf of Thailand, and the onshore Platong, Plamuk, Surat and Kaphong fields, commented Tara Tiradnakorn, Vice-President for Operations at local unit, Unocal Thailand. The fields will start producing 15,000 barrels/day later this year, and Unocal aims to produce 1.07bn cubic feet/d of natural gas by 2005. Tara noted that the economic situation would be closely watched and Unocal investment would follow the local economic recovery. If the Thai economy expanded by 3.9 per cent this year and by 4.4 per cent next year, the country's gas demand would grow by 7.5 per cent.

Bad weather hits North Sea output
BRUSSELS — Extreme weather conditions in the North Sea in February forced drastic oil production cutbacks in both the United Kingdom and Norwegian sectors, industry sources said last month. The bad weather forced major offshore operators, including Norsk Hydro, Statoil, Shell Exploration & Production, and Norske Shell, to reduce or shut in flows from their platforms. Norway's Norsk Hydro said production from its Snorre and Vigdis fields had to be "cut to a minimum" as a result of problems on Statoil's Statfjord A platform, which received output from the two fields for processing. According to Norwegian oil industry sources, only 45,000 barrels/day was being produced from Statoil's Gullfaks C platform, instead of the 250,000 b/d that could have been produced normally. Problems have also affected the Oseberg field centre, leading to output being slashed from 200,000 b/d to 50,000 b/d. A Norsk Hydro spokesman said that so far the company had lost some 600,000 b/d of production, due to weather-related slowdowns.

CERA sees increase in oil demand
BRUSSELS — A short-term forecast by US firm Cambridge Energy Research Associates (CERA) notes that world production of oil and other petroleum liquids is growing by one million barrels/day per year and is expected to triple to 3m b/d per year by 2005. However, by 2010 another gloomy picture could lie ahead, when supplies are expected to decline sharply, while demand for oil and gas will grow by 2 and 3 per cent per year respectively. Global production capacity for petroleum liquids is expected to grow to 92m b/d in 2005, from 79m b/d.

In brief

Ecuador plans new oil pipeline

QUITO — Ecuadorean Minister of Energy and Mines, Pablo Teran, has signed a contract with OCP to build a pipeline from Lago Agrio in the Amazon region, to a terminal at Balao in the province of Esmeraldas, on the Pacific coast. The 500-km heavy crude pipeline system will include the necessary installations for storage, measuring, heating, pumping, pressure reduction, as well as loading tanks for the oil. The OCP line will run parallel with the trans-Ecuadorean pipeline, except for one deviation in the north of Quito. The pipeline is being designed to transport crude oil with an API of between 18° and 24°. Its maximum capacity will be 518,000 barrels/day with a sustainable capacity of 450,000 b/d.

Enlarged EU could face energy crisis

BRUSSELS — The European Union's Energy Commissioner, Loyola de Palacio, has warned that an enlarged EU could face an energy crisis. De Palacio voiced her concerns about "the viability of the European Union's current model of energy supply in the light of the accession of new member states." In a recent EU green paper on energy policy she pointed to "growing energy demand, which is increasing the EU's dependency on fossil fuels." According to the paper, "current forecasts are that the EU's dependence on imported energy will grow from around 50 per cent today to 70 per cent in thirty years' time. This is a major weakness in Europe's energy situation. Other weaknesses are the disproportionate influence of oil prices on the wider economy, and the failure of policies in favour of energy efficiency and renewable energy to prevent consistent rises in energy demand."

BG to invest further in Tunisia

BRUSSELS — United Kingdom gas exploration and production company, BG, has announced it will make further major investments in Tunisia. BG, which has already invested some $600 million in the country, is to invest an additional $450m. The funds will be invested over a nine-year span and will be primarily spent in expanding the Miskar field and in developing the recent Hasdrubal gas condensate discovery. Over the past 10 years, BG has stepped up its investments in Tunisia. It is now the largest foreign investor in the country and the primary source for the country's gas requirements, at 65 per cent. Most of this gas comes from the Miskar gas condensate field, in the Mediterranean Gulf of Gabes, some 125 km off the coast of Tunisia. The Miskar field has reserves of around 650m barrels of oil equivalent, which is enough to meet Tunisia's energy requirements for the next 10 years.

Previous attempts by the government to raise fuel prices in Indonesia have triggered violent protests, forcing a climbdown.

Iraq submits its latest aid distribution plan under oil deal with UN

Baghdad — Iraq has submitted its distribution plan for the aid that it intends to buy under the ninth phase of the oil-for-food deal with the United Nations, it was reported last month.

The UN confirmed that it had received Iraq's $5.5 billion plan for food, medicine and other humanitarian supplies that Baghdad intends to buy under the deal.

The new distribution plan is for the current ninth six-month phase of the deal, which runs from December 6, 2000 to June 3, 2001.

A UN report said that more than $1.27bn was earmarked for the food sector, to cover a daily food ration of 2,472 kilocalories per person per day.

Baghdad has allocated $600 million for oil industry spare parts, as permitted by the UN under the deal, while some $300m has been set aside for the purchase of medicines and medical supplies.

The report said it was not known yet how much money Iraqi oil exports would generate in the current phase. In the previous eighth phase, almost $7.8bn was made available for the humanitarian programme from oil export revenues.

During the previous phase, Baghdad exported an average of 2.2m barrels/day. However, the report added that Iraqi oil exports have fallen sharply during the last two months.

"The week of February 3-9 registered the lowest level of Iraqi oil exports under the UN oil-for-food programme," noted it noted, adding that only 1.6m b of oil were lifted during that week.

The report put Iraq's total oil exports since the beginning of the ninth phase of the oil-for-food deal at 55.3m b of oil, with revenues totalling an estimated 1.26bn euros. The average price for Iraqi crude during the period was $22.35/b.

The oil-for-food deal allows Iraq to sell unlimited quantities of oil over six-month periods, on a renewable basis, to buy food, medicine and other humanitarian needs for the Iraqi people.

Nigeria, oil firms mull plans for a second major LNG complex

Abuja — Nigeria is considering plans to set up a second liquefied natural gas plant in addition to the existing Nigeria LNG complex on Bonny Island, it was announced last month.

The new plant would be located west of the Niger Delta, the Presidential Advisor on Petroleum & Energy, Dr Rilwanu Lukman, said at the signing of a memorandum of understanding for a feasibility study on the plant.

The agreement was signed between the state-run Nigerian National Petroleum Corporation (NNPC) and a group of multinational oil companies, including ExxonMobil, Conoco, Chevron and Texaco, which will be in charge of conducting the feasibility study.

Lukman said the study would identify and evaluate gas requirements, sources, quality and availability for the project; location, design and scope of the LNG plant; potential markets; transportation requirements; LNG loading and receiving facilities; project economics and sensitivities.

ExxonMobil, which had completed a comprehensive gas utilization study for Nigeria last year, had been chosen to lead the joint study team.

"The federal government and all parties involved expect the study to be completed within 12 months from today," Lukman said.

He added that the Nigerian government was determined to monetize the country's large volumes of associated as well as non-associated gas, and use it to generate substantial export earnings.

In order to meet the project's objectives, consideration should be given to large volume commercialization schemes, such as liquefied petroleum gas production and marketing, gas-to-liquids projects and LNG, said Lukman.

He noted that the multinationals chosen for the study had been carefully selected to ensure that the companies in-

volved in the existing LNG plant gave room to others that could set up a rival plant in another part of the Niger Delta.

Nigeria's proven gas reserves are estimated at some 182 trillion cubic feet or 25 billion barrels of oil equivalent, nearly as much as the estimated proven oil reserves of 27bn b.

Current domestic demand is less than 500m cu ft/day of gas, but is forecast to rise to 1.8bn cu ft/d by 2010 and to 4.8bn cu ft/d by 2020.

Iran puts 17 oil and gas contracts out to tender on a buy-back basis

Tehran — The Iranian Petroleum Ministry has decided to put 17 oil and gas contracts out to international tender on a buy-back basis in the upcoming months, it was reported last month.

Local papers quoted Deputy Oil Minister, Hojjatollah Ghanimifard, as saying that the tenders would include the giant South Pars field in the southern waters of the Gulf.

Under Iran's buy-back programme, foreign firms receive crude as compensation and profit in return for investing in projects, under a formula that denies them a direct equity stake.

Last November, the Majlis (parliament) energy and oil commission said that a committee would examine all buy-back deals signed so far with foreign investors, because of possible fraud.

Buy-backs began in the mid-1990s, in a bid to help the government skirt constitutional bans on foreign ventures and attract much-needed capital to revamp Iran's ageing energy infrastructure.

Last year, Shell won an $800m buy-back deal to develop the Soroush and Nowruz offshore fields, together with the National Iranian Oil Company, and is competing for a project to develop the giant Bangestan field.

Although US firms are prohibited from getting involved in Iran, other foreign firms have largely ignored US legislation which theoretically enables companies that invest more than $20m in Iran's energy sector to be punished. The law has been only half-heartedly enforced.

Emirate of Sharjah hosts international conference to discuss solar energy

Sharjah — The Emirate of Sharjah in the UAE last month hosted a major four-day conference on the theme of solar energy in the Arab world.

More than 400 energy experts from 75 countries gathered for the conference, which was opened by the Head of Sharjah's Emiri Court, Sheikh Abdullah Bin Salim Al Qsimi.

The conference was organized by Sharjah University, in collaboration with a number of local, regional and international energy agencies.

Dr Abdullah Abdul Aziz Al Najar, Head of the Research and Studies Section at the University, said renewable energy had become an inevitable necessity and a strategic option for Arab and Middle Eastern countries.

"We should develop new means to adapt the output of scientific advances to meet our demands for energy in the Arab world," he said.

Work is under way in the UAE on introducing solar power to meet energy needs, particularly in some of the more remote areas.

In collaboration with one of the world's leaders in the field, BP Solar, the UAE has already set up a number of solar power projects in the oil and gas industry.

The same is happening in the telecommunications industry, where the use of power systems that are not connected to the national grid is the most convenient option.

The bulk of the UAE's power supply is currently generated by costly plants that utilize substantial supplies of natural gas.

One of the objectives of the conference was to establish a special group to work within the UAE to focus on the development of new solar energy projects in the country.

Research is already under way at Sharjah University to identify the most feasible and cost-effective applications of the new technology in the UAE and in the wider Middle East. Over the next few years, the use of solar power in the Emirates is likely to expand rapidly.

In brief

UK oil output sharply down in 2000

LONDON — Oil output from the British sector of the North Sea fell by eight per cent last year, according to the latest figures relased by the UK Department of Trade and Industry. This contributed to an overall decline in the country's energy production of 2.5 per cent, compared with 1999, said the DTI. The drop in oil production was attributed to routine maintenance during the summer months taking longer and having a bigger impact last year than in 1999. Oil consumption in the UK fell by one per cent last year, including a 2.1 per cent drop in total use of petroleum. The fall in overall energy production included a drop of 13 per cent in coal, 10.5 per cent in both primary electricity and nuclear electricity generation, 7.5 per cent in hydro output, while natural gas production was up by 9.5 per cent.

BP to develop Clair field next year

BRUSSELS — BP Amoco expects to clear all obstacles to the development of its $900 million Clair oil field in the North Sea by the end of this year, and to award contracts in 2002, according to a company statement. The massive, 4 billion barrel oil field was discovered in July 1977 and is located to the west of the Shetland Islands, but development has been delayed due to the difficult geology. BP Amoco executives said that because of the potential for development costs to soar, they would have to develop straightforward fit-for-purpose technologies and systems for Clair.

Thai power use up 7.6 per cent

BANGKOK — Thailand's power consumption increased by 7.6 per cent to 98,418 gigawatt hours last year, despite a slow economic recovery and high imported oil prices, a senior industry official said last month. Coupled with reduced usage of fuel oil for power generation due to high oil prices, this resulted in an 11.4 per cent increase in domestic gas consumption or the equivalent of two billion cubic feet/day, said Dr Chitrapongse Kwangsukstith, President of PTT Exploration & Production (PTTEP). The firm's total production amounted to 18 per cent of the domestic petroleum supply or about 80,000 barrels/d of oil equivalent, which was mostly natural gas, he said. Dr Chitrapongse added that PTTEP planned to capitalize on the country's growing need for gas, demand for which would continue to grow at a rate of eight per cent per year, while power demand would continue to grow by six per cent per year. PTTEP, a privatized and listed unit of the Petroleum Authority of Thailand, has allocated more than $803.9m to expand domestic gas production from fields in the Gulf of Thailand over the next five years.

In brief

Malaysia's Petronas completes gas project
KUALA LUMPUR — Malaysian state oil and gas firm Petronas has announced the completion of phase one of its Angsi gas development project, which is being jointly undertaken by its subsidiary Petronas Carigali and Esso Production Malaysia, offshore peninsular Malaysia. Phase one of the project, also known as the Southern Gas Pipeline System, consists of the design, fabrication and installation of the ANDR-A drilling and riser platform, modifications to the Guntong-D satellite platform, and the installation of 222 km of 32-inch gas pipeline from Guntong-D to ANDR-A and on to the onshore facility. Gas from Guntong-D started flowing on February 2, 2001 to the onshore facility via ANDR-A, the largest such platform in the South China Sea.

PetroChina reports good results for 2000
BEIJING — PetroChina has announced that it achieved good results in the year 2000, including outperforming all of its production and operational targets. The company said that its oil and gas production saw a slight increase in 2000, with crude output rising to 765.4 million barrels and marketed gas production to 503.9 billion cubic feet. In the downstream sector, crude oil processed in 2000 increased by 6.89 per cent to 536.6m b, while gasoline production reached 15.26m tonnes, an 8.74 per cent increase over the previous year. The total number of service stations owned, controlled or franchised by PetroChina or its parent company, the Chinese National Petroleum Corporation, reached 11,350, of which 4,530 were new, representing a 66.42 per cent increase over 2000.

ExxonMobil confirms Crazy Horse finds
IRVING, TEXAS — ExxonMobil has announced the success of two wells drilled during 2000 in the Crazy Horse exploration unit, located in the Gulf of Mexico approximately 125 miles south-east of New Orleans. The wells confirmed Crazy Horse to be a world-class discovery and development opportunity. ExxonMobil owns a 25 per cent interest in the Crazy Horse unit with BP (the operator) owning the other 75 per cent. Results so far confirm that Crazy Horse is at least a billion-barrel discovery, in addition to which a major new discovery called Crazy Horse North was drilled in Mississippi Canyon block 776, located 5 miles north-west of the 1999 Crazy Horse discovery. These results make Crazy Horse the largest oil field discovered in the US Gulf of Mexico. Planning for a phased development is under way, and initial output is expected by 2005 from a floating 250,000 b/d production facility.

BP Amoco to start work on Algeria's In Salah natural gas project

Algiers — BP Amoco expects to start the development of the $2.5 billion In Salah natural gas project in southern Algeria soon, it was announced last month.

The Algerian News Agency quoted BP sources as saying that the exploitation and evaluation phase of the scheme had been completed and the development of the fields should begin in the second quarter of this year.

This, the sources added, would follow the delivery of the exploitation permit from the Algerian Energy and Mines Ministry.

The project, which involves a production-sharing contract with the national oil company, Sonatrach, should return production of gas of more than 10 billion cubic metres/year over a 30-year period.

The sources also indicated that negotiations for the marketing of In Salah gas — again through a joint venture formed between BP and Sonatrach — had ended and the contracts should be signed soon.

In a related development last month, Sonatrach's General Manager, Abdelhak Bouhafs, announced the sale of 5bn cu m/y of gas from In Salah to Gas Natural of Spain. Under another gas sales contract, 4bn cu m/y will also go to Italy's Enel.

Japan and Kuwait to discuss drilling rights in the Neutral Zone

Tokyo — Japan and Kuwait are expected to open crucial negotiations as early as this spring on extending the Arabian Oil Company's (AOC) drilling rights in the Kuwaiti portion of the Neutral Zone, according to a report in the *Japan Times* last month.

The paper said that renewal of the contract was absolutely crucial to the Japanese-owned AOC, which has already lost its rights to the Saudi Arabian-controlled side of the same field.

It quoted sources as saying that the Kuwaiti parliament would grant the government authority to negotiate on the Khafji field in the Neutral Zone, removing a major legal obstacle to the opening of the negotiations between the two countries.

Japan is trying to keep its rights in the huge field and its Foreign Minister, Yohei Kono, stressed the field's importance for the Japanese energy sector during his last visit to Kuwait.

Japan buys 80 per cent of its crude oil needs from the Middle East, and the recovery in global oil prices last year made Tokyo more aware of the need to maintain friendly ties with Saudi Arabia and Kuwait, two of the main sources of its crude imports.

Japan has been trying to mend ties with Saudi Arabia, following the collapse of the negotiations over the renewal of AOC's rights in the Saudi portion of the Neutral Zone in February last year.

It has also been strengthening relations with Iran, which supplies nearly 10 per cent of the country's total crude imports.

Japanese firms have been given preferential negotiating rights to develop the massive 26 billion barrel Azadegan oil field, in south-western Iran, following a visit last November to Tokyo by Iranian President Mohammad Khatami.

PDVSA staff to benefit from Alto Technology mapping, training project

New York — Alto Technology Resources, a company specializing in hyperspectral remote sensing imaging, has opened an office in the Venezuelan capital Caracas, as part of a project it is carrying out for state oil firm PDVSA.

The project combines a technology transfer training programme for PDVSA personnel and an airborne hyperspectral remote sensing study of the country.

Alto Technology, in co-operation with Fundacion de Geografia y Cartografia Militar, is acquiring hyperspectral and radar data for four major areas that include mountainous, coastal and wetlands terrain in Venezuela.

The project will encompass processing and interpreting the data and generating various maps of specific zones that

identify onshore hydrocarbons, soil and lithology, fractures, water bodies and wetlands, vegetation and thermal anomalies.

In addition, Alto will provide an intensive three-month technology transfer training programme for PDVSA personnel at the company's Houston centre of excellence, Stanford University and Alto's Caracas office.

"Our objective with the training programme is to give PDVSA personnel the opportunity to work side-by-side with senior Alto Technology professionals as we introduce them to a wide range of remote sensing topics," said Alto President, Dr Alfredo Prelat.

"Students will learn mission planning, data acquisition, hyperspectral processing and interpretation techniques, using actual data from our PDVSA project.

"When we say technology transfer, we mean it. By the time the course has been completed, PDVSA will have the internal expertise to interpret data we have preprocessed and stored at our Caracas office," he added.

Indonesia to call for tenders on 23 oil blocks, says Minister

Jakarta — The Indonesian government plans to call for tenders on 23 oil blocks soon under a new system, taking over from the state oil and gas firm, Pertamina.

"We will start the tender process gradually with nine blocks in March," announced Energy and Mineral Resources Minister, Dr Purnomo Yusgiantoro.

The blocks include six concessions in the deep-sea area of the Makassar Strait, which would need investment of $200 million for the exploration stage, he said.

Bid invitations would be sent out in March, with June set as the closing date for submission, said the Ministry in a statement.

Meanwhile, the *Jakarta Post* reported that the government would evaluate bids according to their cost competitiveness in operating the blocks, as well as companies' investment commitments.

The successful bids would be subject to approval from President Wahid, after which production-sharing contracts must be signed with Pertamina, which was being promoted as an independent upstream operator, taking a 15-25 per cent stake in each block.

Purnomo said the tender process, with first results likely to be announced in early July, was taken over from Pertamina after the company complained that it was spending about $10m a year in negotiating concessions.

Shell to start drilling at Iran's offshore fields Soroush and Nowruz

Dubai — Oil giant Royal Dutch/Shell will start drilling at the Soroush and Nowruz offshore oil fields in Iran soon, a senior official of the company announced last month.

The Managing Director of Shell Abu Dhabi, Mohamed Defrawi, told reporters that there would be substantial progress on the project in the coming months.

He pointed out that Iran remained one of the largest markets for the company's products and Shell would commercialize the country's huge gas reserves.

Shell Exploration BV has signed an agreement with the National Iranian Oil Company (NIOC) to re-develop the Soroush and Nowruz oil fields.

The fields, which were discovered in the early 1960s, are located in shallow waters some 80 km west of Kharg Island.

Dubai's daily *Khaleej Times* said last month that under the buy-back agreement, Shell would act as a contractor to the NIOC to develop the fields.

In return, it would be repaid to the value of the capital expended, plus a remuneration fee. Development costs for the two fields amounted to over $1 billion.

The paper said that reserves to be developed by the projects at Soroush and Nowruz were estimated at some 500 million and 550m barrels, respectively, of heavy crude oil. Peak production levels were expected to reach 100,000 b/day at Soroush and 90,000 b/d at Nowruz.

Early production from Soroush was expected to start in the autumn of this year, with full production from both fields set for two years later.

In brief

Chevron closes its online marketplace
SAN FRANCISCO — Chevron has announced it has discontinued the operations of its Silicon Valley Oil Co (SVOC) online marketplace. Launched last June, SVOC facilitated spot-market sales of fuels to commercial and industrial customers via the Internet and began its online unbranded fuels auction site in August 2000. Chevron said that while feedback concerning SVOC was positive, the number of customers did not increase at a rate needed to sustain long-term growth objectives. Chevron Vice-President and President of Chevron Products Co, Patricia Woertz, commented: "As a first-generation e-business, SVOC was an excellent testing ground for ideas and technology, and we believe the lessons learned from SVOC will help strengthen and develop our competitive advantage."

Shell reports excellent results for 2000
LONDON — Royal Dutch/Shell Chairman, Sir Mark Moody-Stuart, has reported record fourth quarter and full year results for the group, with all businesses delivering results in 2000 ahead of target. Moody-Stuart commented: "At the end of 1998 we set out our programme to restore Shell to full health by the end of 2001, and I am proud to say that we have more than achieved this recovery faster than planned." He noted that the group had already exceeded its target of $4 billion a year of cost improvements by end-2001, and that the return on average capital employed was 20 per cent, ahead of the end-2001 target of 14 per cent. This, in combination with higher oil prices, resulted in a strong cash flow that was supporting a dividend increase in excess of inflation and a significant share buyback programme that would start immediately, he said.

Conoco finds oil near Heidrun field
STAVANGER, NORWAY — Norske Conoco, the Norwegian subsidiary of US major Conoco, has made an oil discovery near the giant Heidrun field in the Norwegian sector of the North Sea. The firm said that exploration well 6507/7-13 proved the presence of oil in the Jurassic formation. An extended evaluation program was carried out to collect reservoir and geological data, which included drilling a sidetrack hole to obtain core samples. The well was not drill-stem tested, but Conoco said that it held future interest due to its proximity to the Heidrun platform. Exploration license 095 was awarded to Norske Conoco in Norway's eighth round of offshore licensing in 1984. The partners in the license are Norske Conoco (the operator with 20 per cent), Statoil with 75 per cent, and Fortum Petroleum with five per cent.

In brief

Norway's Statoil delivers record results

STAVANGER, NORWAY — Norway's Statoil has announced a profit before tax of NOK 38.1 billion for 2000, an increase of 183 per cent from the year before, and the best result in the group's history. Net profit for the year came to NOK 11.3bn, an improvement of NOK 6.6bn from 1999. Return on capital employed rose from 5.9 per cent in 1999 to 15.1 per cent. "This is a very satisfactory result," said the firm's Chief Executive Olav Fjell. "We have benefited from developments in the oil and gas market, and our improvement efforts have also contributed. Our costs have been reduced in line with the targets we've set for ourselves, and we have improved the overall portfolio by concentrating operations on our core assets," he noted. However, Fjell added that he was still not satisfied with the group's safety record and said there had been "too many serious incidents" last year.

TotalFinaElf begins Bolivian gas output

PARIS — France's TotalFinaElf has announced the start-up of production in the first development phase of the San Alberto natural gas reserves in Bolivia as scheduled, only a year and a half after the project was launched. The San Alberto block, located in the southern department of Tarija, came onstream at the beginning of January. Partners in the project are TotalFinaElf with 15 per cent, Petrobras Bolivia (the operator with 35 per cent) and Empresa Petrolera Andina (50 per cent). With a production capacity of 6.6 million cubic meters/day, the first phase is supplying the Brazilian gas market through the Bolivia-Brazil pipeline under a 20-year take-or-pay contract with Petrobras. Under the terms of the same contract, TotalFinaElf and its partners plan to increase their gas deliveries to 12m cu m/d when the project's second phase is brought on stream in 2002.

IPE to launch electricity futures contract

LONDON — The International Petroleum Exchange is to launch its electricity futures contract in March this year. The new electricity futures contract will trade on the IPE's electronic energy trading system, alongside the existing successful natural gas futures contract, creating the UK's first integrated utilities marketplace. The first contract month for electricity futures will be May 2001, offering traders the opportunity to manage their price risk exposure for the new physical electricity contract year starting in April. The contract will be cleared by the London Clearing House, acting as central counter-party to all trades, offering security of the contract and maintaining anonymity for traders. Margin offsets with gas futures will be considered once sufficient price history has built up.

The report also said that an agreement had also been reached with NIOC to use the associated gas from the fields. The utilization scheme would be determined and implemented during the course of development activities, it added.

Algerian oil and gas output and revenues both climb in 2000

Algiers — Algerian production of hydrocarbons exceeded 200 million tonnes of oil equivalent last year, compared with 188.46m toe in 1999, according to the Vice-President of state oil firm Sonatrach, Mohamed Hamel.

The country's hydrocarbon receipts in 2000 were worth more than $20 billion, up sharply from the 1999 levels, he told an industry conference in Algiers last month.

Output of liquefied petroleum gas last year amounted to 8.4m t, compared with 7.3m t in 1999. Hamel also said the increase in hydrocarbons production had been coupled with an increase in reserves, estimated at 10bn barrels of oil equivalent.

During the period under review, Sonatrach marketed 144m toe of hydrocarbons, including more than 60bn cubic metres of natural gas.

Hamel also indicated that by the year 2004, Sonatrach was aiming to produce 1.5m b/d of oil and to market 186m toe/year of hydrocarbons.

Nigeria LNG exports its one hundredth cargo to Italian customer

Lagos — The one hundredth cargo of liquefied natural gas produced by Nigeria LNG (NLNG) set sail out of the country last month, the firm has announced.

"This cargo, which constitutes a major milestone for the company, will be delivered to Enel of Italy through its receiving terminal at Montoir in France," said the company's General Manager for External Relations, Ms Siene Allwell-Brown.

NLNG began product exports in October 1999 and has delivered six LNG spot cargoes to buyers in the United States.

Ms Allwell-Brown quoted NLNG's Managing Director, Andrew Jamieson, as saying that the shipping of the 100th cargo further confirmed Nigeria as a major player in the world LNG market.

He pointed out that the company's world-class performance had resulted in the endorsement of plans to build a third LNG train, which would come onstream late next year.

NLNG also had plans to develop fourth and fifth trains, scheduled to come onstream in 2005, Jamieson was quoted as saying.

The company began production on September 16, 1999 and exported its first cargo on October 9 of the same year.

Its 50th cargo was exported on August 5, 2000, while the first spot cargo to the US was shipped on May 25, 2000.

NLNG is a joint venture between the state-run Nigerian National Petroleum Corporation (NNPC), which owns 49 per cent equity in the project, Royal Dutch/Shell (25.6 per cent), France's TotalFinaElf (15 per cent), and Italy's Agip (10.04 per cent).

India mulls purchases of natural gas from the UAE's Dolphin project

Abu Dhabi — India is discussing the possibility of receiving gas supplies from the United Arab Emirates-based Dolphin project, according to K C Singh, the Indian Ambassador to the UAE.

Singh said the talks were part of initiatives taken by the Indian government, in order to increase co-operation with the UAE in the oil and petrochemical sector, reported the official UAE News Agency, WAM.

Speaking after the inauguration of Indexpo 2001 in Dubai last month, Singh discussed demand for gas in India, and said his country was open to supplies from any source.

Regarding the Dolphin gas supplies, Singh said that the Indian government was awaiting an agreement on the price, and once that was completed, India would begin negotiations.

February[1]

Crude oil price movements

The average monthly price of the Basket changed direction in February and increased by $1.35 per barrel to register $25.41/b for the month. The biggest contributors to the rise were Arabian Light and Dubai, which gained $2.51/b and $2.23/b, respectively. They were followed by Brent-related Bonny Light and Saharan Blend, which added $1.97/b and $1.72/b to their values, respectively. Minas also moved higher, by $1.59/b, while Tia Juana Light and Isthmus lost 39¢/b and 17¢/b, respectively (see **Table A**).

In the first week of February, the average price of the Basket surged by $2.01/b to $26.86/b, as prices in the USA moved higher on cold weather forecasts and fund-buying in the futures markets. Freezing temperatures in the North Sea also supported prices, with one million b/d being taken out of production temporarily. During the second week, the weekly Basket lost most of its early gains, dropping by 89¢/b as market sentiment turned bearish. A downward revision by the International Energy Agency (IEA) of its demand growth projection for 2001, from 1.9m b/d to 1.5m b/d, at a time when US weekly stock data showed a build in crude inventories of 4.08m b, according to the Department of Energy, undermined market confidence; this was further burdened by signs of a slowdown in the US economy and signals that OPEC might not cut production in March. Adding further pressure was the sharp fall in Brent prices, after the squeeze, that had appeared in the earlier week, was abated. The slide in prices continued into the third week, amid volatility and uncertainty. Expectations that OPEC would cut production by a further 1m b/d at its March Meeting of the Conference and tensions in the Middle East, especially related to Iraq, were bullish factors. However, these were overcome by concern regarding a decline in demand, as winter began drawing to a close, and with uncertainty regarding increases in Chinese demand and Iraqi exports, and the Basket lost $1.14/b. In the fourth week of February, the Basket witnessed a further decrease of 73¢/b and registered $24.10/b, as some OPEC officials stated that no further cuts were needed if prices remained stable and as comments from Mexico and Norway pointed in the same direction.

US and European markets

The very low crude oil stock level (58m b) in the US Midlands caused West Texas Intermediate (WTI) to disconnect from the international market. The situation continued throughout the month, as the lack of pipeline space prevented imported cargoes from being moved inland to replenish inventories. This also caused many sweet grades traded in the Gulf Coast to come under pressure, especially since there was an abundance of available West African supplies. Sour crudes, on the other hand, were weakening under the weight of the overhang, causing Basrah Light to be traded at a discount of over $5.5/b to WTI.

In Europe, dated Brent surged by $3/b in the first week of the month, due to traders' play with dated Brent, in addition to the freezing weather in the North Sea which disrupted production. This rise undermined refiners' margins for all North Sea grades. However, in the following week, Brent lost $4.5/b, as the traders' position unwound and as the IPE March contract, which a European major had taken long positions on, expired. The lower prices for Brent, that caused refiners' margins to revive, did not tempt refiners enough, especially since there was maintenance ahead. Dated Brent again suffered losses, due to a distortion in the Contract for Differences market, as buyers of cargoes loading in early March asked for deferred prices, and hence spot prices were opaque.

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

	January	February	Year-to-date average 2000	2001
Reference Basket	**24.06**	**25.41**	**25.84**	**24.66**
Arabian Light	22.31	24.82	25.22	23.43
Dubai	22.56	24.79	24.08	23.55
Bonny Light	25.43	27.40	27.05	26.30
Saharan Blend	26.08	27.80	27.48	26.84
Minas	24.03	25.62	25.55	24.74
Tia Juana Light	23.18	22.79	25.04	23.01
Isthmus	24.80	24.63	26.44	24.73
Other crudes				
Brent	25.60	27.30	26.78	26.36
WTI	29.42	29.48	28.42	29.45
Differentials				
WTI/Brent	3.82	2.18	1.64	3.09
Brent/Dubai	3.04	2.51	2.70	2.81

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.*

In the Mediterranean, initially poor refiners' margins put pressure on Urals, but even their improvement in the second week of the month could not support the grade, as unsold prompt cargoes maintained the pressure. The abundance of Urals cargoes in the second half of the month also kept the differential to Brent wide.

Far Eastern markets

Planned refinery maintenance in North-East Asia (Japan and South Korea), in addition to the end-of-winter seasonal factors, limited buying interest. However, strong naphtha prices in the second half of the month supported light sweet Asian crudes. There were extra volumes of heavy sweet crudes (Minas) due to prolonged refinery maintenance at the Balongan refinery, but China and South Korea cleared the excess in a bargain-hunting exercise.

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

		December	January	February	Change Feb/Jan
US Gulf					
Regular gasoline	*(unleaded)*	30.25	36.34	34.28	–2.05
Gasoil	*(0.2%S)*	34.32	35.86	32.32	–3.55
Fuel oil	*(3.0%S)*	16.44	18.57	20.62	+2.05
Rotterdam					
Premium gasoline	*(unleaded)*	28.05	29.85	32.49	+2.64
Gasoil	*(0.2%S)*	34.25	30.15	30.88	+0.73
Fuel oil	*(3.5%S)*	18.31	15.48	18.21	+2.72
Singapore					
Premium gasoline	*(unleaded)*	29.97	30.02	31.33	+1.31
Gasoil	*(0.5%S)*	29.61	28.41	27.57	–0.84
Fuel oil	*(380 cst)*	19.74	17.99	19.69	+1.70

Table C: Refinery operations in selected OECD countries

	Refinery throughput *(m b/d)*			Refinery utilization *(%)*[1]		
	Dec 00	Jan 01	Feb 01	Dec 00	Jan 01	Feb 01
USA	15.49	15.02	14.99	93.6	90.8	90.6
France	1.78	1.87	1.77	91.6 R	98.8	93.5
Germany	2.17	2.21	2.22	95.2	98.0	98.1
Italy	1.75 R	1.84	1.77	77.5 R	77.9	75.2
UK	1.64	1.68	1.54	93.7 R	95.1	86.8
Eur-16[2]	12.29 R	12.56	12.39	91.7 R	92.1	90.4
Japan	4.52	4.56 R	*na*	90.5 R	91.9	*na*

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

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

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

Product markets and refinery operations

Oil product prices exhibited divergent trends in February across the three product market centres. They gained in both Rotterdam and Singapore, largely on the back of soaring crude prices, which spurred a number of refinery run cuts on top of ongoing refinery turnarounds, while the light product market lost ground in the US Gulf, undermined mainly by thin demand. Refiners' margins declined significantly in the US Gulf Coast, but still enjoyed positive values due to the strength of the fuel oil market; they fell further in both Rotterdam and Singapore, hampered by surging crude oil prices, despite restricted refinery runs (see **Table B**).

US Gulf market

Light product prices plunged in the US Gulf market in February, while the heavy end of the barrel remained well supported. Following its tremendous gains in January, the average gasoline price experienced a significant loss of $2.05/b in February; this largely reflected a shift in the refinery operational mode that favoured gasoline over distillate products, coupled with a disproportionate unleaded winter gasoline sell-off, in order to dispose of winter grades in the transition to stricter summer gasoline specifications, thereby resulting in abundant supply at a time of usually thin demand. Moderate weather weakened heating oil demand, amid levels of US distillate inventories which surpassed those of last year, and these factors constituted the main reasons for gasoil plummeting by an average of $3.55/b. It is worth noting that tumbling US Gulf Coast light product prices paved the way for their counterparts on the US East Coast to retain their usual premiums, which, in turn, allowed product shipping from the former region's refiners to the latter region.

Despite the continued falling cost of natural gas, it was still well above both low and high sulphur fuel oil prices. High sulphur fuel oil, especially if the fuel oil market is strong, is sometimes used as a supplement to low sulphur fuel oil, thus promoting US electrical utilities to increase the share of less expensive fuel oil vis-à-vis gas. This, together with healthy Mexican demand, comprised the main reasons for the dislocation of strong fuel oil from the weaker crude markets and, consequently, led to fuel oil soaring by an average of $2.05/b, compared with a slight climb in WTI prices (+6¢/b) (see **Table B**).

After witnessing peaks in the preceding month not seen for at least five years, US refiners' margins in the US Gulf market retreated considerably in February, as a consequence of weakening light product markets. Nonetheless, continuously soaring fuel oil prices, at the time of a slight increase in US crude oil, lent good support

to margins, which remained modestly in positive territory (see **Table C**).

US refinery throughput fell slightly, by 33,000 b, to register an average of 14.99m b in February, which is equivalent to a 90.6 per cent utilization rate; this was 4.9 percentage points higher than the previous year's figure.

Rotterdam market

European crude prices (ie, Brent) surged by an average of $1.70/b in February, thereby causing a tightness in product supply, as most regional refineries were forced to cut runs, while others opted for early turnaround maintenance; both, in turn, supported product markets. Gasoline gained significantly, by an average of $2.64/b, boosted by transatlantic shipping to the USA in the first half of the month, followed by strong demand from the UK and West Africa.

Despite thin regional demand, on the back of prevailing moderate weather across Europe and restricted arbitrage movements, the average gasoil price rose by 73¢/b, helped by decent German demand. Fuel oil surged by an average of $2.72/b, on a number of supporting factors: first, rising crude markets; secondly, arbitrage trading to the USA and the Far East, which also spurred strong bunker demand; and thirdly, lower fuel oil stocks in Europe (see **Table B**).

Refiners' margins deteriorated further in Rotterdam, with all crude grades remaining well in negative territory. Sizeable crude gains, particularly during the first week of the month, impacted margins heavily.

Refinery throughput in Eur-16 hovered at 12.39m b/d in February, a fall of 1.64m b from January's runs (see **Table C**). Furthermore, the equivalent utilization rate was 90.4 per cent, which was barely 0.3 percentage points above last year's level.

Singapore market

Apart from gasoil, which declined further on sustained ample supply in the face of limited regional demand, product markets were generally bullish in February. This was in line with crude gains and healthy regional demand, combined with continued refinery run cuts in Singapore and South Korea and ongoing Asian refinery maintenance in Indonesia and Thailand. Gasoline surged by an average of $1.31/b, helped by prevailing strong Indonesian buying. Gasoil continued its downtrend and lost an average of 84¢/b, as the North Asian winter approached its end; this was despite short-lived, soaring kerosene regional buying interests, including from India, following an earthquake that hampered production at Reliance's giant refinery. Fuel oil regained most of the previous month's losses and rebounded by an average of $1.70/b, supported by rising crude markets and healthy regional demand, particularly from the top regional importer, China, which purchased about one million tonnes (see **Table B**).

Refiners' margins plunged into negative territory in Singapore in February, reflecting an upsurge in Asian crude, with Dubai being the highest among other crude markers, registering an increase of $2.51/b.

Refinery throughput in Japan increased by nearly 38,000 b to an average 4.56m b/d in January. Hence, the equivalent utilization rate also rose, to 91.9 per cent, which was 5.8 percentage points above the previous year's level (see **Table C**).

The oil futures market

During the first week of February, NYMEX WTI gained $1.77/b amid volatility, to reach a high for the month of $29.90/b. The basic driver of prices was fund-buying, after the Commitment of Traders Report showed that, as of January 30, non-commercials were set short by 17,033 contracts. A draw on gasoline stocks also supported the unleaded market, which gave further momentum to the rally and occurred despite a build-up in crude oil stocks, especially in the US Midlands and the US Gulf Coast. However, stocks in the US Midlands are still considered low, at the 58m b level.

NYMEX WTI fell to $28.80/b in the second week, losing around $2.8/b in response to the IEA report, which lowered its demand forecasts, and as US weekly stock data showed builds in crude oil and distillate inventories. Concern about the US economic slowdown and remarks by the Federal Reserve Chairman, Alan Greenspan, that high prices would reduce demand, in addition to a statement by the OPEC President, Dr Chakib Khelil, that there was no need for further cuts, all put heavy pressure on prices. The collapse of the spreads between the first and the second front-month and between the second and the third front-month added to the pressure.

In the third week, NYMEX WTI did not respond to news regarding tensions in the Middle East, nor to the huge draw on US crude oil inventories, which was caused by conditions in the US Gulf Coast. Signals from OPEC also failed to move the market higher.

The price of the NYMEX WTI contract continued to fall in the final week of February, ending at $25.57/b, as comments from OPEC officials and non-OPEC Mexico and Norway pointed away from the possibility of production cuts in March.

The tanker market

OPEC area spot-chartering decreased by 1.86m b/d to a monthly average of 12.02m b/d in February, a month in which OPEC fixtures decline seasonally. The downturn in OPEC spot fixtures was the result of the cut in OPEC oil production, which came into effect on February 1, and, to some extent, lower Asian demand, due to refinery run cuts and maintenance. Compared with year-ago fixtures, the current volume is 1.61m b/d lower. The OPEC production cut also affected the downtrend for global spot-chartering, which fell by 2.30m b/d to stand at a monthly average of 21.34m b/d; this was 4.68m b/d below last year's level. OPEC's share of global spot fixtures stood at 56.34 per cent, which was 2.37 percentage points lower than its share in the preceding month. Middle East eastbound and westbound long-haul fixtures declined by 560,000 b/d to 4.28m b/d and by 490,000 b/d to 1.87m b/d, respectively. The share of eastbound long-haul chartering rose by 0.76 percentage points to 35.62 per cent, while that of westbound declined by 1.49 percentage points to 15.53 per cent. Together, they accounted for 51.16 per cent of total chartering in the OPEC area, and this was 2.21 percentage points below last month's level. Preliminary estimates of sailings from the OPEC area for the weeks ending February 3, 10,

17 and 24, are 21.85m b/d, 22.51m b/d, 19.38m b/d and 20.77m b/d, respectively. The Middle East's share of OPEC sailings was 69.96 per cent, which was 0.57 percentage points higher than the figure recorded last month. Arrivals in the US Gulf and East Coasts, including the Caribbean and NW Europe, moved down by 580,000 b/d to 7.65m b/d and by 170,000 b/d to 6.11m b/d, respectively, while arrivals within Euromed rose by 190,000 b/d to 4.32m b/d. The estimate of oil-at-sea on February 25 is 465m b, which was 9m b less than that observed at the end of January.

Freight rates for VLCC long-haul cargoes from the Middle East to the Far East and the West showed further decreases in February, when they fell by 47 and 28 points to monthly average levels of Worldscale 100 and W91, respectively. The cut in OPEC production, which was announced on January 17, had a negative impact on VLCC freight rates; these were also affected by plummeting Suezmax freight rates, as traders were discouraged from combining cargoes. Suezmax freight rates saw the largest plunge among the other tanker rates, as they slipped by 73 points to stand at W148. The lower number of inquiries resulted in a very high level of available tonnage. Thus, Suezmax freight rates were depressed to their lowest level since June 2000. Aframax freight rates moved in different directions during February, as they suffered from further losses within the Mediterranean and from there to NW Europe, when they plunged by 34 points to W216 and by 22 points to W236, respectively, on the back of stagnant demand.

On the Caribbean/US East Coast route, Aframax freight rates enjoyed a gain of 13 points to W294, due to strong activity. Aframax freight rates for 70–100,000 dwt tankers for cargoes from Indonesia to the US West Coast almost stabilized at the previous month's average level, experiencing a decline of just two points to W251, due to steady activity.

Lower activity in the Far East, especially in the second half of the month, pushed down product freight rates for medium-range tankers in February. The rates on the routes from the Middle East and Singapore to the Far East dropped by 38 points to a monthly average of W321 and by 41 points to W373, respectively. Within the Mediterranean, clean cargo rates moved down marginally, by four points, to a monthly average of W329, on the back of steady activity. Along the Mediterranean/NW Europe and Caribbean/US Gulf Coast routes, product freight rates gained 23 points to W380 and seven points to W326, respectively.

World oil demand

Figures for 2000

World

As we prepare to enter the second quarter of the year, it is the first time that we have a complete set of data on oil consumption for the OECD countries for the year 2000. OECD petroleum product consumption data have a two-to-three-month time-lag; therefore, the oil demand figures for December 2000 were only released by the middle of March 2001. In the case of developing countries, the time-lag is approximately one year; thus, as of the time of writing this issue of the report, the only available preliminary DC demand data include only 1Q2000, with the remaining three quarters based on estimates. From past experience, it is possible to affirm that, after all data are compiled for a given year for DCs, the final figures can swing up or down by 100,000 b/d. As for the former CPEs, there is also a complete set of preliminary apparent demand data for the past year, even though it is important to mention that the preliminary figures are exactly that, preliminary, and that they can always be, and most likely will be, revised in future issues. With this prelude, we wish to bring to the attention of our readers the fact that the oil demand figures presented below for 2000 are the best estimates, according to the latest available data. However, they are by no means final and most likely will be subject to further revision.

World oil demand growth has once again been revised down for the year 2000. According to the most up-to-date data, demand grew by 730,000 b/d, or 1.0 per cent, and averaged 75.71m b/d last year. The quarterly data show that consumption fell by 0.4 per cent in 1Q, but recovered for the remaining three quarters, rising by 1.6 per cent, 2.0 per cent and 0.7 per cent, respectively. It is important to note that, even though consumption posted an increase during the last quarter, the weak growth rate was evidence of a deceleration. The slowdown in consumption was particularly apparent in Japan and South Korea, as well as in major Asian developing countries. On a regional basis, OECD consumption registered a marginal decline of 40,000 b/d, or –0.1 per cent, to average 47.58m b/d. DC consumption is projected to have risen by 510,000 b/d, or 2.8 per cent; however, as mentioned above, due to the limited reliability and availability of the data, no definite conclusions should be drawn. Finally, apparent consumption for 'Other regions', derived from production and trade statistics, seems to have risen by 260,000 b/d, or 2.9 per cent, to 9.25m b/d.

Projections for 2001

The world oil demand forecast for the year has been revised down by 140,000 b/d and now stands at 77.01m b/d, which translates into a growth rate of 1.7 per cent or 1.30m b/d. However, there is a possibility that demand growth in 2001 will be lower than we all expect. There are already increasing signs that demand growth is weakening. Western Europe's consumption contracted by 2.5 per cent in 4Q2000, after signs of recovery in 2Q (1.1 per cent) and 3Q (2.4 per cent). The same can be said about Japan and South Korea, where inland deliveries of petroleum products declined by 4.4 per cent and 2.0 per cent in 4Q2000, respectively. In the USA, the biggest global oil consumer, demand showed almost no growth during 4Q2000, having risen only modestly in earlier quarters (0.4 per cent in 2Q and 0.2 per cent in 3Q). Not to be taken lightly is the possible strengthening of petroleum product prices in the USA (especially gasoline and heating oil), which, in turn, could dampen demand. Low gasoline and heating oil inventories ahead of the driving and heating oil seasons and refinery bottlenecks could result in a price hike similar to the one experienced last year. Temperature could be another factor undermining demand in the USA. In terms of degree days, January has been 6.5 per cent warmer than normal. In Europe, the factors affecting demand growth are more of a struc-

tural nature. The continued phasing-out of fuel oil (especially in Italy), high taxation of petroleum products, stricter environmental measures and restructuring in the energy industries will have negative repercussions on demand for oil in the short and the long terms. Another factor undermining demand is the ongoing phasing-out of government subsidies in many developing countries, especially in Asia, which will ultimately translate into higher prices for consumers.

OECD

OECD inland delivery of petroleum products is projected to rise by 560,000 b/d, or 1.2 per cent, to average 48.14m b/d in the present year. Slightly more than half the incremental consumption will occur in North America. The USA will account for the lion's share of this group, with Mexico and Canada providing one-third of the total demand growth in the region. Consumption in Western Europe is projected to rise modestly by 140,000 b/d, or 0.9 per cent, to 15.11m b/d, after declining in the last two years. The projection is based on a healthy 2.9 per cent regional forecast rate of economic growth; nonetheless, recent signs of economic weakness could dampen consumption on the continent. Deliveries of petroleum products in OECD Pacific countries are expected to rise by little more than 100,000 b/d, which translates into a growth rate of 1.2 per cent. Healthy projected economic growth in South Korea, Australia and New Zealand will be the main force driving oil demand growth. However, Japan's economy, by far the biggest oil consumer in the region, is expected to feature a mild 0.7 per cent economic expansion, which will ultimately result in lower oil consumption.

Developing countries

DC oil demand has been revised down by 30,000 b/d for 2001. Consumption is now expected to rise by 590,000 b/d, or 3.1 per cent, to average 19.47m b/d for the year. The estimated growth rate in consumption has been lowered to 3.7 per cent for the Asian countries from the previous 4.2 per cent. The correction captures the perceived slowdown in consumption observed in January. Projections for the remaining regions of this group (Latin America, Middle East and Africa) have been kept unchanged from the last report.

Other regions

Current projections set apparent consumption for 'Other regions' at 9.41m b/d, rising by 160,000 b/d, or 1.7 per cent, during the year. Apparent demand in the FSU is projected to shrink by 0.9 per cent, or 30,000 b/d, a very conservative estimate when compared with the previous year. We expect the continued significant decline in apparent consumption seen in 2000 to be somehow capped by the healthy rate of economic expansion anticipated for 2001. Nonetheless, the high levels of debt and the incentive to maximize exports at the expense of domestic consumption could translate into another considerable decline in consumption. As we stated in our last report, China remains the wild card, when assessing demand for the present year. There are signs which suggest that apparent demand in China experienced a deceleration during the last month of 2000 and the beginning of 2001. In our forecast, we estimate that apparent demand will experience a growth rate of 3.5 per cent for the present year, even though the estimate for economic expansion remains very healthy at 7.0 per cent. The reasons for the low rate of growth are twofold: on the one hand, it is believed that China is holding high inventories of products, while, on the other, there is the fact that government subsidies have been continuously eliminated, resulting in higher prices for consumers. China's oil consumption will be critical, in order to balance the global supply/demand equation. A small increase in Chinese consumption or, even worse, a decline will mean that the critical balance between supply and demand will have to be adjusted, in order to avoid a negative impact on prices. This became evident last year, when two-thirds of the total growth in consumption originated in China.

World oil supply

Non-OPEC

Historical data, including 1999

There are no revisions to non-OPEC supply historical data, compared with the last report's figures.

Figures for 2000

The non-OPEC supply total for 2000 has been revised down by around 80,000 b/d to 45.81m b/d, since the last report. This is the result of revisions made to the figures for the quarterly non-OPEC supply distribution, which have been revised down by 30,000 b/d to 45.85m b/d, 30,000 b/d to 45.54m b/d, 60,000 b/d to 45.67m b/d and 180,000 b/d to 46.17m b/d, respectively. The yearly average increase is estimated at around 1.23m b/d, compared with the 1999 figure.

Expectations for 2001

The non-OPEC supply forecast for 2001 has been revised down by around 320,000 b/d to 46.50m b/d, which is 690,000 b/d more than revised figure for 2000. Also, the expected non-OPEC quarterly distribution is down by 130,000 b/d to 46.67m b/d, 170,000 b/d to 46.32m b/d, 350,000 b/d to 46.32m b/d and 620,000 b/d to 46.69m b/d, respectively.

The FSU's net oil export figures for 2000 and 2001 have been revised up by 10,000 b/d to 4.14m b/d and 200,000 b/d to 4.52m b/d, respectively, compared with the last report's figures (see **Table D**).

OPEC natural gas liquids

OPEC NGL data for the 2000 estimate and 2001 forecast remain 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 February, OPEC output was 27.56m b/d, which was 580,000 b/d lower than the revised January level of 28.14m b/d. **Table E** shows OPEC production, as reported by selected secondary sources.

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]	4.47	4.62	4.76	4.24	**4.52**

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

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

	1999	3Q00	4Q00	2000	Jan 01*	Feb 01*	Feb 01/ Jan 01
Algeria	766	823	841	808	844	807	–37
Indonesia	1,310	1,277	1,286	1,280	1,259	1,245	–14
IR Iran	3,509	3,697	3,803	3,671	3,854	3,740	–114
Iraq	2,507	2,760	2,363	2,551	1,760	2,088	328
Kuwait	1,907	2,161	2,207	2,101	2,229	2,098	–130
SP Libyan AJ	1,337	1,411	1,438	1,405	1,442	1,390	–52
Nigeria	1,983	2,032	2,129	2,031	2,149	2,130	–20
Qatar	641	709	726	698	740	700	–40
Saudi Arabia	7,655	8,535	8,653	8,236	8,430	8,175	–255
UAE	2,077	2,297	2,386	2,265	2,407	2,236	–172
Venezuela	2,808	2,919	3,001	2,897	3,022	2,950	–72
Total OPEC	**26,499**	**28,621**	**28,833**	**27,943**	**28,136**	**27,558**	**–578**

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

Stock movements

USA

US commercial onland oil stocks showed a further slight draw, of 7.9m b, or 230,000 b/d, to 914.7m b, during January 26–March 2. Most of the draw took place on 'Other oils', which fell by 7.2m b to 144.2m b, and, to a lesser extent, on crude oil, as stocks moved down by 5.3m b to 277.3m b, on the back of delayed offloadings of imported crudes at the US Gulf Coast, due to bad weather. Gasoline also showed a slight decrease, of 2.9m b to 203.0m b, as a result of lower gasoline output, due to refinery shutdowns and closed transatlantic arbitrage. A build of 5.0m b to 93.7m b in unfinished oils and slight increases of 3.1m b to 37.5m b in fuel oil and 1.1m b to 115.6m b in distillates diminished the overall draw. Total oil stocks were about two per cent above the year-ago level.

During the same period, the US Strategic Petroleum Reserve (SPR) rose by 1.0m b to 541.7m b (see **Table F**).

Western Europe

In February, commercial onland oil stocks in Eur-16 (EU plus Norway) showed a minor draw of 1.5m b, or a rate of 50,000 b/d, to 1,068.8m b. This draw resulted basically from a decrease of 4.3m b to 646.3m b in total major products; middle distillates accounted for most of this draw, declining by 3.4m b to 338.0m b, on the back of lower distillate production and, to some extent, healthy demand, especially in the second half of the month, due to colder weather. A build of 2.8m b to 422.5m b in crude oil was due to a drop in refinery throughput, which declined by 3.36m b. The overall level was 3.6m b higher than that registered a year earlier (see **Table G**).

Japan

In Japan, commercial oil stocks decreased marginally, by 2.0m b, or a rate of 60,000 b/d, to 176.5m b in January. A draw of 3.5m b to 36.8m b on middle distillates, which was due to relatively strong demand, contributed mainly to this decline, while a build of 1.9m b to 14.6m b in gasoline outpaced this draw. Crude oil remained almost unchanged from the previous month's level. The total level was about six per cent lower than last year's figure (see **Table H**).

Balance of supply/demand

The non-OPEC supply estimate for 2000 has been revised down from last month's report by less than 100,000 b/d to 48.7m b/d, and that for world oil demand by more than 100,000 b/d to 75.7m b/d. The difference item therefore remains unchanged at 27.0m b/d. The balance items have been revised down by 200,000 b/d to 2.0m b/d for 2Q and up by 400,000 b/d to 900,000 b/d for 4Q. The overall 2000 balance has been revised up marginally, by 100,000 b/d (see **Table I**).

The non-OPEC supply and world oil demand forecasts for 2001 have been revised down by more than 300,000 b/d to 49.4m b/d and by 100,000 b/d to 77.0m b/d, respectively; the annual difference is, therefore, estimated at 27.6m b/d, up by less than 200,000 b/d from last month's report. The quarterly distribution forecasts have been revised up by 100,000 b/d to 27.3m b/d, by 300,000 b/d to 25.9m b/d and by 300,000 b/d to 27.8 for the first three quarters, while 4Q remains unchanged at 29.2m b/d.

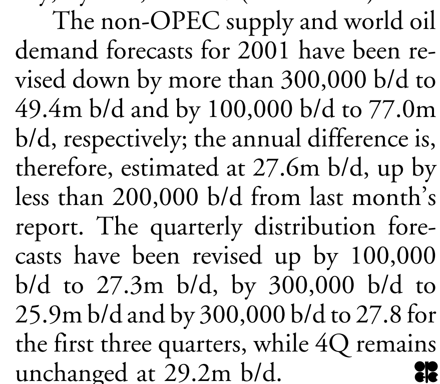


Table F: US onland commercial petroleum stocks[1] *m b*

	Sept 29, 00	Dec 29, 00	Jan 26, 01	March 2, 01	Change Feb/Jan	March 2, 00
Crude oil (excl SPR)	**286.7**	**288.7**	**282.6**	**277.3**	**–5.3**	**288.9**
Gasoline	195.6	193.8	205.9	203.0	–2.9	201.6
Distillate fuel	114.2	116.1	114.5	115.6	1.1	104.9
Residual fuel oil	36.5	34.7	34.4	37.5	3.1	34.3
Jet fuel	43.1	43.9	45.1	43.3	–1.8	41.9
Unfinished oils	88.0	87.1	88.7	93.7	5.0	92.8
Other oils	195.9	165.8	151.4	144.2	–7.2	136.7
Total	**959.9**	**930.0**	**922.6**	**914.7**	**–7.9**	**901.1**
SPR	570.7	541.2	540.7	541.7	1.0	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*

	September 00	December 00	January 01	February 01	Change Feb/Jan	February 00
Crude oil	**424.4**	**420.6**	**419.7**	**422.5**	**2.8**	**426.6**
Mogas	152.8	152.9	159.7	159.8	0.1	158.1
Naphtha	26.0	24.6	25.1	25.5	0.4	25.3
Middle distillates	325.7	342.8	341.3	338.0	–3.4	330.1
Fuel oils	124.2	125.8	124.4	123.0	–1.4	125.1
Total products	**628.7**	**646.2**	**650.5**	**646.3**	**–4.3**	**638.6**
Overall total	**1,053.0**	**1,066.7**	**1,070.3**	**1,068.8**	**–1.5**	**1,065.2**

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

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

	June 00	September 00	December 00	January 01	Change Jan/Dec	January 00
Crude oil	**121.4**	**101.2**	**105.1**	**105.2**	**0.1**	**111.1**
Gasoline	14.0	13.4	12.7	14.6	1.9	15.1
Middle distillates	34.4	43.5	40.3	36.8	–3.5	41.4
Residual fuel oil	18.3	18.9	20.4	20.0	–0.4	20.3
Total products	**66.7**	**75.8**	**73.4**	**71.3**	**–2.1**	**76.8**
Overall total[2]	**188.1**	**176.9**	**178.5**	**176.5**	**–2.0**	**187.9**

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

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	47.6	47.9	46.3	47.7	48.4	47.6	48.5	46.7	48.2	49.2	48.1
North America	22.7	23.1	23.9	23.6	23.7	24.3	24.4	24.0	23.8	23.9	24.8	24.9	24.3
Western Europe	15.0	15.3	15.1	15.1	14.5	15.0	15.3	15.0	15.2	14.7	15.1	15.5	15.1
Pacific	9.0	8.4	8.6	9.3	8.0	8.3	8.8	8.6	9.5	8.1	8.3	8.9	8.7
Developing countries	17.7	18.1	18.4	18.5	19.1	19.0	18.9	18.9	19.0	19.5	19.6	19.8	19.5
FSU	4.3	4.2	4.0	3.7	3.6	3.5	4.2	3.8	3.7	3.6	3.5	4.1	3.7
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	4.9	4.6	5.0	4.9	4.9
(a) Total world demand	**73.4**	**73.7**	**75.0**	**75.7**	**74.3**	**75.9**	**77.1**	**75.7**	**76.9**	**75.2**	**77.1**	**78.8**	**77.0**
Non-OPEC supply													
OECD	22.1	21.8	21.3	22.2	21.8	21.7	21.8	21.9	22.1	21.8	21.7	21.8	21.8
North America	14.6	14.5	14.1	14.4	14.4	14.3	14.1	14.3	14.5	14.6	14.5	14.3	14.5
Western Europe	6.8	6.6	6.6	7.0	6.6	6.5	6.9	6.7	6.8	6.3	6.3	6.6	6.5
Pacific	0.7	0.7	0.7	0.9	0.8	0.8	0.8	0.8	0.9	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	11.3	11.3	11.4	11.6	11.4
FSU	7.2	7.2	7.5	7.7	7.8	8.0	8.2	7.9	8.2	8.2	8.3	8.3	8.2
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.3	3.2	3.2	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.1	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	44.6	44.5	44.6	45.9	45.5	45.7	46.2	45.8	46.7	46.3	46.3	46.7	46.5
OPEC NGLs	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
(b) Total non-OPEC supply and OPEC NGLs	**47.5**	**47.3**	**47.4**	**48.8**	**48.5**	**48.6**	**49.1**	**48.7**	**49.6**	**49.3**	**49.3**	**49.6**	**49.4**
OPEC crude oil production[1]	27.2	27.8	26.5	26.5	27.8	28.6	28.8	27.9					
Total supply	74.7	75.1	73.9	75.2	76.3	77.2	77.9	76.7					
Balance[2]	1.3	1.4	-1.1	-0.4	2.0	1.3	0.9	1.0					
Closing stock level (outside FCPEs) *m b*													
OECD onland commercial	2643	2725	2470	2446	2526	2561	2554	2554					
OECD SPR	1207	1249	1228	1234	1232	1237	1210	1210					
OECD total	3850	3974	3699	3680	3758	3798	3764	3764					
Other onland	1030	1063	989	984	1005	1016	1006	1006					
Oil on water	812	859	808	829	853	830	855	855					
Total stock	5692	5896	5496	5492	5616	5643	5625	5625					
Days of forward consumption in OECD													
Commercial onland stocks	56	57	52	53	53	53	53	53					
SPR	26	26	26	27	26	26	25	25					
Total	82	83	78	80	79	78	78	78					
Memo items													
FSU net exports	2.9	3.0	3.4	4.0	4.1	4.5	4.0	4.1	4.5	4.6	4.8	4.2	4.5
[(a) — (b)]	25.9	26.4	27.6	26.9	25.8	27.3	28.0	27.0	27.3	25.9	27.8	29.2	27.6

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 42, while* ***Graphs One and Two*** *(on pages 41 and 43) show the evolution on a weekly basis.* ***Tables Three to Eight,*** *and the corresponding graphs on pages 44–49, show the evolution of monthly average spot prices for important products in six major markets. (Data for Tables 1–8 is provided by courtesy of Platt's Energy Services).*

Graph 1:
Evolution of spot prices for selected OPEC crudes, November 2000 to February 2001

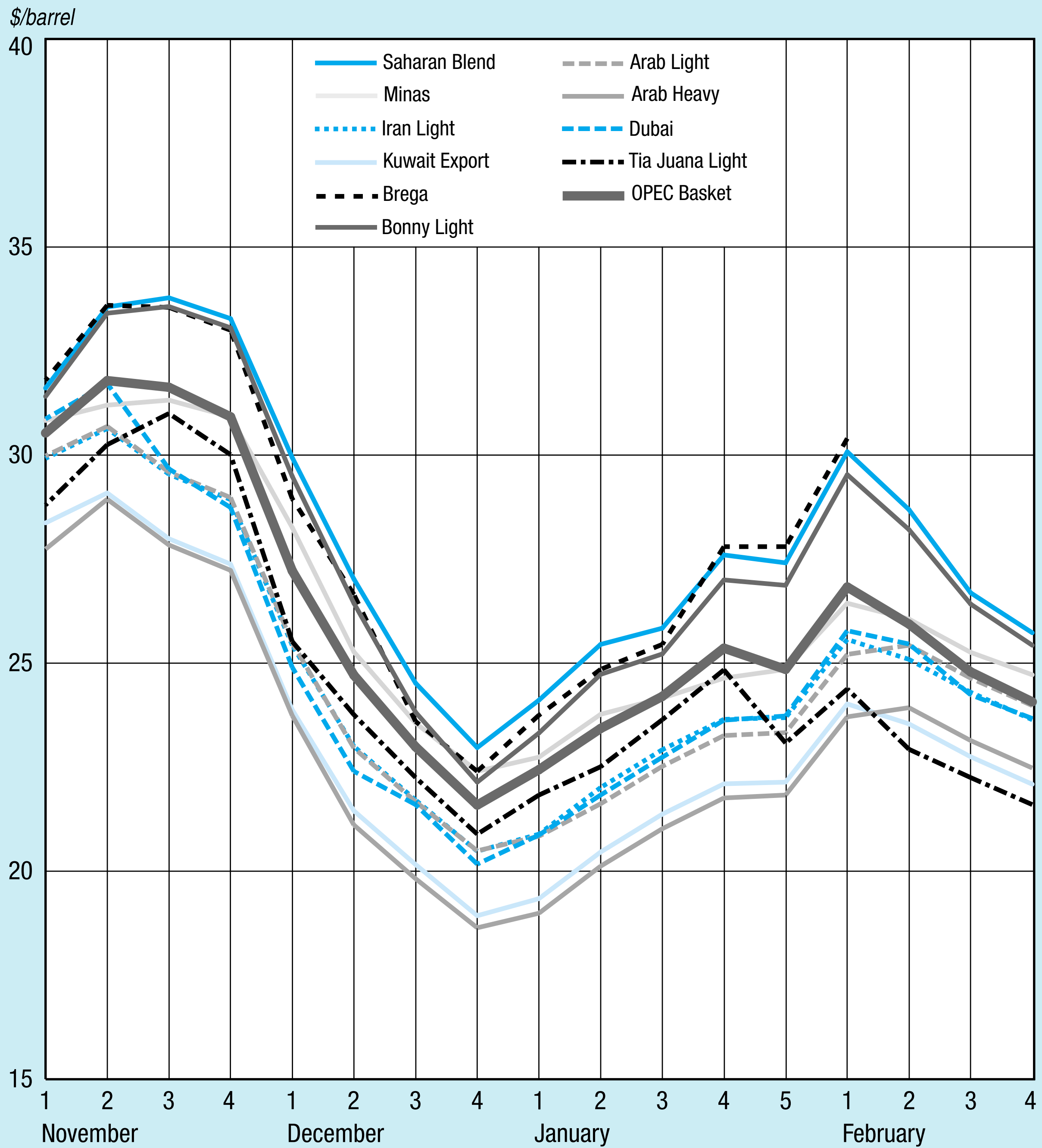


Table 1: OPEC spot crude oil prices, 2000–2001

($/b)

Member Country/ type of crude (API°)	Feb 5Wav	Mar 4Wav	April 4Wav	May 5Wav	June 4Wav	July 4Wav	Aug 5Wav	Sept 4Wav	2000 Oct 5Wav	Nov 4Wav	Dec 4Wav	Jan 5Wav	1W	2W	February 3W	4W	4Wav
Algeria																	
Saharan Blend *(44.1)*	28.74	27.65	22.91	28.02	29.94	28.76	29.25	33.18	31.19	33.06	26.11	26.08	30.08	28.69	26.69	25.73	27.80
Indonesia																	
Minas *(33.9)*	26.48	27.39	24.15	28.26	31.30	30.44	30.33	33.36	32.30	31.07	24.87	24.03	26.44	26.06	25.26	24.72	25.62
IR Iran																	
Light *(33.9)*	25.70	25.87	22.86	26.10	27.99	27.09	27.12	30.45	30.42	29.75	22.66	22.63	25.57	25.09	24.30	23.64	24.65
Iraq																	
Kirkuk *(36.1)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait																	
Export *(31.4)*	24.84	25.07	22.29	25.60	27.44	26.39	26.21	29.05	28.87	28.20	21.11	21.08	24.02	23.54	22.75	22.09	23.10
SP Libyan AJ																	
Brega *(40.4)*	28.59	27.71	22.86	27.84	30.14	29.36	29.44	32.64	30.98	32.99	25.40	25.93	30.40	28.35	26.80	25.60	28.52
Nigeria																	
Bonny Light *(36.7)*	28.36	27.54	22.91	27.87	29.86	28.75	29.06	32.65	30.67	32.86	25.47	25.43	29.53	28.21	26.42	25.43	27.40
Saudi Arabia																	
Light *(34.2)*	25.85	26.02	22.95	26.27	29.09	27.19	27.12	30.60	30.17	29.81	22.65	22.31	25.21	25.43	24.64	23.98	24.82
Heavy *(28.0)*	24.00	24.52	22.00	25.27	27.09	25.99	25.52	28.00	28.21	27.94	20.83	20.74	23.71	23.93	23.14	22.48	23.32
UAE																	
Dubai *(32.5)*	24.77	24.99	22.14	25.69	27.24	26.35	26.79	30.05	30.57	30.25	22.27	22.56	25.78	25.46	24.24	23.67	24.79
Venezuela																	
Tia Juana Light[1] *(32.4)*	26.08	25.89	22.16	25.50	27.99	26.32	26.84	29.33	28.34	30.01	23.11	23.18	24.38	22.93	22.25	21.60	22.79
OPEC Basket[2]	**26.84**	**26.71**	**22.93**	**26.94**	**29.12**	**27.94**	**28.30**	**31.48**	**30.42**	**31.22**	**24.13**	**24.06**	**26.83**	**25.94**	**24.79**	**24.07**	**25.41**

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

($/b)

Country/ type of crude (API°)	Feb 5Wav	Mar 4Wav	April 4Wav	May 5Wav	June 4Wav	July 4Wav	Aug 5Wav	Sept 4Wav	2000 Oct 5Wav	Nov 4Wav	Dec 4Wav	Jan 5Wav	1W	2W	February 3W	4W	4Wav
Gulf Area																	
Oman Blend *(34.0)*	25.42	25.55	22.75	25.65	27.74	26.83	27.24	30.55	29.88	28.97	22.76	22.43	25.15	24.50	24.13	23.40	24.29
Mediterranean																	
Suez Mix *(Egypt, 33.0)*	26.16	24.68	19.90	25.03	26.64	24.24	26.24	28.59	26.18	29.06	21.11	22.09	25.90	23.20	21.30	20.05	23.47
North Sea																	
Brent *(UK, 38.0)*	27.99	27.14	22.66	27.60	29.74	28.96	29.74	32.94	30.86	32.67	25.07	25.60	29.67	27.78	26.41	25.35	27.30
Ekofisk *(Norway, 43.0)*	28.47	27.29	22.74	27.91	29.85	28.44	28.57	32.75	30.77	32.66	25.50	25.51	29.66	28.44	26.44	25.42	27.49
Latin America																	
Isthmus *(Mexico, 32.8)*	27.62	27.51	23.31	26.95	29.45	27.74	28.75	31.19	29.73	31.47	24.40	24.80	26.36	24.78	24.05	23.35	24.63
North America																	
WTI *(US, 40.0)*	29.44	29.85	25.81	28.78	31.93	30.19	31.04	34.05	33.00	34.65	28.39	29.42	30.99	30.02	28.83	28.10	29.48
Others																	
Urals *(Russia, 36.1)*	27.52	25.60	21.20	26.35	27.39	24.75	27.00	30.30	28.04	31.23	24.06	24.40	27.65	25.61	23.49	22.35	24.78

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; Secretariat's calculations.

Graph 2:
Evolution of spot prices for selected non-OPEC crudes,
November 2000 to February 2001

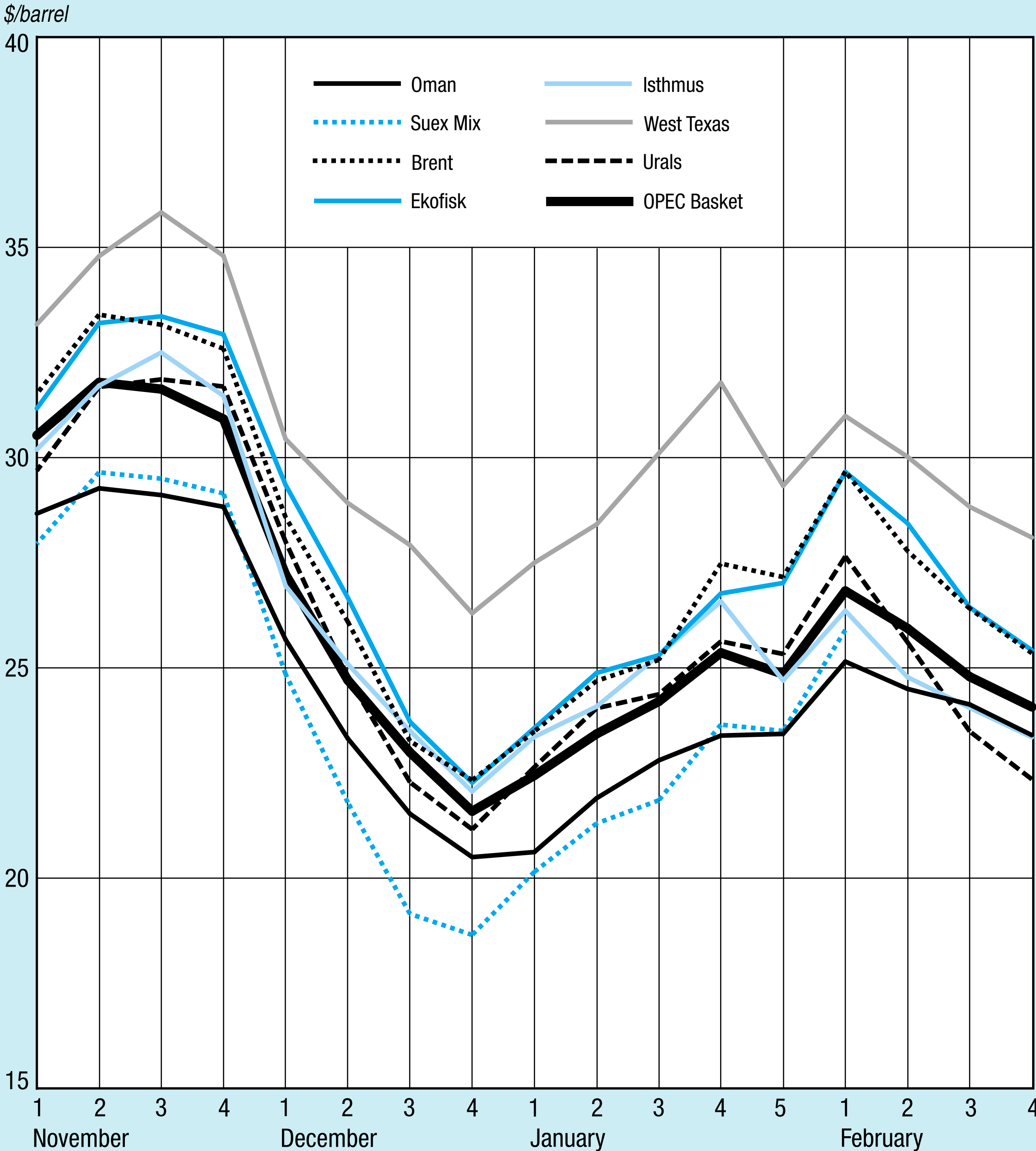


Table 3: North European market — bulk barges, fob Rotterdam *($/b)*

1999	naphtha	regular gas unleaded 87	premium gas unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
February	10.46	12.44	13.05	12.75	13.83	8.99	8.29
March	13.09	14.49	15.36	15.61	16.16	9.68	9.11
April	15.59	18.23	18.93	17.10	19.29	11.53	10.61
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

Sources: Platt's Oilgram Price Report & Platt's Global Alert. Prices are average of available days.

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

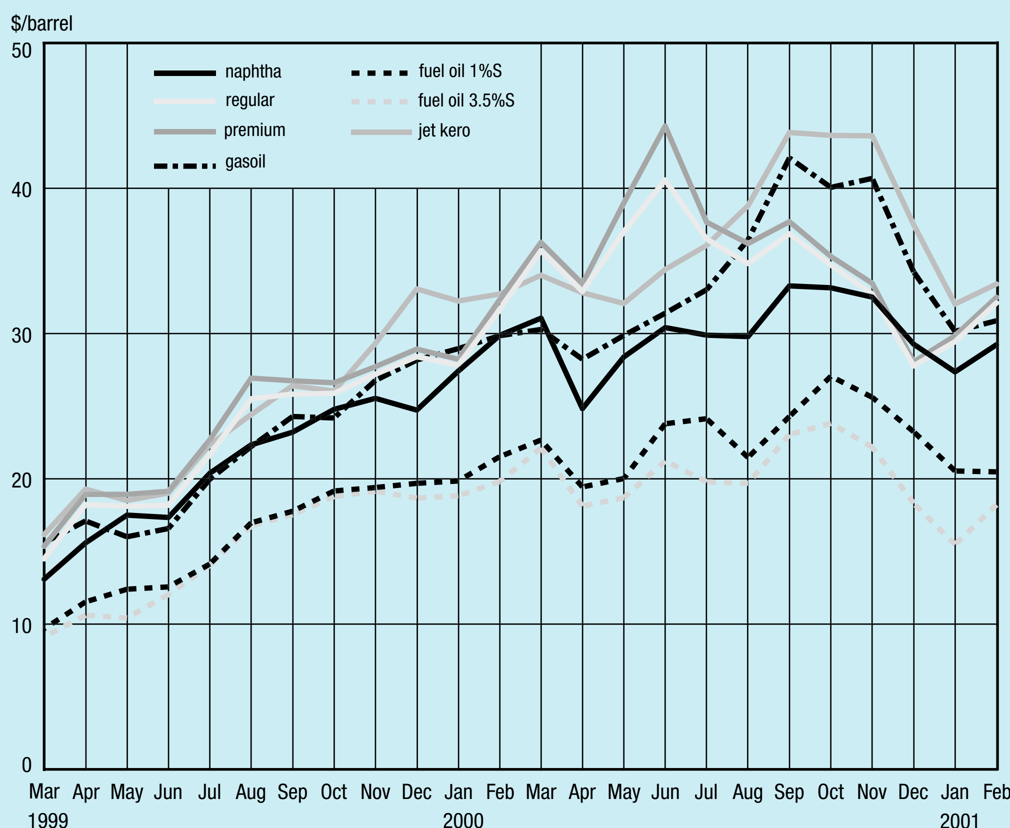


Table 4: South European market — bulk cargoes, fob Italy *($/b)*

1999	naphtha	gasoline premium unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
February	9.26	12.69	11.07	12.36	8.44	7.47
March	11.80	15.08	13.88	14.47	9.45	8.04
April	14.49	18.82	15.32	18.30	10.71	9.85
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

Sources: Platt's Oilgram Price Report & Platt's Global Alert. Prices are average of available days.

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

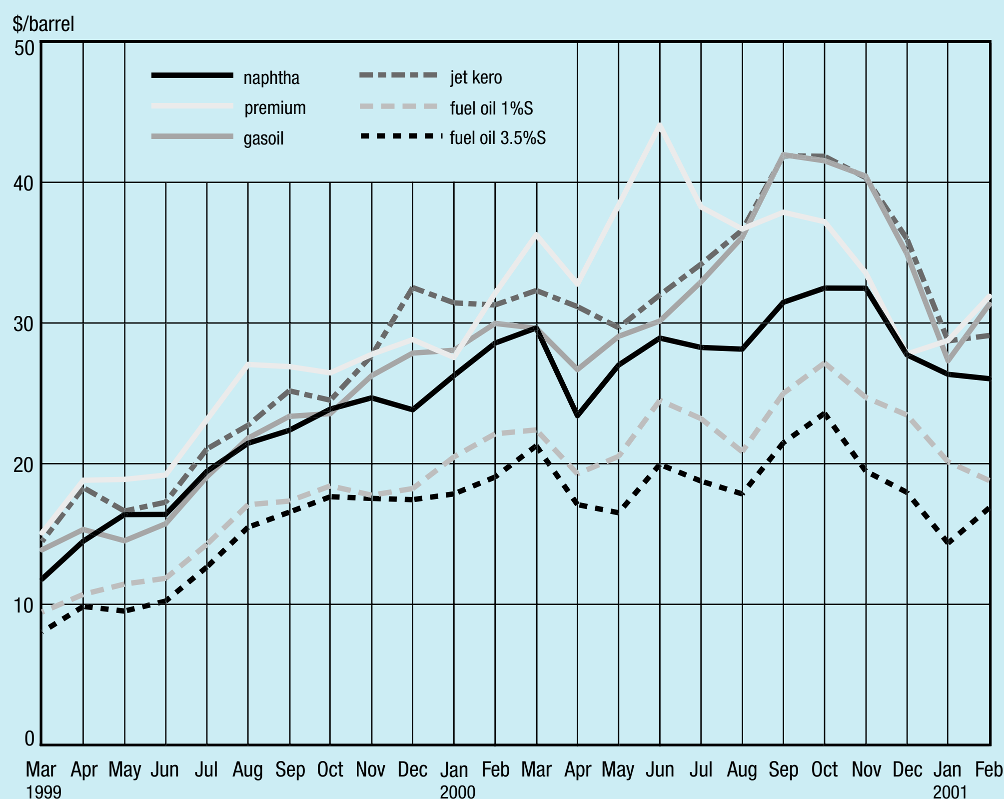


Table 5: US East Coast market — New York *($/b, duties and fees included)*

1999	gasoline regular unleaded 87	gasoil	jet kero	fuel oil 0.3%S LP	fuel oil 1%S	fuel oil 2.2%S
February	13.12	12.63	13.36	11.42	8.73	8.31
March	17.50	16.02	16.68	13.21	11.20	10.36
April	20.61	17.85	18.84	15.18	13.06	11.78
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

Sources: Platt's Oilgram Price Report & Platt's Global Alert. Prices are average of available days.

Graph 5: US East Coast market — New York

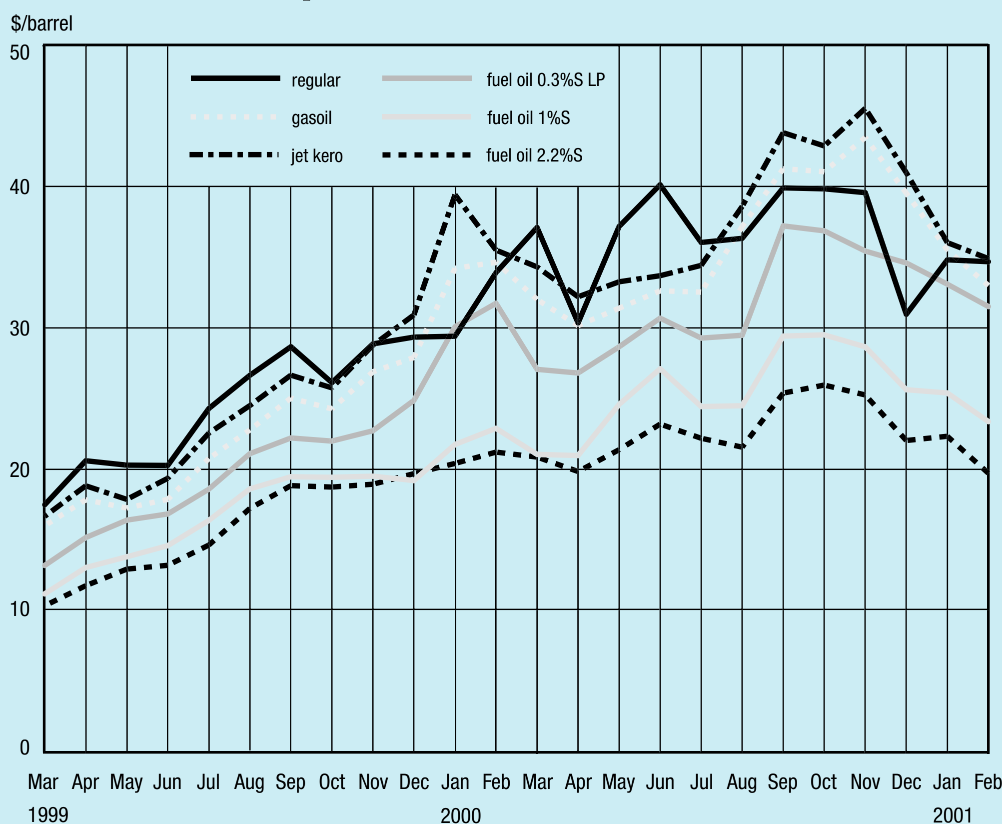


Table 6: Caribbean cargoes — fob *($/b)*

1999	naphtha	gasoil	jet kero	fuel oil 2%S	fuel oil 2.8%S
February	10.46	11.59	12.72	7.41	6.67
March	15.39	15.04	15.66	9.42	8.37
April	16.70	17.34	18.36	10.85	10.01
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

Sources: Platt's Oilgram Price Report & Platt's Global Alert. Prices are average of available days.

Graph 6: Caribbean cargoes — fob

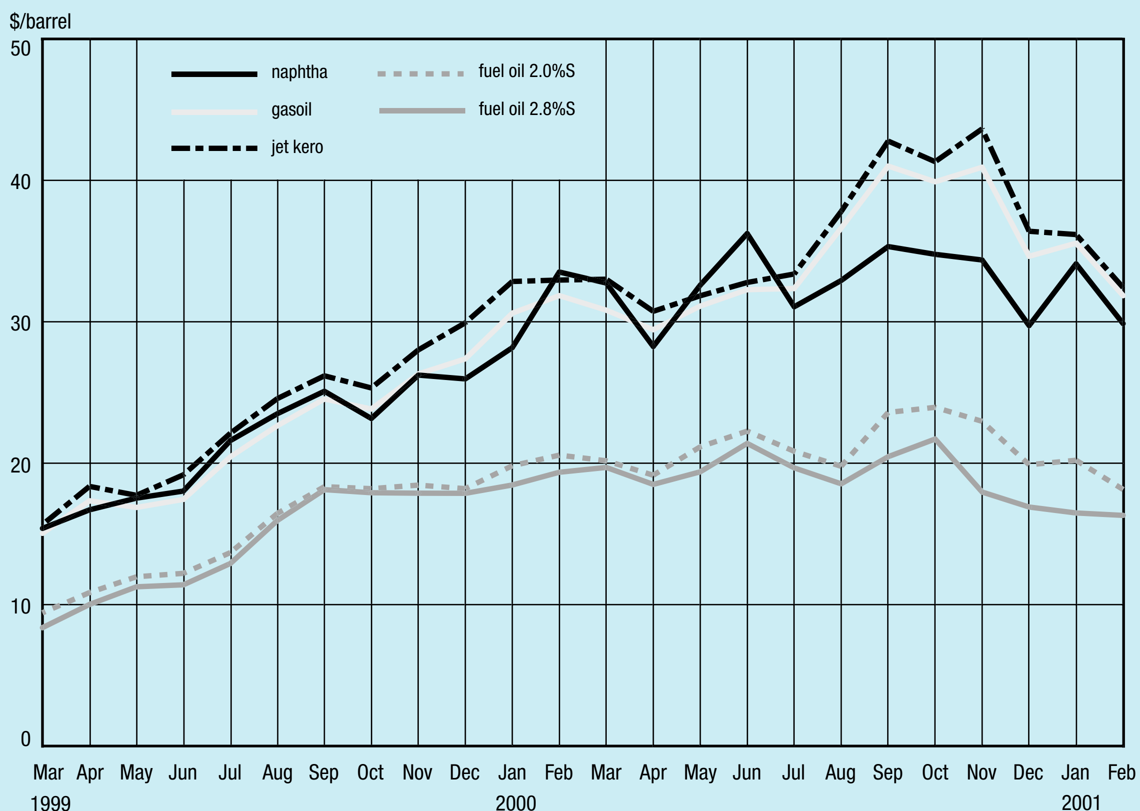


Table 7: Singapore cargoes *($/b)*

1999	naphtha	gasoline premium unleaded 95	gasoil	jet kero	fuel oil 0.3%S	fuel oil 180C	fuel oil 380C
February	11.48	13.85	12.32	13.34	9.00	8.46	8.24
March	13.66	15.79	14.10	15.82	10.85	9.80	9.57
April	16.19	19.74	16.73	19.29	13.07	11.93	11.71
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

Sources: Platt's Oilgram Price Report & Platt's Global Alert. Prices are average of available days.

Graph 7: Singapore cargoes

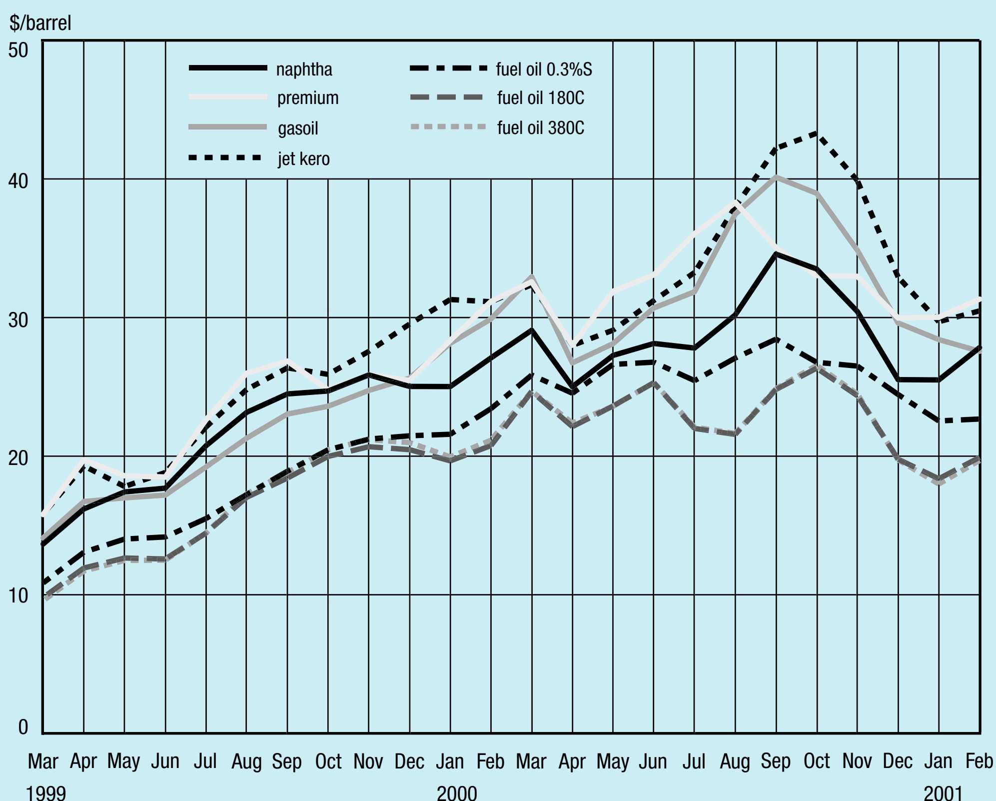
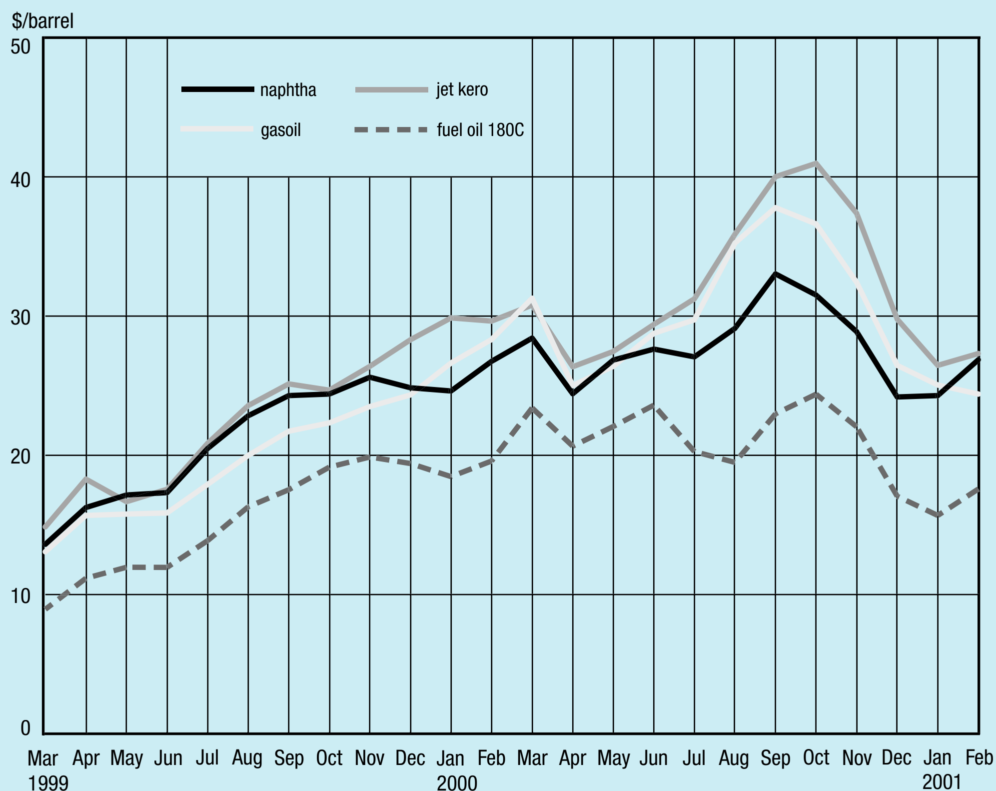


Table 8: Middle East— fob *($/b)*

1999	naphtha	gasoil	jet kero	fuel oil 180C
February	11.27	11.17	12.25	7.62
March	13.61	13.07	14.86	8.94
April	16.25	15.68	18.29	11.17
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

Sources: Platt's Oilgram Price Report & Platt's Global Alert. Prices are average of available days.

Graph 8: Middle East — fob



Iran plans to export water to five Middle East states

Tehran — Iran is planning to supply water to five Gulf states to help them overcome water shortages, it was report in the government daily *Iran* last month.

The paper quoted First Vice-President Hassan Habibi as saying: "The five Gulf states of Kuwait, Qatar, Saudi Arabia, Bahrain and the United Arab Emirates are among eight countries facing water shortages."

He added that it would be beneficial both for Iran and for regional security to supply water to the five countries concerned.

Earlier this month, the Kuwaiti government said it was considering a project to transport fresh water from Iran to the Emirate, with the former Kuwaiti Minister of Electricity & Water, Dr Adel K Al-Sabeeh, saying that his country would announce its stance after a thorough survey of the plan.

The Iranian Energy Ministry has said that Iran could export one billion cubic metres/year of water to the southern Gulf littoral states, and had submitted a related plan to the government.

Last year, reliable sources said Iran was prepared to go ahead with a plan to sell drinking water to neighbouring Kuwait.

The project, to be completed within the next five years, would be carried out by a consortium of investors from Iran, Kuwait and the UK. Under the scheme, some 760 million litres/day of water would be supplied to the Emirate by Iran.

The total investment cost of the project was estimated at $2bn. Around 35 per cent of this amount would be met by Iran and the rest financed by the Kuwaiti and British partners.

The project envisions a 540-km pipeline to be built to conduct water from the Karkheh dam in southern Dasht-E-Abbas in Iran's Khuzestan Province.

Some 330 km of this pipeline, valued at $800m, would be constructed through Iranian territory, while another 210 km of line would be laid under the sea.

According to an initial agreement, Iran would supply water at a cost of $1.5-2.0/litre to Kuwait for a span of 30 years.

However, according to an earlier report in UK newspaper the *Daily Telegraph*, the plan may put excessive strain on the water resources of the Karkheh dam.

Gas supply deal clears way for fertilizer project in Dubai

Dubai — The $180 million fertilizer project run by SPIC Fertilizers & Chemicals (SFC) in Dubai's Jebel Ali free zone is set for take-off, now that the Dubai government has made a long-term commitment on gas supply, it was reported last month.

The government has agreed to supply natural gas for an period of initial 15 years, and a gas supply and purchase agreement will be signed soon, according to SFC Deputy Managing Director, S Chandramohan. Commercial production at the Jebel Ali plant would begin in the last quarter of next year, he added.

Some 400,000 tonnes/year of urea and 226,000 t/y of ammonia would be produced at the plant, all for export to India under a buy-back arrangement between SPIC India and SFC, reported the Dubai-based paper *Gulf News*.

The Jebel Ali plant is a joint venture between south Indian agribusiness firm SPIC and Dubai's ETA group. The project was set up in 1996 with an initial investment of $160m, which was later revised to $180m.

Construction began in 1998 after SPIC brought a second-hand fertilizer plant from Sri Lanka to Jebel Ali, but the project made little headway, due to high naphtha prices and the absence of a reliable gas supply.

However, over 50 per cent of the project has now been completed at an estimated cost of $70m, and the gas is expected to come from the Abu Dhabi-Dubai gas pipeline.

M W Kellogg is the prime engineering contractor for the ammonia plant and Stamicarbon BV of the Netherlands is technology provider for the urea plant.

The investment in the project is the largest by any overseas company in the Jebel Ali free zone. It is also the first overseas urea/ammonia project by any Indian company.

SPIC has another Middle East interest: Indo-Jordan Chemicals, which is a $170m joint venture based at Eshidiya in Jordan producing phosphoric acid.

Heads of World Bank and IMF visit Nigeria to discuss economy

Abuja — The heads of the World Bank and the International Monetary Fund (IMF) visited Nigeria last month and met with President Olusegun Obasanjo to discuss economic matters.

Speaking at a joint press conference with World Bank President James Wolfensohn, the IMF's Managing Director Horst Köhler noted that it could not be said that everything was well with the Nigerian economy.

Finding the right economic balance would encourage domestic and foreign investments to flow into the country, the IMF boss said, adding that it was important for Nigeria to take the right decisions on liquidity, expenditure and fixing the right prices for basic services.

He added, however, that the Fund was not in the business of dictating to the Nigerian government what decisions it should take, but it wanted to work with the country in a co-operative manner.

Köhler said that while it was true that deregulated prices for services improved the conditions and growth of the economy,

it was also imperative to consider the "appropriateness" of any decision relating to prices.

The Nigerian government has come in for a lot of domestic criticism for blindly accepting decisions from the World Bank and the IMF. Many claim that the government's plan to deregulate the nation's oil industry — which they believe will impoverish ordinary Nigerians — was one of the decisions it had thoughtlessly followed from the two institutions.

Köhler said the Fund had genuine concerns over the planned huge capital expenditure in Nigeria's 2001 budget, as it had reservations on the sustainability of such huge expenditure and whether or not the economy could absorb it.

Nigeria plans to spend some $4.5 billion on the provision of infrastructure this year, an amount which the IMF and the World Bank have said will result in too much money in circulation and hyper-inflation.

He emphasized the need for the people to benefit from the dividends of democracy. He stressed, however, that project execution must be transparent and all procurement procedures must be open and competitive.

Köhler added that useful discussions had been held not only with President Obasanjo, but also with the economic policy co-ordinating committee chaired by Vice-President Atiku Abubakar, and with the legislative arm of government. He emphasized that the idea was to offer sound advice based on best practices across the globe.

He said that he believed it was possible for Nigeria's economy to grow at the rate of between nine and 10 per cent annually, as against the government's projection of seven per cent, adding that the country needed to rediscover the fact that it was a rich nation.

For his part, the World Bank's Wolfensohn added that the two Bretton Woods institutions were willing and ready to support the growth of African economies, and the Bank would assist in creating the required atmosphere for achieving rapid growth.

Price recovery helps Qatar record strong economic growth in 2000

Doha — Qatar recorded strong growth last year and will continue to do so in 2001, because of the continuing recovery in energy prices and higher revenues from the export of liquefied natural gas, according to a new report issued last month.

The report was presented to the annual general meeting of the Qatar National Bank by its Chairman, Yousef Hussain Kamal, who is also the country's Minister of Finance, Economy & Trade.

In the report, the Minister noted that the nation's exports of LNG rose from 6.5 million tonnes in 1999 to almost 11m t last year.

He also noted that the country's gross domestic product was seen expanding by more than 20 per cent, following an increase of 18.9 per cent in 1999.

The state budget was forecast to record a surplus, which would enhance the government's domestic and international reserves, Kamal added.

The Qatar National Bank achieved record results in 2000, with net profits rising by nine per cent and total assets improving by 10 per cent.

At the same time, the annual inflation rate had remained below three per cent throughout the past two years.

Indonesian exports reach new record level of $62bn in 2000

Jakarta — Indonesia earned a record $62.02 billion from exports last year, reversing a two-year decline, according to the latest figures from the Central Bureau of Statistics.

Non-oil and gas exports rose by 22.91 per cent to $47.78bn, and oil and gas exports surged by 45.39 per cent to $14.24bn.

The Head of the Bureau, Soedarti Surbakti, said that total exports for 2000 increased by 27.43 per cent from $48.67bn in 1999. Comparatively, the government had estimated exports last year at $55bn.

The country's import bill for 2000 also increased by 39.76 per cent to $33.55bn, from $24bn the year before, Soedarti said.

The import of raw materials, mostly used for the re-export oriented manufacturing sector, shot up by 40.51 per cent to $23.54bn, while the import of capital goods surged by 47.91 per cent to $4.09bn. Imports of consumer goods rose by 8.47 per cent to $2.52bn.

The nation's trade surplus for the year under review rose to $28.47bn, up from $24.57bn in 1999, against a backdrop of the continuing recovery in oil prices.

Separately, the latest figures from Bank Indonesia, which is the central bank, said the country's foreign exchange reserves stood at $29.26bn in the fourth week of January.

Algeria's foreign debt declines by $3 billion to ten-year low

Algiers — Algeria's foreign debt stood at a ten-year low of $25.26 billion at the end of 2000, according to the latest figures from the country's Central Bank.

The end-2000 level was down by more than $3bn from the $28.31bn recorded in December 1999, noted the Bank.

It added that the ratio between annual debt servicing and exports also fell from 39.05 per cent in 1999 to 19.80 per cent last year. The country's debt servicing costs were $4.50bn in 2000, in comparison with $5.11bn in 1999.

This result, said the Bank, was achieved thanks to firmer oil prices and the corresponding rise in oil and gas export revenues on the one hand, and to better control of macro-financial equilibrium on the other.

At the end of 2000, the country's short-term debt stood at just $173 million, out of the total debt of $25.26bn. The medium and long-term debt of $25.08bn was denominated 73

per cent in US dollars, French francs, Deutschmarks and Japanese yen.

However, the Bank pointed out that in spite of exceptional export receipts in 2000 of $22bn and foreign exchange reserves at $11.9bn, the nation's foreign debt still weighed on its economic development.

To ease the debt burden, the Bank said that the authorities were considering different debt-handling techniques, such as conversion of debt into shares in the Algerian state-owned firms that are due to be privatized by the current government.

Meanwhile, the latest figures from the country's statistics office show that Algeria's rate of inflation in Algeria has fallen sharply over the last six years. From a rate of 30 per cent in 1995, inflation fell to just 0.34 per cent at the end of 2000.

The annual rate of inflation started to come down in 1996 and 1997, reaching 18.7 per cent and 5.7 per cent, respectively. The fall continued in the following years to five per cent in 1998, 2.6 per cent in 1999, and 0.34 per cent last year.

The office noted that the drop in the inflation rate was one of targets fixed by the three-year financing facility accord that Algeria signed with the International Monetary Fund in 1995.

Iraq and Jordan seeking to sign free trade agreement

Baghdad — Iraq and Jordan have opened talks aimed at reaching a free trade agreement, similar to those signed recently by Baghdad with Egypt and Syria, newspaper reports said last month.

The talks were being held between a visiting Jordanian delegation headed by Trade & Industry Minister, Wasef Azzar, and the Iraqi side led by Trade Minister, Dr Mohammed Mehdi Saleh.

"Iraq is seeking to increase the volume of trade exchanges with Jordan to help reach a free trade agreement, similar to those signed with Egypt and Syria," the papers quoted Saleh as saying during a meeting with the Jordanian delegation.

"Iraq's market is open to Jordanian commercial and industrial companies to set up joint projects to achieve economic integration between the two countries," he added.

Sources said that the current talks would also tackle problems facing Jordan in exporting $450 million worth of goods to Iraq. The exports are part of a barter deal under which Baghdad supplies Jordan with all its energy needs.

Iraq exports some 4.8 million tonnes/year of crude oil and products to Jordan, worth a total of around $600m. These oil exports to Jordan are exempt from the United Nations trade restrictions on Iraq, which have been imposed since 1990.

Earlier, Iraqi newspapers reported that Baghdad had concluded a free trade agreement with Syria, along the lines of a previous deal signed with Egypt.

The deal was signed in Damascus by Iraqi Vice-President, Taha Yassin Ramadan, the most senior Iraqi official to visit Syria for 20 years, and Syrian Prime Minister, Mohammed Mustafa Mero.

The free trade agreement stipulates the removal of all customs duties and related taxes on goods originating in either of the two countries.

It is expected to increase the volume of trade between Syria and Iraq to $1 billion this year, up from $500m in 2000.

Saudi Arabia's SABIC posts big jump in profit in 2000

Riyadh — The Saudi Arabian Basic Industries Corporation (SABIC) posted a $968 million profit in 2000, an increase of 113 per cent over the 1999 figure of $455m, it was announced last month.

SABIC Chairman, Hashim A Yamani, was quoted by the *Saudi Gazette* as saying that the result could be attributed to two main factors.

One was a rise in global petrochemical prices and the other was the firm's increased efficiency, which was the result of several programmes to improve performance in operations, production and marketing, that were being implemented by the management.

SABIC also announced record sales revenues of $6.56bn for last year, sharply up from 1999's $5.11bn, noted Yamani, who is also the country's Industry & Electricity Minister.

The company's Vice-Chairman & Managing Director, Mohammed H Al-Madhi, said he was pleased with the financial results.

"SABIC will go ahead with its strategic plans to expand as a global company," he said.

The SABIC boss added that several expansion programmes that came onstream last year would boost the corporation's annual production this year.

Venezuela's President Chavez announces Cabinet reshuffle

Caracas — Venezuelan President Hugo Chavez has announced a significant reshuffling of his Cabinet, appointing new Defence, Foreign, Interior & Justice, and Infrastructure Ministers.

Chavez has appointed Jose Vicente Rangel to become his new Defence Minister, replacing General Eliecer Hurtado Soucre, who was named Infrastructure Minister.

Rangel, who had been serving as Foreign Minister, will become the first civilian to hold the post of Defence Minister in about 70 years.

Chavez also named Luis Alfonso Davila to replace Rangel as the new Foreign Minister. Davila had been holding the post of Interior & Justice Minister.

Luis Miquilena has been chosen to replace Davila at the helm of the Interior & Justice Ministry. He had previously served as Interior & Justice Minister at the start of Chavez's term in office at the beginning of 1999.

Kuwait Fund lends Syria $65m to boost power station capacity

Damascus — Kuwait and Syria have finalized an agreement under which the latter will receive $65 million to expand the Naseriya power station, the Kuwait News Agency (KUNA) reported last month.

The deal was signed by Dr Mohammad Sadeqi, representing the Kuwait Fund for Arab Economic Development (KFAED), and officials from the Syrian Planning Authority.

KUNA quoted Sadeqi as saying that the loan would finance the import and installation of gas turbines, steamers and two steam turbines to produce around 300 megawatts of electricity.

The total output of the station, which is located to the north-east of the Syrian capital Damascus, will be about double that amount.

The project's total cost is around $217m, with the venture being co-financed by the Kuwait-based Arab Fund for Economic and Social Development.

KFAED has so far extended some $254m in loans to develop the Syrian power generation sector.

Iranian President Khatami opens $100 million petrochemical plant

Mahshahr, Iran — Iranian President Mohammad Khatami has opened a $100 million plant for the production of paraxylene in southern Iran, reported the official Islamic Republic News Agency (IRNA) last month.

The plant's director, Mohammad-Reza Rezaie, said that it would produce 180,000 tonnes/year of paraxylene, all of which would be exported.

Since March last year, 50,223 t of paraxylene had been produced in the country, Rezaie said, adding that 36,820 t of the total, worth $15m, had been exported.

Executive operations on the project started in March 1997 and ended in March 1999. Rezaie noted that it was partly funded by a French company, which he declined to name.

The plant is part of the Bandar Imam Khomeini petrochemical complex, Iran's biggest and one of the largest in the Middle East. It took nearly three years to build.

Firm oil prices boost GCC's trade surplus with Japan

Dubai — The value of Japan's trade with the six members of the Gulf Co-operation Council (GCC) increased by 68 per cent to $23 billion in the first half of 2000, according to figures released by the Japanese External Trade Organization (Jetro).

This compared with $13.77bn during the same period in 1999, said Jetro, and attributed the rise to the continuing strength in crude oil prices.

As a result of this, the cost of Japan's imports from the GCC nations rose by a hefty 92 per cent, while the value of Japan's exports to the GCC declined by four per cent.

"Due to the sharp climb in the import value and the decline in exports, the balance of trade grew in favour of the GCC countries," Jetro noted.

At the end of June 2000, the GCC nations enjoyed a trade surplus with Japan to the tune of $16.3bn, an increase of 142.5 per cent over the first half of 1999.

The GCC countries, as a single block, supplied more than three-quarters (76 per cent) of Japan's crude oil imports in the period under review.

Japan's total imports from GCC countries in the first half of 2000 surged to $19.69bn from $10.24bn during the same period in 1999. Fossil fuels constituted 98.5 per cent of the total.

The cost of Japan's crude oil imports from the GCC surged by 101.8 per cent to $14.96bn in the first half of last year, up from $7.4bn in the corresponding period in 1999.

"Out of the 568 million barrels of crude imported from the GCC in the first half of 2000, 204m b, or 35.9 per cent, came from the United Arab Emirates, 194m b (34.2 per cent) came from Saudi Arabia, 73m b (12.9 per cent) came from Qatar, 60m b (10.6 per cent) came from Kuwait, and 36m b (6.4 per cent) came from Oman. Imports from Bahrain were limited to refined products only," said Jetro in a statement.

Algeria not realising its potential in petrochemicals, says Minister

Algiers — Algeria's achievements in the petrochemical sector have fallen well short of its potential, according to the country's Minister of Energy & Mines, Dr Chakib Khelil.

Addressing an industry seminar in Algiers last month, he noted that output levels were paltry, in comparison with the level of installed capacity, which was about 1.5 million tonnes/year.

Even though the sector had been developed in the 1970s, the fall in oil prices in the 1980s had led to all investments in petrochemicals being stopped, said Khelil.

The seminar examined Algeria's downstream activities, most notably the advantages being offered under the nation's new hydrocarbons law, related to investments in storage, refining, petrochemicals and the distribution of petroleum products.

In a separate development in the petrochemical sector last month, Algerian state oil and gas company Sonatrach and Malaysia's Petronas were reported to be finalizing a $1.5 billion contract.

Sources at the Energy & Mines Ministry said that the deal would involve construction of a unit to produce ethylene and propylene, which would be transformed into propylene and PVC. Most of the unit's production would be used for exports, the sources added.

Also last month, the Vice-President of France's TotalFinaElf, Christophe de la Margerie, announced that his company was holding discussions with Sonatrach concerning a contract for gas exploration and development.

Speaking to reporters on the sidelines of an industry conference, Margerie indicated that his firm was interested in blocks in the Hamra and Rhourde Nouss regions, in south-eastern Algeria.

EC officials in Nigeria for talks on development co-operation

Abuja — Officials of the European Commission (EC) have held discussions with Nigerian President Olusegun Obasanjo, as part of efforts to establish guidelines for development co-operation.

The team of officials was accompanied to the talks by the Head of the EC Delegation in Nigeria, Ambassador Veli Ollikainen.

He said in a statement after the session that the talks centred on various areas of mutual co-operation between the European Union (EU) and Nigeria.

The visiting team, led by the EU's Nigeria Desk Officer Nick Costello, would spend two weeks visiting six of Nigeria's 36 states which had been identified as potential beneficiaries of European development assistance.

Ollikainen explained that the six states — Abia, Cross River, Gombe, Kebbi, Osun and Plateau — represented Nigeria's six geo-political zones.

Visits to the states, he added, would be carried out in conjunction with Nigeria's National Planning Commission, the African Leadership Forum and the Development Research Network.

During its stay in Nigeria, the team would hold discussions with state governors, leaders of relevant state legislatures and non-governmental organizations, Ollikainen noted.

Dubai's GDP grew by record nine per cent in year 2000

Abu Dhabi — The Emirate of Dubai posted a record nine per cent growth in its GDP last year, according to a new study by the Dubai Economic Development Department.

Dubai's GDP in 2000 totalled $15.1 billion, compared with $13.86bn a year earlier, the local *Gulf News* quoted the Department's report as saying.

Previous years saw rises in GDP of 5.9 per cent in 1999, 2.6 per cent in 1998, 4.8 per cent in 1997 and 8.5 per cent in 1996.

The study attributed the improvement last year to higher oil sector revenues, which grew by 38.8 per cent, from $1.27bn in 1999 to $1.77bn last year. This was achieved despite a decline in production.

Dubai's oil sector contributed around $1.36bn to the Emirate's GDP in 1997, but the figure dropped to $1bn in 1998, and rose again to $1.27bn in 1999.

The non-oil sector's contribution to GDP rose by six per cent, totalling $13.35bn in 2000, compared with $12.58bn in 1999.

Saudi Arabian private sector registers 2.4 per cent growth

Riyadh — The Saudi Arabian private sector continued its positive performance during 1999 by registering a rate of growth estimated at nearly 2.4 per cent, it was reported last month.

The annual report of the Council of Saudi Chambers of Commerce & Industry showed that the share of the private sector in the Kingdom's gross domestic product during the year was 38 per cent.

This, it said, was less than the previous year, when it reached 40 per cent, but went on to point out that the share was around 48 per cent when it was evaluated in terms of fixed prices.

These figures demonstrated the continued expansion and the increase of efficiency in economic and social development in the Kingdom, the report added.

Giving a breakdown of activities in the private sector, it noted that non-oil manufacturing industries registered growth of 6.3 per cent, the construction and building sector 2.1 per cent, and the electricity sector 3.9 per cent.

The report said that the private sector was expected to continue its positive growth within the framework of the increase in government expenditure and the positive effects of various economic reforms that had been implemented since 1998.

Algeria, Egypt sign accords to boost economic co-operation

Algiers — Algeria and Egypt have signed several economic partnership accords and agreements, it was reported last month.

The accords covered such topics as the elimination of double taxation and the reciprocal protection of investments.

The agreements were been signed at the end of a session of the Algeria-Egypt Joint Commission, which was co-chaired by the Foreign Affairs Ministers of the two countries, Algeria's Abdelaziz Belkhadem and his Egyptian counterpart, Amr Moussa.

Regarding the twelve accords signed, eight involved Egyptian investments in projects tied to Algeria's food and pharmaceutical industry sectors.

UAE firm signs investment promotion deal with Yemen

Dubai — The United Arab Emirates Offsets Group (UOG) and Yemen's Ministry of Oil & Mineral Resources have signed a declaration of principles, under which they are to promote and facilitate the development of long-term economic ties between the two countries.

The declaration was signed by UOG Chief Executive Officer, Mohammed Saif Al Mazroui and the Yemeni Deputy Minister for Oil & Mineral Resources, Dr Rasheed Ba-Rabaa,

on the sidelines of a two-day conference on investment opportunities in Yemen.

"We are pleased to reach an understanding with UOG for exploring avenues of investment in our country's mineral and petroleum sectors, which offer a wide range of opportunities with high potential for forging joint ventures," said the Yemeni Minister for Oil & Mineral Resources, Mohammed Khadim Al Wajeeh, who was heading his country's delegation.

For his part, Ba-Rabaa added: "We look forward to co-operating with the government and people of the UAE, and working towards creating a mutually beneficial economic and commercial relationship."

Both parties are to commence discussions with a view to entering formal agreements, enabling the UAE to make commercially viable investments in Yemen.

Ba-Rabaa discussed the infrastructure facilities and investment climate in his country, where the oil sector offered exploration opportunities at prices much more attractive than those prevalent in neighbouring countries.

He noted that Yemen's production capacity was currently at 450,000 barrels/day, with proven reserves of 3.7bn barrels of oil and 17 trillion cubic metres of gas. The recent discovery in Yemen of two more oil fields was encouraging, he added.

Yemen has already signed a production-sharing agreement with Occidental of the United States and is set to sign another with Canada's Mexen.

Nigerian committee says smelter needs new management structure

Abuja — The Nigerian government should develop a new management structure for the Aluminium Smelter Company of Nigeria (Alscon) according to the National Economic Intelligence Committee.

"One of the reasons for shutting down Alscon may be attributable to the management structure, by which the technical partner, with a minority share, provides the managing director and all key staff," the committee stated at a press briefing.

The government established the committee in February 1994 to analyse and work out details of enforcing the implementation of the country's annual budget and to assess and report on any project being carried out by the administration.

The committee also proposed that the contribution by the government to the smelter be reviewed, with a view to increasing its equity shareholding in the company.

It also said that the government should compel the smelter to pay the $5.38 million it owed the Nigerian Gas Company, which supplied it with gas while it was in production.

The smelter, located at Ikot Abasi in Nigeria's south-east region, was shut in June 1999, due to a lack of working capital. It had begun production less than a year earlier, in October 1998.

Nigeria has a 70 per cent equity holding in the smelter, while the technical partner, Ferostaal of Germany, has 20 per cent and Reynolds of the United States has the other 10 per cent.

Algeria, Libya sign agreement to co-operate on tourism

Algiers — OPEC's two North African Members, Algeria and Libya, have signed a tourism co-operation accord, it was officially announced last month.

The agreement, signed by the Algerian Tourism & Handicrafts Industry Minister, Lakhdar Dorbane, and his Libyan counterpart, Fethi Mustapha Al-Masrati, focuses on an action plan to promote tourism in the Saharan regions of the two countries.

The two sides also agreed to create working groups to examine the guidelines of the plan for 2001 and 2002.

Speaking at the signing ceremony in Algiers, Dorbane stressed Libya's pioneering experience in developing Saharan tourism, where investments have allowed the development of attractive destinations for foreign visitors.

Meanwhile, the Libyan official indicated that his country had found in Algeria an excellent partner for tourism ventures, and noted that the two countries had in recent years launched joint tourism projects worth $165 million.

Saudi Investment Authority plans more service centres

Dubai — The Saudi Arabian General Investment Authority (Sagia), which has now been in operation for a year, plans to set up two more comprehensive service centres (CSCs) to attract foreign investment, according to a top official in the Kingdom.

Prince Abdullah Bin Faisal Bin Turki Al Abdullah Al Saud, the Head of Sagia, noted that Saudi Arabia's new foreign investment law had already attracted foreign direct investment totalling $50 billion in joint ventures, mostly in petrochemicals and refining.

"We have set up the first CSC in Riyadh and will open two more in early 2001, in Jeddah and Dammam," he told the *Shell in the Middle East* magazine.

CSCs are one-stop shops where investors may gain access to representatives from the Kingdom's government departments with whom they must deal.

"With the new policies being implemented by the government, we expect that investment will come from domestic and foreign investors and Sagia's role will be to monitor and oversee this investment," said the Prince.

"These may be representatives from departments, such as immigration, finance and customs, so that potential investors do not have to go all over town gaining access to the individual departments," he explained.

However, foreign investment would not be allowed in real estate in the holy places, such as the holy cities of Makkah and Madinah. It was also unrealistic to expect a big opening up of the financial services sector, he noted.

Prince Abdullah also pointed out that Sagia also planned to back the Kingdom's gas initiative.

OPEC Fund signs eight loans worth more than $47m with various developing countries

In February, the OPEC Fund for International Development signed eight agreements for loans totalling $47.5 million with Bolivia, Honduras, Kenya, Korea DPR, Kyrgyz Republic, Mauritania, Morocco and Nepal.

No 6/2001
Vienna, Austria, February 9, 2001

OPEC Fund supports micro-finance institution in Bolivia

An agreement for a $2 million line of credit has been signed between the OPEC Fund for International Development and Caja Los Andes SA (CLA), a Bolivian-based, private financial institution.

The loan will allow CLA to respond more effectively to the financing requirements of the country's small entrepreneurs and farmers. Micro-enterprises play a significant role in wealth generation and employment in Bolivia, supporting some 60 per cent of the working population and accounting for 90 per cent of the jobs created over the past few years. Caja Los Andes has developed remarkable micro-lending skills and experience: in over three years it has granted 160,000 micro-loans to over 42,000 micro-entrepreneurs.

The line of credit represents the OPEC Fund's first private sector operation in Bolivia. Substantial assistance totaling $39.7m, however, has previously been directed to the public sector in the form of project loans in the transportation, agriculture, water supply and sewerage and health sectors. Additionally, the Fund has approved debt relief to Bolivia under the Heavily Indebted Poor Countries initiative, and the country has also been the recipient of technical assistance grants benefiting education and health schemes, as well as one grant for emergency aid. In December 2000, an agreement for the protection and encouragement of investment was entered into between the Fund and the government of Bolivia.

The signing ceremony took place at the Fund's headquarters in Vienna. The agreement was signed on behalf of Caja Los Andes SA by Javier Lupo Gamarra, Vice-Chairman of the Board and Pedro Arriola Bonjour, General Manager, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

No 07/2001
Vienna, Austria, February 9, 2001

Honduras to pursue flood protection project with $5m Fund loan

The OPEC Fund for International Development has signed an agreement with the Republic of Honduras for a loan of $5 million to help prevent flood damage to the country's vital agricultural areas. Once completed, the project is expected to dramatically reduce widespread crop destruction and lost revenues, which have placed additional hardships on a six million-strong population still recovering from the devastation wreaked by Hurricane Mitch in 1998.

Agriculture plays a crucial role in Honduras' economy, and is responsible for producing the majority of food for the country. Fertile soils and a diverse climate lend themselves to an ideal growing environment. However, the sector suffers numerous setbacks during the rainy months, when severe flooding causes massive damage to the agricultural regions, jeopardizing food security and destroying livelihoods, especially among the rural poor. These problems are particularly severe in the country's northerly-located Sula Valley area, where the highest concentration of agricultural and pastureland is found.

Three major rivers that run through the valley, the Chamelecon, Choloma and Ulua, experience serious flooding due to an inadequate drainage and protection system. Sula Valley has been deemed a high-risk area by the Government of Honduras, and is in urgent need of rehabilitation.

In response to these challenges, a variety of sub-projects will be established to entirely revamp the infrastructure surrounding the flood plain areas. Special emphasis will be placed on halting current environmental degradation and preserving the region's fragile ecosystem. Interventions will include the excavation of new canals, enlarging existing water courses, constructing and reinforcing dikes, rehabilitating bridges, and installing gabions and syphon control works. Once fully operational, an estimated $2.8m in yearly damage to agricultural production will be prevented, and the quality of land will improve from a more regulated moisture content.

Additionally, the region's 650,000 inhabitants will benefit from the employment opportunities generated by increased land development potential, and will experience fewer constraints in the transport of agricultural produce and inputs, as well having better access to social services. As a result, the standard of living for thou-

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sands of families should receive a considerable boost.

The OPEC Fund has previously extended 14 other loans to Honduras; earlier loans consist of one for balance of payments support, and 13 project loans in the multisectoral, water supply and sewerage, energy and transportation sectors.

The agreement was signed in Vienna by Sonia E Carpio Mendoza, Chargé d'Affaires at the Embassy of the Republic of Honduras in Germany, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Sula Valley flood protection.
Sector:
Agriculture.
OPEC Fund loan:
$5m
Lending terms:
Interest rate of 1.5 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 Honduras.
Executing agency:
Executive Commission of the Sula Valley.
Implementation period:
Three years.
Appraising agency:
Kuwait Fund for Arab Economic Development (Kuwait Fund).
Loan administrator:
Kuwait Fund.
Co-financiers:
Kuwait Fund; Government of Honduras.
Total cost:
$71.28m
Project description:
The project comprises the following components:
— excavation of 40 km of new canals;
— enlarging existing water courses;
— construction and reinforcement of dikes;
— rehabilitation of bridges;
— installation of 45,000 cu m of gabions; and
— syphon control works.

No 08/2001
Vienna, Austria, February 9, 2001

Kenya to pursue road construction with $7m OPEC Fund loan

The OPEC Fund for International Development has signed a $7 million loan agreement with the Republic of Kenya in support of a road rehabilitation project in the southern province of Makindu. By upgrading the road, the project will aid a government initiative to provide Kenya's more isolated regions with a more reliable road network, thus reducing transportation costs, promoting economic activity and facilitating the integration of domestic and regional markets.

Kenya has a fairly extensive road network, but it is mostly concentrated in the heavily populated Mombasa-Uganda corridor. Government strategy is now focusing on developing an efficient road infrastructure in rural areas, where agricultural potential and economic expansion are currently restricted due to the poor condition of the road system. The transportation of agricultural outputs and basic commodities has become a serious problem, particularly during the rainy season and, to make matters worse, many existing roads are unconnected to the main road network.

The route earmarked for rehabilitation is the 67-km Wote-Makindu road. Following the existing gravel road, and starting outside Wote, the province's capital, the new road will run southwards through towns and villages until it joins the main Nairobi-Mombasa highway at the town of Makindu. It will be paved to double bituminous standard with a six-metre wide carriageway and a 1.5-metre wide shoulder on each side.

Upon completion, the upgraded road will greatly improve communication links between the province and the rest of the country, thereby strengthening social and economic integration and promoting interregional exchange of goods, benefiting both rural and urban populations.

In addition, it will offer improved access to employment and social services, resulting in raised incomes and better living standards for the region's 800,000 inhabitants.

The OPEC Fund has previously approved 12 other loans for development operations in Kenya, including three lines of credit to the Kenya Commercial Bank Group, one balance of payments support loan and eight project loans spread across the transportation, agriculture, health and water supply and sewerage sectors.

The agreement was signed in Vienna by Michael D Kinyanjui, Chargé d'Affaires at the Embassy of the Republic of Kenya in Austria, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Wote-Makindu road.
Sector:
Transportation.
OPEC Fund loan:
$7m
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 17 years, including a grace period of five years.
Borrower:
Republic of Kenya.
Executing agency:
Ministry of Public Works and Housing.
Implementation period:
3½ years.
Appraising agency:
Arab Bank for Economic Development in Africa (BADEA).
Loan administrator:
BADEA.
Co-financiers:
BADEA; government of Kenya.
Total cost:
$17.5m
Project description:
The project comprises the following components:
— construction works for the upgrading of 67 km of dirt road to bitumen standard, including drainage systems, bridge works, signs and markings; and
— design and supervision services.

No 09/2001
Vienna, Austria, February 9, 2001

OPEC Fund supports irrigation project with $8m loan in Korea DPR

The OPEC Fund for International Development has signed a $8 million loan agreement with the Democratic People's Republic of Korea to help finance the second phase of a project to rehabilitate the extensive Pyongnam Irrigation Scheme. With the dual aim of increasing agricultural production and at the same time conserving energy supplies, the project involves replacing the existing pump-driven system with one using more reliable, gravity-fed technology.

Agriculture, which accounted for almost one-fifth of Korea's gross domestic product in 1998, has suffered a decline in recent years due to a series of natural disasters, including hailstorms, floods and droughts. As a result, the production of rice and maize, the country's main staples, has fallen drastically, creating widespread problems of food insecurity. Strategies to reverse this decline and boost crop yields depend heavily on the existence of an efficient and reliable irrigation sub-sector, a requirement currently not being met due to the sporadic nature of electricity supplies. These energy shortages have particularly severe implications for the farming industry due to the fact that almost 80 per cent of irrigated land is watered by electrically operated, and therefore unreliable, pumping systems.

Covering over 106,000 hectares, the Pyongnam Irrigation System is located in the country's prime grain-producing area and consists of over 130 co-operative farms averaging about 500 hectares each. Rehabilitation of the scheme, which began in 1999 and is now entering its second phase, aims to provide the delivery of a steady supply of gravity-fed water to cultivated areas.

Upon completion of the project, rice and maize production is expected to increase substantially, and savings of around 115 million kilowatt hours of electricity are anticipated. In addition, the new irrigation system will allow farmers to expand areas used for fodder and green manure, which will increase the production of livestock and have a positive long-term effect on soil fertility and conservation. Along with improving the livelihoods of farmers, these benefits will also help achieve food security for the country.

The project represents the Fund's third lending operation in Korea DPR. Of the earlier loans, one supported the first phase of the Pyongnam Irrigation Rehabilitation scheme, and the other a project in the health sector.

The agreement was signed in Vienna by HE Kim Gwan Sop, Ambassador and Permanent Representative of the Democratic People's Republic of Korea to the United Nations and other International Organizations in Vienna, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Pyongnam Irrigation Rehabilitation, Phase II.
Sector:
Agriculture.
OPEC Fund loan:
$8m
Lending terms:
Interest rate of 1.5 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:
Democratic People's Republic of Korea.
Executing agency:
Ministry of Agriculture.
Implementation period:
3½ years.
Appraising agency:
OPEC Fund.
Loan administrator:
OPEC Fund.
Co-financier:
Government of the Democratic People's Republic of Korea.
Total cost:
$39.49m
Project description:
The project comprises the following:
— construction of intake barrage and 100 km of canal;
— excavation of 25 tunnels;
— installation of hydraulic structures, distribution works; and
— construction of bridges.

No 10/2001
Vienna, Austria, February 9, 2001

Kyrgyz Republic obtains $4m loan for cardiology centre

The OPEC Fund for International Development has signed a $4 million loan agreement with the Kyrgyz Republic to help upgrade facilities at the country's leading cardiovascular medical institute, the National Centre for Cardiology and Therapeutics. Located in the capital, Bishkek, the 285-bed centre is the immediate focus of priorities under the Government's ten-year health care reform programme, which seeks, above all, to reduce the inordinately high number of deaths caused every year by cardiovascular disease.

As a direct result of the economic transition programme launched following Kyrgyzstan's independence in 1991, steep cuts in public expenditure have led to neglect of the country's social infrastructure. The health care system, in particular, has undergone a major funding crisis. Not only has there been a damaging curtailment of basic supplies, but the maintenance and repair of equipment has also suffered. The ensuing deterioration in health services has had a seriously detrimental effect on the health status of the population, especially in the area of cardiovascular disease. Deaths from cardiovascular illnesses have risen steadily and now account for 40 per cent of the total mortality rate.

Addressing this problem is the core aim of the country's health sector reform strategy, and one tackled by the proposed project, which will finance the acquisition of equipment for the diagnosis, monitoring and treatment of heart disease at the National Centre for Cardiology and Therapeutics. To provide space for the new equipment, the project will also support the implementation of civil works to modify and expand existing buildings.

The upgraded facilities will improve the Centre's diagnostic and treatment capabilities and enable it to triple the number of heart operations performed each year from 350 to 1000. From a wider perspective, an improved capacity in the treatment of cardiovascular disease will have a positive effect on economic productivity by reducing mortality rates among the working population.

This is the third lending operation conducted by the Fund in the Kyrgyz Republic. Two previous loans supported projects in the education and rural development sectors.

The agreement was signed in Vienna by HE Alikbek Djekshenkulov, Ambassador of the Kyrgyz Republic to Austria, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
National Centre for Cardiology and Therapeutics.

Sector:
Health.

OPEC Fund loan:
$4m

Lending terms:
Interest rate of 1.5 per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 17 years, including a grace period of five years.

Borrower:
Kyrgyz Republic.

Executing agency:
Ministry of Health.

Implementation period:
1½ years.

Appraising agency:
Islamic Development Bank.

Loan administrator:
OPEC Fund.

Co-financier:
Government of the Kyrgyz Republic.

Total cost:
$4.5m

Project description:
The project comprises the following components:
— provision and installation of equipment for cardiac investigations, surgery, anaesthesia, and respiratory and clinical laboratories;
— civil works; and
— consultancy services.

No 11/2001
Vienna, Austria, February 9, 2001

Mauritania obtains $3.5m loan for livestock development

The OPEC Fund for International Development has signed a $3.5 million loan agreement with the Islamic Republic of Mauritania to help finance a livestock development project. To be implemented within the framework of a government initiative aimed at rural development and poverty reduction, this scheme will introduce strategies to increase the availability of pastureland and strengthen food security in southern regions of the country.

Although Mauritania's desert climate and barren terrain does not lend itself well to crop cultivation, over 40 million hectares are, nevertheless, suitable pastureland. With over 9.9 million head of cattle, camels, sheep and goats, animal husbandry contributes significantly to the economy, producing over 60,000 tons of meat per year, one-quarter of which is exported. However, problems are arising in southern Mauritania where nomadic farmers are bringing their herds in vast numbers due to the higher rainfall and more plentiful water sources.

As a result, land is being overgrazed and water supplies are drying up, causing erosion and desertification of this already-fragile environment. These constraints, along with a shortage of sanitary meat-processing facilities and inadequate veterinary coverage, are causing widespread food deficits and lost revenues.

Under the project, activities will focus on five distinct regions in Southern Mauritania. Immediate action will be taken to protect and rehabilitate pastureland by drilling a series of boreholes and wells, and by deepening existing watering holes. To regenerate depleted areas and guard against desertification, some 400,000 trees and 10,000 fodder species will be planted, and 160-km of fire belts constructed. Once these measures are put in place, the food needs of approximately two million more livestock will be met. Additionally, hay packaging and storage facilities will be refurbished and vaccination depots, barns and livestock fattening units constructed. To assist small farmers with their micro livestock activities, 10 co-operative credit and savings bank offices will also be established.

At least 200,000 people are expected to benefit from more abundant and safer food supplies, better health from clean drinking water, and a higher household income from increased job opportunities and access to credit services.

This project represents the OPEC Fund's 20th public sector loan to Mauritania. Of the earlier loans, five were extended for balance of payments support, one financed a commodity imports programme, and 13 were project loans in the energy, agriculture, transportation and education sectors. The Fund has also approved the delivery of debt relief to Mauritania under the Heavily Indebted Poor Countries Initiative. In addition, through its private sector window, the Fund has extended a line of credit and invested in the share capital of a leasing company.

The agreement was signed by Touré Badra Ali, Chargé d'Affaires at the Embassy of the Islamic Republic of Mauritania in Germany, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Livestock development.

Sector:
Agriculture.

OPEC Fund loan:
$3.5m

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:
Islamic Republic of Mauritania.

Executing agency:
Project Implementation Unit, Direc-

torate for Livestock and Agriculture, Ministry of Rural Development and Environment.

Implementation period:
Five years.

Appraising agency:
African Development Bank (AfDB).

Loan administrator:
AfDB.

Co-financiers:
African Development Fund; beneficiaries; government of Mauritania.

Total cost:
$12.65m

Project description:
The project will comprise the following:
— drilling of boreholes and wells;
— planting trees and fodder plants;
— construction of 160 km of fire belts;
— procurement of cattle, farm equipment, chemicals;
— construction of vaccination depots; and
— setting up micro credit facilities.

No 12/2001
Vienna, Austria, February 9, 2001

Nepal receives $10m loan from OPEC Fund for rural electrification

The OPEC Fund for International Development has signed a $10 million loan agreement with the Kingdom of Nepal in support of an initiative aimed at developing the country's power sector. To address the growing need for electricity in rural areas, the project seeks to improve the availability and efficiency of power supplies in the Eastern, Central and Western regions, as well as in the Kathmandu Valley.

In a country where the power sector is still in the early stages of development and more than 85 per cent of the population is still without access to electricity, the provision of reliable public power supplies has become a prerequisite for Nepal's economic growth. In recognition of this need, several hydroelectric plants are currently under construction and expected to almost double the country's electricity generating capacity when they go on-line. To effectively utilize this increased capacity, a corresponding expansion of transmission and distribution systems is essential.

Under the project, some 2,300 km of new power lines will be installed, and a number of existing systems upgraded to increase transmission efficiency and reduce losses. The project will also finance the development of distribution systems for isolated power projects. Upon completion, it is anticipated that some 240 new Village Development Councils will be connected to the electricity network, thereby giving 154,000 rural households access to the benefits of electric lights and electric-powered labour-saving devices. Additional project activities include consultancy services to strengthen the sector's institutional capacity and the introduction of computerized billing systems.

The loan represents the Fund's 13th lending operation in Nepal. Of the earlier loans, one was approved for balance of payments support, one financed a commodity imports programme and ten helped finance projects in the energy, transportation, agriculture, education and telecommunications sectors.

The agreement was signed in Vienna by HE Dr Bimal Prasad Koirala, Finance Secretary, Ministry of Finance, Kingdom of Nepal, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Rural electrification, distribution and transmission.

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 17 years, including a grace period of five years.

Borrower:
Kingdom of Nepal.

Executing agency:
Nepal Electricity Authority (NEA).

Implementation period:
Five years.

Appraising agency:
Asian Development Bank (AsDB).

Loan administrator:
AsDB.

Co-financiers:
NEA; AsDB; government of Nepal.

Total cost:
$73.86m

Project description:
The project comprises the following components:
— rural electrification in the Eastern, Western and Central regions of Nepal;
— development of electricity distribution systems for isolated power supply projects;
— distribution system reinforcement to bring systems to a satisfactory level;
— transmission development to improve the power supply in the Kathmandu valley;
— computerized billing systems; and
— consultancy services.

No 13/2001
Vienna, February 9, 2001

Morocco expands hospital services with $8m OPEC Fund loan

The OPEC Fund for International Development has signed a $8 million loan agreement with the Kingdom of Morocco to help improve medical services in and around the southern city of Marrakech. Loan proceeds will be used to co-finance the creation of a new university hospital in the city by expanding and rehabilitating two existing facilities, the Ibn Tofail and Ibn Nafess hospitals. In addition to providing enhanced health care, the university hospital will offer increased opportunities for medical training and research in the region.

With a rapidly-growing population and a shortage of adequately equipped hospitals, severe strain has been placed on southern Morocco's existing medical facilities, causing a decline in the region's ability to deliver appropriate health care services. Furthermore, as well as being the country's poorest region, there is a large discrepancy in the quality and availability of

health services available in urban and rural areas, with only half of the rural population receiving proper health care.

Accorded high priority by the Government, the project will involve the construction of seven new buildings, with a total floor area of 43,000 square metres, to house facilities for surgical wards, maternity services and radiotherapy. It will also cover the rehabilitation of 29,000 sq m of existing buildings to accommodate radiology and psychiatric wards. In addition, medical equipment, spare parts and supplies, along with necessary furniture such as desks and chairs, will be provided for both the new and rehabilitated premises.

Upon completion, the project will help meet the demand for better hospital facilities, while alleviating pressure on university hospitals in Rabat and Casablanca. Not only will the region expand its capacity by 310 beds but, because of the new Faculty of Medicine under construction near Ibn Tofail Hospital, the project will also help meet the region's urgent need for medical training and teaching facilities. Under the proposed project, some seven million people, of whom over 60 per cent live in rural areas, will benefit from improved medical services.

Morocco has been the recipient of Fund support on nine previous occasions with loans supporting projects in the sectors of energy, agriculture and national development banks.

The agreement was signed in Vienna by HE Dr Tajeddine Baddou, Ambassador of the Kingdom of Morocco to Austria, and by HE Dr Saleh A Al-Omair, Chairman of the Governing Board of the OPEC Fund.

Data summary

Project:
Marrakech University Hospital.
Sector:
Health.
OPEC Fund loan:
$8m
Lending terms:
Interest rate of 2.25 per cent per annum, with an annual service charge of one per cent on amounts withdrawn and outstanding; maturity of 17 years, including a grace period of five years.
Borrower:
Kingdom of Morocco.
Executing agency:
Ministry of Public Health.
Implementation period:
3½ years.
Appraising agency:
OPEC Fund.
Loan administrator:
OPEC Fund.
Co-financiers:
Saudi Fund for Development; government of Morocco.
Total cost: $51.17m
Project description:
The project comprises the following components:
— construction of seven new buildings with a floor area of 43,000 sq m;
— rehabilitation of 29,000 sq m of existing buildings;
— provision and installation of medical equipment;
— provision of all necessary furniture; and
— consultancy services.

No 14/2001
Vienna, Austria, February 8, 2001

Fund approves grant of $40,000 towards Ministerial Meeting

The OPEC Fund for International Development has approved a grant of $40,000 to help finance a high-level Ministerial Meeting that will be held in Rabat, Morocco from May 20-21, 2001. Its aims are to promote co-operation among policy makers and donor agencies to address growing rural poverty and degradation of natural resources in the dryland areas of West Asia and North Africa (WANA).

Characterized by extreme aridity and limited water resources, the WANA regions are experiencing severe environmental deterioration and desertification due to over-exploitation of natural resources. As a result, soil fertility has dropped, and crop and livestock productivity has declined, exacerbating the extent of rural poverty for millions of people.

Goals of the Ministerial Meeting are to develop a strategic policy framework and make recommendations towards facilitating its future implementation with the support of the donor community. Eleven countries will be represented: Algeria, Egypt, Iran, Jordan, Lebanon, Libya, Oman, Syria, Morocco, Tunisia and Yemen. Participants will include ministers of finance/planning, ministers of agriculture/rural development and ministers of environment, as well as representatives of multi/bilateral agencies operating in the concerned regions.

Specific objectives will be to: identify opportunities for collaboration that would increase the flow of resources to dryland areas and optimize productivity; arrest desertification and reduce vulnerability to drought; sensitize the donor community and concerned ministries to opportunities for investing in the ecosystems of the region, and alert them to the cost of neglecting these fragile areas; reach a better understanding of the policy environment, including institutional and regulatory framework; increase allocation of domestic resources directed at the infrastructural base in dry areas in order to help meet growing demands of the population; and, share experiences and encourage knowledge transfer among countries and across institutions.

No 15/2001
Vienna, Austria, February 9, 2001

Eight loans totalling $47.5m extended by the OPEC Fund

Eight agreements for loans totalling $47.5 million were signed between the OPEC Fund for International Development and eight developing countries in Africa, Asia and Latin America. The loans were extended to two least-developed countries, namely Mauritania and Nepal, and other developing countries, ie Bolivia, Honduras, Kenya, Korea DPR, Kyrgyz Republic and Morocco. Seven of the loans will help finance public sector projects in the agriculture, energy, health and transportation sectors. The seventh has been extended under the Fund's Private Sector Facility

and comprises a line of credit to a microfinance institution in Bolivia.

All seven public sector projects will be co-financed by the concerned governments and by a number of international development institutions, including OPEC aid agencies such as the Arab Bank for Economic Development in Africa, the Kuwait Fund for Arab Economic Development and the Saudi Fund for Development. Other contributors include the African Development Fund and the Asian Development Bank.

The OPEC Fund's public sector loans carry interest at rates ranging from one per cent to 2.25 per cent. Four out of the seven loans have a maturity of 17 years, while three have a maturity of 20 years; all include a grace period of five years.

As of the end of December 2000, 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 $5.8 billion and benefited 107 countries. Total disbursements had amounted to $3.9bn.

No 16/2001
Vienna, Austria, February 23, 2001

OPEC Fund and Jamaica sign agreement to protect investment

An agreement for the encouragement and protection of investment has been signed between the OPEC Fund for International Development and Jamaica. Drawn up within the framework of the Fund's Private Sector Facility, the convention was initialled by HE Omar Davies, Minister of Finance and Planning of Jamaica, and by HE Dr Y Seyyid Abdulai, Director-General of the OPEC Fund.

The Fund's Private Sector Facility is a new 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.

Jamaica, a Caribbean island country, has a population of 2.6 million (1999) and its GNP per capita reached $2,330 in that same year. The mainstays of the economy are primary agricultural exports, including sugar and bananas, bauxite mining, and tourism.

Jamaica is well endowed with natural resources and has a relatively well educated and skilled labour force. It has made some progress in stabilizing the economy since the mid-1990s, following the financial crisis of 1995-96. It is, however, highly dependent on changes in the international economy due to its extreme openness.

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