Managing globalisation

INTERVIEW WITH HE ENG DR ALI BIN IBRAHIM AL-NAIMI
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ALI BIN IBRAHIM AL-NAIMI has a bachelor degree in geology from Le High University and a masters from Stanford University in the US. He joined Aramco in 1947, became a board director in 1980 and was appointed president in 1983. He assumed his current position as minister of petroleum and mineral resources in 1995.

How do you see the interrelationship between the energy sector and the process of globalisation? What are the ramifications of inter-dependence?

We are transitioning to a global marketplace where traditional national borders are increasingly meaningless for the transfer of capital and ideas. The operative word for the future is inter-dependence. We are being drawn closer together by expanding global trade and investment. Those attempting to 'go-it-along' in this new global economy will risk being left behind.

Globalisation holds the promise of a better way of life for the world's people. But realising this promise will not always be easy. We will be faced with trade-offs as we try to balance economic growth, quality of life, the environment, culture and tradition.

When we speak of the promise of globalisation, we must remember the essential role of energy. Economic activity requires energy – energy to produce goods, to move them to markets and to sell them to consumers. Energy also provides us with many of the conveniences of modern life. Without energy, economic progress is not possible.

The world's demand for energy will grow because of globalisation. The good news is that we are becoming more efficient in our use of energy, which means we won't need as much energy to grow our economies in the future as we did in the past. And, I am confident that we will produce and deliver more energy than ever before. We have technology and technological innovation to thank for that.

How important is the equilibrium between consumers and producers? How should the balance be maintained?

Consuming and producing countries, as well as the oil industry, benefit from stable and predictable prices that ensure an adequate return to the industry while protecting economic growth. However, achieving stable prices is complicated by several factors, including cyclical volatility, regulatory actions, oil's new role as a financial investment asset, and a lack of market transparency.

Past experience teaches us that very low prices and very high prices are not sustainable. Investment capital follows opportunity. During periods of low oil prices, capital tends to move out of energy sectors offering higher returns. The result is underinvestment in new capacity across the spectrum of the industry – including production, transportation, refining, distribution and marketing.

In such an environment, demand grows due to 'cheap' energy while supply capacity either stagnates or contracts due to lack of investment. Inevitably, prices must rise to restore balance by reducing demand and encouraging additional investment in supply capacity.

We are seeing this dynamic played out today. From the mid-1980s to the end of the 1990s, the oil industry operated in an environment of surplus upstream and downstream capacity. Overcapacity all along the supply chain kept prices low, contributing to complacency about the adequacy of existing capacity to meet future requirements. At the same time, low prices boosted demand.

The cycle of alternating low and high price periods creates uncertainty for the oil industry, which is required to make massive capital investments with long lead times and extended payback periods. The lack of predictability increases the risk that companies face, thereby discouraging investment in new capacity.

Regulatory actions, no matter how well-meaning, may also negatively impact investments in the energy supply chain, and, therefore, result in higher product prices for the consumer. Multiple jurisdictions and inconsistent standards have fractionalised product markets, reducing flexibility and making it more difficult for the industry to ensure stable markets. Like cyclical volatility, these regulatory actions tend to increase risks for the oil industry, discouraging new investment.

Oil has become a financial investment asset, similar to currencies, equities and bonds. Oil futures and over-the-counter markets are now attracting vast sums of money from hedge funds and institutional investors seeking to maximise returns relative to alternative investments. The massive funds involved have made it more difficult to stabilise markets.

Transparency is a key condition for oil market stability. Energy data collection and forecasting are areas where cooperation between producers and consumers can improve transparency. We must strive to do a better job in estimating demand. Efforts are already underway and are beginning to bear fruit. The International Energy Forum, dedicated to dialogue between producing and consuming countries, has been closely involved in encouraging cooperative efforts. The IEF Secretariat, based in Riyadh, can serve a useful and productive role in fostering greater dialogue and cooperation between producers and consumers of oil.

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The Joint Oil Data Initiative (or JODI) is now working to complete its global database of oil statistics. The JODI database will help improve oil market data transparency where we need it most – in fast growing, developing economies.

Please outline the actual initiatives that the Kingdom of Saudi Arabia is pursuing to meet global oil demand.

The Kingdom currently has sustainable crude production capacity of about 11 MBD, which includes a spare capacity cushion of about 1.5 MBD. In addition, Saudi Arabia has initiated a number of mega oil projects will significantly increase its production capacity to both meet demand and maintain spare capacity. These projects represent a combined production capacity of more than 3 MBD, part of which will be utiliSed to offset natural decline and the rest of expand capacity. By 2009, we expect our maximum sustainable capacity to rise from the current 11.0 million b/d to 12.5 million b/d.

Additional projects have been identified and can be advanced, as needed, to meet any new supply requirements. In fact, the Kingdom has evaluated a production capacity scenario of 15 million barrels per day, which can be implemented when dictated by market demand. Our efforts to increase world energy supplies extend to the downstream. Saudi Arabia is increasing its capacity and upgrading capabilities at its existing refineries in the Kingdom and in other major markets where we have a presence. In addition, we are considering construction of new refineries inside the Kingdom. We are also looking at building new refineries in other countries, which would be configured to handle sour and heavy crudes.

Globalisation will expand the world's economy creating unprecedented additional demand for oil. While demand growth is expected to be large, remaining oil resources are significant. I believe that technological innovations will provide the key to achieving balanced markets by improving the efficiency of producing and consuming oil. It is clear that both producers and consumers benefit from stable and predictable prices. However, we must be mindful that strong cyclical forces, regulatory actions, oil's new role as an investment asset and the lack of market transparency all complicate the task of achieving stability.

How is Saudi Arabia contributing to global economic stability through its oil reserves?

Saudi Arabia has 264 billion barrels of crude oil reserves, with the potential to increase those resources by at least 200 billion barrels. As for natural gas, we have reserves of 258 trillion cubic feet, with a high likelihood of doubling that figure in the future. Currently our total petroleum production, including crude oil, liquids, and natural gas, exceeds 11 million barrels of oil equivalent daily. Equally important, we are increasing our petroleum production capacity year after year, in keeping with forecast future global needs. For this reason, the Kingdom is spending over US$90 billion in the next five years to increase its production capacity in both the upstream and downstream segments of the industry.

As part of these efforts, Saudi Arabia's crude oil production capacity will rise next year to 12.5 million barrels per day, which is enough to meet the expected call on Saudi oil for the foreseeable future, even as we maintain a spare production capacity of 1.5 to 2 million barrels per day, to be used if there is a sudden disruption of supplies from other sources. On the downstream side, we will double our refining capacity at home and abroad from three to 6 million barrels per day, largely to meet the international demand for cleaner petroleum products.

I don't believe there is any doubt that we are seeing considerable economic benefits from such investment decisions. But just as important as the rate of financial return, is the role these upstream and downstream investments play in ensuring the continued health of the international petroleum market, and with it the health of the wider global economy. Having spare production capacity of more than 2 million barrels per day, as is the case today, has cost billions of dollars. Increasing production capacity entails further expenditure, particularly in a time of demand uncertainty and against a backdrop of statements made under various pretexts by some consuming nations, which urge the rollback of petroleum use and a reduction of oil imports from the Middle East, which includes, of course, Saudi Arabia.

The same problem applies to our downstream initiatives. Even though refining margins are low – especially if they are geared for export – we are building new refineries and expanding some existing ones in order to meet the needs of some major consuming countries, which through restrictive permitting regimes are making it almost impossible to build new refineries in their own markets. Saudi Arabia's contribution to the availability of energy and the stability of global energy markets is considerable, and serves the wider interest of global economic growth and human prosperity.

The protection of the natural environment and the conservation of endangered habitats is now a key global policy issue. What is your position on this issue?

The natural environment is a common trust and a God-given patrimony for which we all must care. Protecting it requires sincere commitment and effort – locally, regionally and internationally, in all places and at all times. Environmental issues include keeping our neighbourhoods, cities, rivers, deserts, mountains and forests pristine and minimising pollution in our air, water and soil. They require us to conserve precious natural resources and address climate change while better understanding its causes and effects.

Therefore, to tackle these issues and to safeguard our precious natural environment, one of our foremost goals must be to reduce all harmful emissions. At the same time, we must continue to improve the living standards of our fellow men and women and ensure they have the prospect of more prosperous lives. This is especially true within the developing societies and emerging economies that account for so much of the world's population.

I believe that those two goals – protecting the natural environment and promoting human prosperity – go hand in hand. They influence each other to a tremendous extent, and therefore we must pursue them simultaneously and in a balanced fashion. Of course, those of us in the energy sector, and particularly in the petroleum industry, have a particularly important role to play in addressing these challenges, given the close relationship of our work to both the natural environment and economic development and social progress.

How can 'real renewables' be promoted as part of the energy mix?

What is needed to expand the uses of solar energy is to make the solar cells more effective in concentrating the sun rays, and to make the production and transmission of solar power more cost effective. I know that many universities and research institutes are working day and night toward this goal, and with such keen minds on the job, I am confident that they will succeed. For our part in Saudi Arabia, we are giving this source of energy special attention.

As I said, we should also work intensively to reduce emissions from fossil fuels, which include conventional oil, natural gas, coal, tar sands and oil shales, among others. Taken together, these sources are more than enough to meet the world's growing energy demand for the rest of this century. And I am sure that fossil fuels can be and should be made environmentally-friendly sources of energy, particularly as they will continue to meet the lion's share of energy needs for the foreseeable future. Moving forward, they should be supplemented with truly renewable energy sources in order to meet global energy needs, help to sustain economic growth while protecting the environment, and enhance prosperity, especially within developing societies and among disadvantaged people.

Therefore, the major challenge is to reduce emissions from fossil fuels while managing the cost of such reductions and their possible negative impact on economic growth and human prosperity. And that is a task not only for the fossil fuel industries but also national governments, universities, research institutions, and cross-border organisations. From my perspective, I believe we can do this at a minimum cost and for a maximum benefit, but only if we work together as producers and consumers engaging not only the energy industry but also other institutions and organisations.

How is Saudi Arabia responding to the issue of carbon emissions at the national and international levels?

Saudi Arabia is very active on this issue at both the national and international levels, especially in terms of reducing emissions from oil and gas. We have done a lot in this regard, including signing on to the Kyoto Protocol, part of the United Nations Framework Convention moon Climate Change. Yet, our work concentrates on what we believe is the best way to deal with these issues over both the short and long terms, and that is developing scientific and technological methods too reduce emissions of greenhouse gases.

One of the best methods to reduce emissions is through carbon capture and storage technologies. For this reason, Saudi Arabia is a member of the Carbon Sequestration Leadership Forum, which involves nearly two dozen nations as well as the European Commission. This January, Saudi Arabia was proud to host a successful meeting of this organisation, which focused in part on capacity building.

And last year, during the Third OPEC Summit, King Abdullah announced an initiative designed to protect the global environment through research into reducing fossil fuels emissions, and contributed US$300 million to this cause. This initiative has received a great deal of international support, with Kuwait, the United Arab Emirates and Qatar contributing an additional US$450 million for the same program. Other countries such as Nigeria, the United Kingdom, Norway and Japan, among others, have shown interest in getting involved in this ▶

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The Minister of Petroleum and Mineral Resources with King Abdullah Bin Abdul Aziz Al-Saud

◀ initiative. Furthermore, Saudi Arabia is currently building two major scientific establishments where energy and the environment will be at the top of the agenda.

The first is the King Abdullah University for Science and Technology, or KAUST, which will admit its opening class in September 2009. This university, where I have the privilege as serving as Chairman of the Board of Trustees, will focus on scientific research at the graduate level. It has already begun attracting students and faculty, and has named a distinguished founding president, Professor Shih Choon Fong, formerly head of the National University of Singapore. Two of KAUST's main areas of interest are alternative energy, especially the development of solar energy, and reducing carbon content in fossil fuel use.

The second project, the Centre for Petroleum Research and Studies, will start operations before the end of the year. While this centre will deal with a variety of subjects and topics, including energy economics and policies, its major area of interest will be the scientific side of petroleum and energy. Given such a mandate, environmental issues – and above all reducing carbon emissions – will be a focal point for the centre. In order to ensure the quality and objectivity of King Abdullah's environmental and energy initiative, it will be operated through this centre, and will involve a high degree of international cooperation.

What role will technology play in the future of the energy sector?

Given the state of technology there are currently no viable substitutes for oil, particularly in the transportation sector where oil accounts for 95.0 per cent of the energy consumed globally. Oil will remain the fuel of choice in transportation, both from the standpoints of economics and easy of use, for at least the next 30 years.

There are alternative technologies like fuel cells and battery-powered vehicles, that hold promise for the future. But the reality is none is currently close to being commercially competitive with gasoline- and diesel-powered vehicles based on the internal combustion engine. Some new fuel-saving technologies, like hybrid vehicles, are commercial today and increasingly competitive in the market place. There are examples of how technological advances will enable us to utilise our oil resources more efficiently and minimise the impact on the environment.

Let me clarify a popular misconception. We in Saudi Arabia are not opposed to energy conservation, efficiency gains or even alternative fuels. The reality is that we will need a lot of BTUs in the future and that means there will be a role for all forms of energy and technologies. Energy conservation and efficiency are important because they allow us to do more with the resources we have.

How do you see the relationship and trade-off between energy and food production?

The interrelation between energy and food production has to be examined carefully. As we all know, an adequate food supply is the first priority of human beings. Moreover, energy sources should be used to increase the food supply and lower the cost of food production, and yet what we see today is the opposite. Staple food crops such as soy beans, sugar and corn are being produced not to feed humans but to fuel cars, trucks and now even airplanes. As a result the price of food has been soaring: for example, corn prices went from under US$2 per bushel in 2005 to US$6 in 2008 and rising.

It should be noted that biofuel production is not contributing positively to environment protection, nor is it reducing global emissions of greenhouse gasses as anticipated. In fact, the opposite might be the case. Forests in many parts of the world, which play a major role to reducing CO_2 by acting as carbon sinks, are being cleared to produce biofuel crops which have a far smaller capacity to absorb carbon. As a result and according to the latest scientific studies, global carbon omissions are likely to increase, not to decrease, as a result of increasing biofuel production.

We should also avoid any disruption of free market mechanisms. In the long term, no product can last as a viable option if it runs counter to free market rules. The rise in biofuel use stems not from cost-competitiveness or enhanced performance, but rather is largely due to government subsidies, high import taxes, and financial favouritism of these sources vis-à-vis others. Also, some governments have enforced the adoption of biofuels by demanding that a certain percentage of automotive fuels come from ethanol. Finally, many analysts expect ethanol land biofuel production to reach an equivalent of five million barrels per day of oil by the year 2010, or about six per cent of total global petroleum consumption. This is a small percentage, yet it makes ethanol, a marginal product with high production costs, the de facto artificial floor for global petroleum prices, and by extension the worldwide energy market as a whole.

Let us be realistic. Currently, ethanol and other biofuels will not contribute to the protection of the global environment by reducing emissions, they will not increase energy security, nor will they reduce contemporary civilisation's dependency on fossil fuels to any appreciable degree. In short, current biofuels are not the solution, though they might herald a move to a higher level of renewable fuels, which does not damage the environment nor negatively impact food markets.

That is why we have to look beyond biofuels as a solution, and concentrate instead on two major issues: Increasing the use of truly renewable sources of energy, while reducing emissions from fossil fuels. Personally, I believe that putting ethanol and similar biofuels in the category of renewables is highly misleading, since these types of fuels create scarcities of arable land, precious water, and with time stable food products. F

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