<u>Delivering Energy in the Low Carbon Era</u>

ADIPEC – Abu Dhabi (November 2010)

Ahmed Alarbeed

Dana Gas - CEO

Ladies and gentlemen,

It is a pleasure to address one of the region's largest and most prestigious oil and gas industry gatherings, to discuss the future of the region's most important economic sector, the Oil and Gas Industry.

Today I would like to focus on the transformation of the global energy industry and the impact of this transformation on our region by examining the increasing importance of the private sector in the region's energy industry.

Energy is one of the largest industrial sectors in the world. Few people realize that every day the energy industry has to produce, ship, refine and distribute the equivalent of 250 million barrels of oil. Less than 40 per cent of that consists of oil itself. Most of the rest is gas, coal, wood and electricity from various other primary sources, including nuclear and hydropower and other renewable such as wind and solar power. This is an enormous task that, for the most part, is managed seamlessly, day after day, by a very complex system built up over the last two centuries.

On the relatively rare occasions when something goes wrong with the system, we hear about it through international news headlines. That simply highlights the energy sector's importance to the world. Unfortunately, such headlines are becoming more frequent. This is because the world's energy system is now under unprecedented pressure to grow, adapt and change, all at the same time.

The energy requirements of almost 7 billion people on this planet are expanding rapidly as the global population continues to grow and more people aspire to be among those with access to modern transportation and electricity, the cornerstones of a decent standard of living in today's world. We see this clearly demonstrated as the East becomes more industrialized, urbanized and wealthy. The International Energy Agency (IEA) estimates that, if current trends continue, by 2030 the world will need to produce energy equivalent to 350 million barrels of oil per day.

As global energy production and consumption grows, the level of new investment required will be immense. According to the IEA, the world will need 26 trillion US$ in energy sector investment through 2030, out of which about $8 trillion will be needed for upstream oil and gas development. A significant part of that will have to be invested in our region as the part of the world with the biggest share of oil and gas reserves. Over the next decade, the region will need to find the right balance of state and private sector engagement by formulating oil and gas policies to encourage the required amount of regional investment. Our region needs to develop policies to ensure that it remains at the centre of the global energy industry and emerges as a true leader and innovator in this most important economic sector.

There can be few who doubt the size of this region's oil and gas reserves, and the power that flows from that accident of nature. But with power comes responsibility. The region as the world's largest hydrocarbon resource holder has a huge responsibility to ensure that its resources are developed in a timely manner to meet growing demand.

Our region holds about 61 per cent of the world's proven oil reserves and supplies about 36 per cent of world oil demand, which implies that its importance as the world's pre-eminent oil supplier will not diminish over the long-term.

It also holds about 45 per cent of the world's proved reserves of gas, a fuel that is increasingly important for power generation, industry and even transportation because of its relatively low price, ease of use and lower carbon emissions than oil and coal. Since the region currently supplies only 19 per cent of the world's gas, this is another area of significant growth potential for the region's energy sector. But countries will need to prioritize gas-sector investments, following the lead of countries like Qatar and Egypt, if the region as a whole is to do its part to meet the global energy challenge and to capture an appropriate share of the emerging global gas market.

Make no mistake: gas is not a rare commodity worldwide, although some of the largest deposits are in remote areas or in rock formations that are difficult to tap.

But as technology advances, it is becoming more feasible to tackle these frontier resources. It is also becoming easier and more economic to ship gas around the world. So if the region fails to develop its large gas resources, there will be others ready and able to fill the gap, with the result that our share of the global gas market could actually shrink.

That would be a tragedy for the region. It would represent a massive lost opportunity to participate in the global transition to a lower carbon economy by leveraging and expanding existing strengths and knowledge base. This would also be the world's loss, as the concentration of gas resources in our countries should ensure their competitiveness. We cannot and must not allow those resources to be bypassed, so what must we do to ensure that the region's gas sector delivers on its potential?

As the CEO of the region's leading publicly quoted gas exploration and Production Company, I have experienced firsthand the investment challenges our industry faces. Capital has a cost, whether it is state capital entrusted to a national oil company or private capital entrusted to a private-sector company like Dana Gas. The policies of region authorities must ensure that the cost of capital for funding the region's oil and gas projects is minimized, while still meeting the legitimate objectives of investors.

When I see the high returns demanded by shareholders for making an investment in an oil and gas project, I feel saddened because the main reason for this is not that technical or operational risks are higher in the region than elsewhere. On the contrary, they are lower than in most other parts of the world. Investors are demanding high returns here to compensate for other risks. That is mostly because in many of our countries, policymakers do not provide adequate protection for investors. The sanctity of contract terms and the long-term stability of oil and gas industry policies are critical if investment is to be channeled into the region's energy sector. A stable legal and regulatory environment is the best way to encourage investment and to reduce the costs of securing that investment.

It is also important to find the right balance of state and private sector involvement in the region's oil and gas industry. A state has an indisputable duty to its citizens to extract rent from its natural resources, but this should go hand in hand to target efficient development of those resources. Our nations are endowed with huge oil and gas resources that do not have commensurate production positions today because their industries have not provided the necessary capital and expertise to develop the nation's resources efficiently.

The state's role in regulating the industry is crucial, in areas including health, safety and environmental protection as well as encouraging the efficient exploration and development of resources via licensing rounds. The role of the state-controlled national oil companies (NCOs), however, may now need to change, not only in our region but also around the world. In many countries and regions, this is changing already, and it is important that our countries should not be left with outdated business models.

To achieve efficient exploitation of resources, even as they fulfill a second function of ensuring that resources are conserved for the use of future generations, NCOs need to be subject to competitive pressures. An NOC challenged by competition will become better at exploration, which will increase the potential for future oil and gas production. It will become better at resource development, better at squeezing the most oil and gas out of the ground, better at capital allocation, better at marketing oil and gas and will make better, more efficient use of capital and technical resources – all to the benefit of the nation, the region and the world.

There are many ways to maintain the NCOs' central role in a more competitive environment. In Norway, Russia and Brazil, NCOs are partially privatized and have to compete with the private sector for licenses and opportunities. In parts of the Asia-Pacific region, NCOs are encouraged by states to be more outward looking and to build access to resources abroad, where they must compete both with private sector energy developers and with the NCOs of rival states.

In our region, the NCOs' dominant position should also be opened to competition. In those parts of the region where state domination has been at least partially lifted, the industry has flourished. Since reforming and opening up its exploration sector in the 1990s, Egypt, for example, has become a major gas producer and exporter of liquefied natural gas (LNG). It has more than tripled its annual gas production from about 17 billion cubic meters to 63 bcm in the past ten years. Dana Gas is proud to have been among the private-sector companies contributing to the Egyptian gas sector's recent emergence.

The shale gas revolution in the US is one of many global examples of how a vibrant private sector has been able to create value for oil and gas investors and, through an inevitable ripple effect, significant benefits to local and regional economies. A few years ago, few in our industry thought the gas in North American shale formations could be tapped economically and would enable the world's biggest energy consumer to establish self-sufficiency in the fuel, probably for at least a century.

Our region should also tap the powerful ability of the private sector to innovate, attract capital and create jobs and wealth. There is no better way to do that than to hitch the region's great private-sector capital resources and expertise through policies that appropriately incentivize regional investment and maintain sovereign control on the resources.

That is what we believe we already contribute to at Dana Gas. Nevertheless, we should not be almost alone in this endeavor. We would welcome more regional competition, which would only serve to stimulate our company to become more efficient and productive, helping to maintain our region’s position as the pre-eminent global energy supplier.

Lastly, since we have mentioned Egypt's gas sector as a success story, I would like to leave you with the mental image of a pyramid. This is not any pyramid, but what I call the pyramid of energy prosperity.

At its apex is "prosperity", the goal that every nation, every company and every individual is seeking. On the next layer down are "stability" and "growth", which together make up "prosperity".

Ladies and gentlemen, a foundation needs all its bricks to support the weight of the pyramid. The Private Sector is indispensible if we are to attain regional and global energy prosperity.

Thank you for your attention.