

## UNDERSTANDING ROLES AND RESPONSIBILITIES TO SPUR INVESTMENT AND INNOVATION

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nergy is the lifeblood of the global economy, and an enabler of economic, social and environmental progress in every developed and developing nation. Given the central role energy plays, it is imperative that world leaders recognise and address the challenges we face in continuing to develop sufficient, reliable, responsible and affordable energy in the decades ahead.

We will need government and industry, international oil companies and national oil companies, entrepreneurs and investors to work together as never before. We all have something to contribute to the effort to unlock new supplies of energy, increase energy efficiency, and reduce the environmental impacts associated with energy use.

The best way to achieve our shared aspirations is to understand our respective strengths and roles in economic growth and energy production. Government and industry each have core responsibilities. By comprehending and capitalising on them, we can build markets that attract long-term investment, foster open competition, and develop the innovative technologies and partnerships that maximise value for all.

The scale of the challenges ahead – driven by population growth and expanding economies – makes clear the need for understanding and cooperation. The world recently noted a significant global milestone when the global population surpassed 7 billion people. By the year 2040, experts project that the global population will grow by close to 25 per cent – reaching nearly 8.7 billion people. Not only will populations grow, but so will the global economy, which is set to more than double in size between now and then.

Taken together, these two trends – the continued growth in the world's population and the associated expansion of economic output – will mean that global energy demand will be more than 30 per cent higher in the year 2040 than today.

In the years and decades ahead, the world will need to invest in and develop all economically competitive sources of energy if we are to meet projected demand.

## **NEED FOR OIL AND GAS**

The most important sources in the foreseeable future will continue to be oil and natural gas. In the decades ahead, they will provide nearly 60 per cent of the energy used in the global economy. But we will see a continued evolution in energy use. By the year 2040, oil will remain the most widely used fuel, but we expect natural gas will grow fast enough to overtake coal for the number two position. In

fact, demand for natural gas will rise by more than 60 per cent over the next 30 years.

The single biggest driver of demand over the next three decades will be the need for energy to generate power – a sign in itself of increased global prosperity as more consumers and businesses have access to a secure and reliable electricity supply. By 2040, the fuels used to generate electricity will account for more than 40 per cent of global energy consumption. Natural gas has already proven itself to be a safe, reliable, affordable, and efficient means of power generation, and it will continue to grow in importance in this sector.

A second major part of this evolutionary change will be where that oil and natural gas will come from. Although the majority of oil and natural gas will continue to come from conventional sources, in the years ahead, a growing share will come from unconventional sources, such as shale, tight sands, deepwater, and oil sands.

High-impact technologies have made these unconventional sources not just economical, but environmentally responsible. This development of unconventional sources is a reminder that innovative thinking, advanced technologies, and partnerships will be the key to meeting the challenges of the future.

## **ROLES AND RESPONSIBILITIES: INDUSTRY**

Both industry and government have core responsibilities that when fulfilled help encourage and expedite the investment and innovation we need. For industry, we have a responsibility to develop and deliver new supplies of energy in a safe, secure, and environmentally responsible way. As part of this responsibility, we must engage in effective risk management. We must engage in long-term planning, undeterred by the ups and downs of business cycles. We must invest with discipline and ingenuity. And we must focus relentlessly on our operational integrity and best practices — to protect our employees and the communities where we operate.

Our track record as an industry shows that not only can we fulfill these responsibilities, but we can do so in a manner that generates new economic opportunities for host nations and maximises value for consumers and shareholders.

One of the most effective ways we do this is by building international partnerships that leverage our strengths. For instance, over the years, National Oil Companies have demonstrated a wide range of capabilities as strong partners in energy development, including secure access to resources,

detailed experience operating in specific environments, and a firsthand understanding of the local and national governments' regulations and requirements. These strengths are augmented by the educational and cultural leadership that NOCs bring to their people as they pass on new skills and create new employment opportunities.

Our industry is further strengthened by the contributions of International Oil Companies. IOCs have an unparalleled breadth and depth of experience taking on energy challenges around the world, across a wide range of conditions, developing new approaches and best practices that can be brought to new partnerships and new countries.

We invest in large-scale capital projects, develop new technologies, and use our global perspective to maximise value along the entire energy value chain. IOCs have pioneered exploration and production in some of the world's most remote, most difficult environments. And we have done so by maintaining a steadfast commitment to innovation and technological advancement to make what was previously thought impossible, possible. Further improving our operational expertise and developing and implementing best practices is a must in our business. Without continuous improvement, we can lose our competitive edge – and our ability to create higher value – and face the prospect of falling behind.

As we look at the energy needs in the decades ahead, it will take our entire industry combining these strengths to meet growing energy demand. We will need access and knowledge, technology and expertise, project excellence and operational integrity, to deliver reliable and affordable energy to the billions of people who need it.

## ROLES AND RESPONSIBILITIES: GOVERNMENT

The energy and economic challenges the world will face in the decades to come require a business and policy climate that enables investment, innovation, and international cooperation. Here is where sound policies are critical. In other words, industry has an important role in the future of energy – but so do governments.

When governments fulfill their roles effectively, the results can be extraordinary – bringing enormous benefits in terms of investment, social and economic growth, and job creation. These benefits go beyond promises of a better future for citizens. They put in place the essential elements to deliver that better future – with increased education and improved healthcare.

Our industry especially respects the role that only government can play in determining the rules and framework to enable and stimulate competition. Because we are a global industry, we can see which principles work and why they should underpin energy policymaking.

Simply put, history proves that energy policies that are efficient and market-based are the best path to economic growth and technological progress. By promoting the rule of law and the sanctity of contracts, government helps attract, increase, and sustain capital flows so that they are directed to their highest and most efficient use.

Governments and their leaders must make clear and set high standards of ethical conduct for all participants – industry, government employees and their citizens. Government also has a responsibility to provide a stable and fair legal, tax, and regulatory framework. Uncertainty undermines the long-range thinking, investment decisions, and mutually beneficial partnerships that allow our industry to excel. Our industry thinks in terms of decades, not years. To do so successfully, we need the confidence that the rules of the game will not be changed or altered haphazardly.

Government has a role that industry cannot replicate or replace. Only governments can open – and keep open – the doors to international trade and cooperation between nations. The more energy policies promote free trade and the free flow of goods, services, and expertise, the more they can help maximise the value of energy resources for all.

Finally, energy developments are most effective when there is a level playing field for all participants. By allowing people, ideas, and industry to come together in innovative, competitive ways for long-term projects, citizens and consumers benefit from the fairness and transparency of free markets.

If we meet our roles and responsibilities together, government and the energy industry – along with citizens and consumers at large – can lay the foundation for sustained economic growth – by providing reliable, affordable energy in a safe, secure, and environmentally responsible way.

For millions of people, this will mean new jobs and new opportunities in the years ahead. For governments, sound, long-term policies will mean increased revenues and greater prosperity. And for the billions yet to be born, an energy industry able to operate in a climate of investment and mutual cooperation will mean a brighter future and a better life for all.