

# Towards a gas-fired era



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**A**fter a decade of rapid economic development, a global redesign of the world economy is at work, redefining the geography of energy demand. Today, the world energy system faces two major challenges: how to secure the supply of reliable and affordable energy; and how to rapidly transform to a low-carbon, efficient, and environmentally harmless energy supply.

Asia and the Middle East as a whole has become a major consumer of energy, thanks to the increasing development of regional manufacturing industries. More oil will be required to satisfy the aspirations to mobility of an expanding middle class. Similarly, more natural gas will be needed to meet power generation growth and industrial activity.

This global redesign has consequences over the direction of energy supply flows, and the investments that are made throughout the hydrocarbon industry's value chain.

Recently published outlooks share a common view regarding worldwide energy consumption: they show an estimated increase of over 50 per cent in demand between now and 2035. Nearly 90 per cent of this global energy demand growth is expected to come from non-OECD countries, led by emerging economies like China and India, which are expected to witness

strong economic growth and substantial oil and gas demand in the long run.

A new paradigm is settling in, where emerging countries are in the driving seat of energy demand. This statement is valid for oil and gas, as well as for coal, nuclear energy, and renewable resources. As the energy demand is fuelled by industrial projects and durable goods purchases, the outlook appears remarkably robust.

## Role of natural gas in the energy mix

The United Nations COP 18 climate conference in Doha has successfully clarified the procedural steps towards a new global climate protocol, and strengthened the operational mechanisms around coordinating policies, technology transfer, and finance. As a result, natural gas usage—because of its environmental qualities—emerged more than ever as the fuel of choice to achieve CO<sub>2</sub> emission reductions.

Among other advantages, gas is abundant, widely distributed, and has a reasonable price. As a result, gas usage is driven by economic reasons, while at the same time reaping the benefits of reduced pollution.

For these economic and environmental reasons, I believe that natural gas should continue to be promoted in static usage like power generation and

industrial heating, while extending mobile usage to road and maritime transportation. To meet this end, cooperation should be the keyword in consumer-producer relations, both at the governmental and private sector levels.

A key component to using natural gas as a transportation fuel will be the establishment of the right fiscal incentives to

**LNG carriers at the port of Ras Laffan in Qatar**





enable the infrastructure investment, an unbiased fuel competition, and collective global value creation in the energy sector.

### LNG flows vs price structures

As more and more gas is required, more and more supply will need to be developed. A new gas map is slowly emerging, with new players leveraging technological innovation to explore new gas resources. Innovation has played a pivotal role in the US shale gas revolution and will continue to make available new unconventional gas resources throughout the world.

The emergence of shale gas has changed global LNG flows and will continue to create new challenges in the long term.

Such developments have always fuelled the debate over the future of gas prices. In short, we believe that the LNG industry is, and will continue to be, dominated by long-term contracts, which give all LNG industry players, including buyers, sellers, financiers and governments, the confidence to make the large investment decisions required along the LNG and gas value chain.

### The need for sustainability

There is a growing global need for energy that is required for economic development. While most such development is aimed at reducing poverty and global inequalities, greater emphasis should be placed on policies that do not harm the environment, and manage to preserve it for future generations. This places a heavy burden on the shoulders of scientists and engineers, as well as on governments to help create innovative and sustainable solutions to the energy problems.

It is clear that a substantial amount of work and coordination still needs to be undertaken before any joint international effort to address climate change and its environmental consequences is effective. Further efforts have to be deployed to improve energy usage efficiency and reduce the level of emissions. This includes the development of technologies that will allow the world to mitigate greenhouse gas emissions and adapt to the impacts of climate change.

Qatar is committed to taking a proactive approach in this matter, and is embarking on implementing a number of projects, such as the Al-Shaheen Gas Flare Recovery, for example. This project represents

a tangible reduction of gas flaring by re-injecting gas back into the field. Qatar is also committed to financing ambitious research programmes both domestically and internationally, to build and promote solar energy projects, to produce energy efficient devices like LEDs, and to innovate with green buildings.

Above and beyond its individual commitment and effort, Qatar is working with its friends and partners to address the environmental impacts of global energy use, as well as to ensure sustainability. The energy community at large is expected, more than ever, to make available adequate financial and human resources, as well as regulatory frameworks, to support energy innovation.

### Qatar's place in the gas value chain

A key component of Qatar's success has been its ability to develop a clear vision for the future. With the guidance of His Highness Sheikh Tamim bin Hamad Al-Thani, the Emir of the State of Qatar, the National Vision 2030 has been the guiding force behind Qatar's energy policy aspirations. Besides defining the broad future trends and reflecting the aspirations, objectives and culture of the Qatari people, this roadmap has enabled us to share a common set of objectives, like energy and food security, economic growth and diversification, and social development and environmental management that can be achieved through the use of fossil fuel energies as well as development of renewable energy sources.

As a result, Qatar is enjoying unprecedented prosperity that is rapidly transforming the country into one of the Middle East's favourite and most attractive business and investments spots. This fast but perennial economic development will ensure the wealth of Qatar's future generations.

However, as the business environment changes, we will need to meet the challenge of redeveloping mature assets using modern technologies which could provide a huge leverage to Qatar's investment in the oil and gas industry. We will also need to leverage value along the international gas value chain through global investments and redevelopments.

In all cases, Qatar will continue to be the partner of choice in the years ahead for both consuming and producing countries, and play a definitive positive role in energising a growing world in a gas-fired era. ■