

## PUBLICATIONS



INVESTORS - MARCH 2, 2021

## Natural gas: A bridge to responsible energy transition

BY DAVE NOAKES



With recent fossil fuel divestment announcements from the New York City pension funds and permit cancellations for the Keystone XL pipeline, the drive toward a lower-carbon future continues to gain momentum. Some 125 countries, including half of the G20, have now [committed to achieving “net zero”](#) emissions by 2050 – meaning that any carbon emissions would be balanced by absorbing an equivalent amount from the atmosphere. Relatedly, a large number of organizations support the climate-related reporting framework proposed by the [Task Force on Climate-related Financial Disclosures](#). This framework is endorsed by more than 1,500 organizations globally, including more than 1,340 companies with a market capitalization of \$12.6 trillion and financial institutions responsible for assets of \$150 trillion.

While many agree on the long-term goal of reducing greenhouse gas emissions, our society faces the challenge of how to accomplish this while still meeting the world’s rapidly growing energy needs. Due largely to urbanization and rising living standards in developing economies, energy demand is expected

to continue to increase for several years. Although governments, regulators, companies and consumers are actively seeking to decrease their carbon footprint, there is no single solution or simple approach.

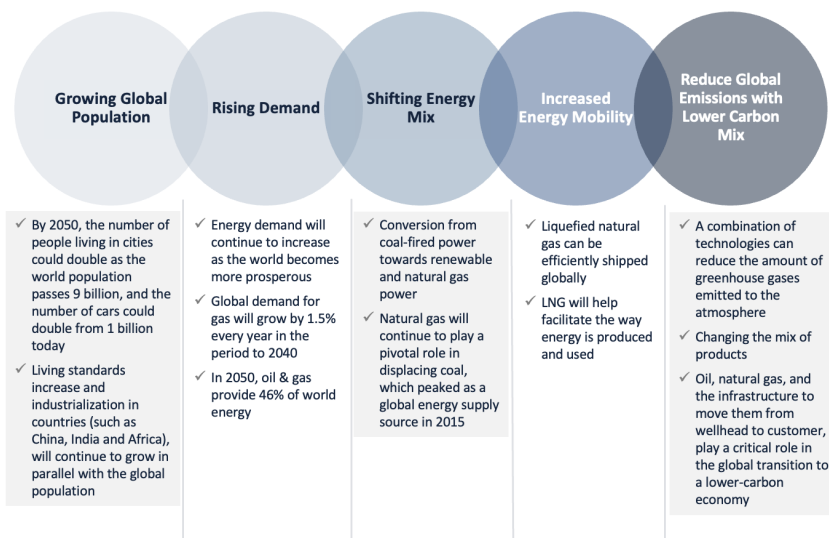
Today, the world still largely relies on traditional energy sources. However, the energy market has embarked on the transition toward a lower carbon emissions world, with a focus on producing more energy from cleaner sources, including natural gas. This article is an effort to narrow the “information gap” between the decarbonization initiatives being undertaken by the industry, including firms such as Prostar Capital, and what the public believes is happening.

## The essential role of natural gas

Natural gas is a low-carbon energy source, the cleanest-burning and most cost-effective hydrocarbon when burnt for power generation. It emits less than one-tenth the sulfur and nitrogen oxide compared to heavy fuel oil. Until alternative energy sources such as wind and solar power are more widely available, natural gas will continue to be a viable, lower-emissions solution to the world’s energy needs. The International Energy Agency’s [World Energy Outlook 2020](#), which provides various possible energy demand scenarios for the next several years, projects demand for natural gas will significantly grow, mainly in Asia.

Most would agree eliminating the global use of coal, which is the primary source of energy for many developing countries, is crucial for solving the complex problem of reducing emissions. Natural gas is widely considered an important part of the solution, but it faces a challenge from those arguing to remove all traditional energy sources from the global energy mix. Natural gas is needed as a bridging fuel during the energy transition, and as an ongoing energy source for when the sun isn’t shining, or the wind doesn’t blow, as the supply of reliable energy cannot entirely be met by renewables.

According to Shell estimates, gas is expected to supply 43 percent of the world’s additional demand for energy over the next 20 years, with renewable sources supplying 37 percent; the combination of gas and renewables together will serve 80 percent of the growth in energy demand.



## Investing in natural gas infrastructure and energy transition

The United States, Australia and Qatar are positioned to supply the rapid development of economies that continue to focus on displacing coal-fired power and heating. However, the “virtual pipeline” from the wellhead to the user is a lengthy one. Investment will be needed to move gas from the United States to, for example, South Korea. We estimate billions of dollars will be needed during the next few years globally in order to invest in natural gas infrastructure.

At Prostar, we are particularly attuned to opportunities to invest on the demand end of this chain – building infrastructure closer to the end-users. For example, our portfolio company, Kyungnam Energy (KNE), is the largest independent city gas distributor in South Korea and serves the needs of more than 820,000 industrial, commercial and residential customers.

In addition, KNE has been working to balance the current energy needs of its customers with the long-term vision embodied in South Korea’s Green New Deal. KNE has started to build solar generation capacity and has invested in facilities that generate steam from recycled plastic incineration and produce biogas from sewage.

According to McKinsey & Co.’s *Global Energy Perspectives 2021*, gas will continue to increase its share of global energy demand in the next 10 to 15 years – the only hydrocarbon to do so – and then peak in the late 2030s.

## Advancing the global energy transition

We share the goal of finding alternative, cleaner processes and technologies that can offset carbon emissions and be partnered with renewable sources. Long-term policies are needed to enable the manufacturing of affordable lower-carbon and renewable sources of energy. These policies must be supported by investments into technologies that will transform the way energy is produced, distributed and used. Advancements continue to be made in capturing and storing carbon, renewable power, biogas and carbon pricing mechanisms, all of which contribute to reducing emissions. For example, fuel cell technology can convert the chemical energy from the methane in natural gas straight into electricity. The only byproducts of this process are water and heat, which means fuel cells have a virtually zero-emissions profile.

Governments, regulators, companies and consumers need to work together to facilitate the energy transition. It will take decades to transform the world’s energy system – and solutions will vary by geography, given the vast range of developing and emerging economies, resources, and policies.

In the near and intermediate term, gas will continue to be an important stabilizing system and provide more and cleaner energy solutions. Until the world can be weaned off hydrocarbons and use more renewables, Prostar and the natural gas industry will continue to invest in the talent and technologies needed to produce gas safely and efficiently.

**Dave Noakes** is senior managing director at **Prostar Capital**.