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Natural Gas Boom Fizzles as a U.S. Glut Sinks Profits

Chevron's multibillion-dollar write-down of gas assets is the most recent sign that the gas supply has far outstripped demand.

Storage tanks at a shale gas site in Zelienople, Pa. The Marcellus field in Pennsylvania was once viewed as the most promising in North America.Credit...Keith Srakocic/Associated Press

By Clifford Krauss Dec. 11, 2019

HOUSTON — A decade ago, natural gas was heralded as the fuel of the future. In shale fields across the country, hydraulic fracturing uncorked a lucrative new source of supply. Energy giants like Exxon Mobil and Chevron snapped up smaller companies to get in on the action, and investors poured billions of dollars into export terminals to ship gas to China and Europe.

The boom has given way to a bust. A glut of cheap natural gas is wreaking havoc on the energy industry, and companies are shutting down drilling rigs, filing for bankruptcy protection and slashing the value of shale fields they had acquired in recent years.

Chevron, the country's second-largest oil and gas giant after Exxon, said on Tuesday that it would write down $10 billion to $11 billion in assets, mostly shale gas holdings in Appalachia and a planned liquefied natural gas export facility in Canada. The move was an energy company's clearest acknowledgment yet that the industry has been far too optimistic about the prospects for natural gas.

While cheap natural gas continues to take market share from coal in the electricity sector, supply of the fuel has far outstripped demand. As a result, once-booming gas fields in Arkansas, Louisiana and Texas have become quiet backwaters. The number of gas rigs deployed nationwide has dropped to 132, from 184 last year.

"In the short term the gas market is oversupplied and is likely to remain so for the next few years," said Andy Brogan, oil and gas global sector leader at EY, the firm formerly known as Ernst & Young. "It's a cyclical business, and we're at the bottom of the cycle."

Some analysts said the gas slump could persist for some time because the cost of wind and solar energy has tumbled in recent years, making those renewable sources of energy more attractive to power producers. And while gas exports are climbing, growing production of the fuel in Qatar, Russia and Australia threatens to drive down international prices over the next few years.

Nowhere are the declining fortunes of natural gas more in evidence than in Appalachia, where the Marcellus field centered in central and western Pennsylvania was once viewed as the most promising in North America. With gas prices slashed nearly in half from a year ago, the number of drilling rigs operating in Pennsylvania has dropped to 24, from 47, over the last 12 months. EQT, one of the premier producers in the Marcellus, recently cut nearly a quarter of its work force, eliminating 196 positions.

That is a far cry from the picture Chevron painted when it acquired Atlas Energy almost exactly 10 years ago for $3.2 billion, while assuming $1.1 billion in debt, cementing its foothold in southwestern Pennsylvania. At the time, George L. Kirkland, then Chevron's vice chairman, predicted that the "strong growth potential of the asset base and its proximity to premier natural gas markets make this targeted acquisition a compelling investment."

Other energy companies have also acknowledged losses, though not to the same extent. Exxon Mobil wrote down the value of its American natural gas assets by $2.5 billion in recent years after buying the natural gas producer XTO Energy for more than $30 billion in 2010.

Gas producers have struggled in part because New York and other Northeastern states have made it harder to build pipelines to transport the fuel. But analysts point to a far bigger problem: The industry is just producing too much gas. In some oil fields where gas bubbles to the surface with crude, it has become cheaper for producers to burn the gas than gather it and send it to market.

"Natural gas is in the tank," said Patrick Montalban, president of Montalban Oil & Gas Operations. "We're looking at a project right now of over 200 wells in Montana that are for sale, but they are uneconomic. Not only are the wells uneconomic, the gathering of the gas is uneconomic."

American natural gas inventories are about 19 percent higher than a year ago, according to the Energy Department. The government estimates that the average spot price for natural gas will be $2.45 per million British thermal units in 2020, about 14 cents below this year's average. At its peak in 2008, the benchmark price topped $10 per million British thermal units.

Exports of liquefied natural gas are rising sharply, but future profits may be meager. S&P Global Platts warned this week that European gas prices could slide next year, reducing how much money United States exporters can earn.

Moody's Investor Service predicted that several gas exploration and production companies active in the Marcellus will face heightened financial risks over the next three years because of the debt they have accumulated. Between 2021 and 2023, companies such as Antero Resources, CNX Resources, EQT and Gulfport Energy will need to refinance between $3.5 billion and $4 billion

in debt. All told, the producers have to repay lenders more than $12 billion during that period.

"If low natural gas prices persist beyond 2020," the Moody's report said, "companies may need to reduce debt to maintain compliance with financial covenants or amend covenant levels."

Many smaller companies have sought bankruptcy protection or indicated that they could go out of business. Shares of Chesapeake Energy, the Oklahoma-based champion of shale gas drilling, traded at more than $60 in 2008. Now they sell for less than a dollar. Chesapeake warned in a recent securities filing that if prices remained low and it was unable to comply with the conditions of its debt, "there is substantial doubt about our ability to continue as a going concern."

Such pessimism is widespread.

"We expect the trend of write-downs to continue as price outlooks are adjusted down," said Tom Ellacott, senior vice president at Wood Mackenzie, a research firm.

Of course, low natural gas prices have been a boon to users of the fuel, especially electricity utilities, which are increasingly replacing coal-fired plants with ones that use gas. Gas is expected to have provided about 37 percent of electricity produced in the United States this year, up from 34 percent in 2018, according to the Energy Department. But renewables are climbing even faster.

In a recent report, Morgan Stanley estimated that demand for natural gas would grow for a few years but fall 13 percent between 2020 and 2030 as utilities increasingly switch to wind and solar power. Future regulations or a carbon tax put in place by lawmakers worried about climate change could accelerate the transition to renewables.

Exports offer perhaps the greatest growth potential for American natural gas. But even as companies build more liquefied natural gas export terminals across the Gulf Coast, competition from Russia and Qatar is intensifying and analysts fear there could soon be a global glut of gas.

"There is significant uncertainty as to the scale and durability of demand for imported L.N.G. in developing markets around the world," the International Energy Agency said in a recent report. Considering the high cost of processing and transporting liquefied natural gas, the report added, "competition from other fuels and technologies, whether in the form of coal or renewables, loom large."

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Correction: Dec. 13, 2019

An earlier version of a picture caption with this article imprecisely described equipment at a shale gas site in Zelienople, Pa. They are storage tanks, not natural gas tanks.

Clifford Krauss is a national energy business correspondent based in Houston. He joined The Times in 1990 and has been the bureau chief in Buenos Aires and Toronto. He is the author of "Inside Central America: Its People, Politics, and History." @ckrausss