Reports Tout the Longevity of Domestic Shale NatGas Resources

The shale gas boom in North America has finally plateaued over the past year as companies have slowly cut back on dry gas drilling in light of the historically-low natural gas prices of the past several years.

But with exports of LNG on the horizon and industrial demand for natural gas feedstocks climbing, the continent's abundant unconventional natural gas resources appear poised to remain an important segment of the energy mix -- even at relatively low market prices.

A series of studies released last month by academics and an energy policy think tank seem to confirm the longevity of shale gas in North America, which is expected to provide energy security and economic opportunities in the US while reducing greenhouse gas emissions from power generation and, to a lesser degree, transportation.

The Barnett Shale play in North Texas -- which kicked off the US shale drilling boom in the early 2000s -- provides perhaps the most poignant example of the decline in dry gas development activities in North America over the past few years.

Drilling activity in the gas-prone Barnett Shale has tapered off significantly as a result of persistent weakness in natural gas prices, though production from existing wells remains strong.

Nevertheless, a report released last week by the Bureau of Economic Geology at the University of Texas suggests the Barnett will continue to deliver significant volumes of natural gas over the next two decades.

The report forecasts output in the Barnett Shale will decline steadily from the current peak of 2 trillion cubic feet per year to about 900 billion cubic feet per year by 2030.

Cumulative gas production from the Barnett Shale through 2050 is projected to reach 44 Tcf, of which just over 12 Tcf has already been produced.

The report formed its conclusions on a base case natural gas price assumption of $4/MMBtu -- slightly higher than current prices in the mid-$3 range. It also assumes that no new wells are drilled after 2030.

The report estimates that the Barnett holds 86 Tcf of technically recoverable gas, including volumes already produced. Estimates of technically recoverable reserves do not take into account the impact of prices on the volumes that are ultimately produced.

The University of Texas team estimates that the oil and gas industry will need to drill another 13,000 wells in the Barnett Shale by 2030 to achieve the production volumes that it forecasts.

Scott Tinker, director of the Bureau of Economic Geology and the study's principle investigator, said the Barnett Shale still holds promising drilling locations across the 8,000 square miles covered by the study.

Tinker said these locations, which are forecast to remain economic at low gas prices, were likely missed during the industry's earlier efforts to delineate the prolific gas play.

"Drilling in the better rock won't last forever," he said. "But there are still a few more years of development remaining in the better rock-quality areas."

http://www.lexisnexis.com/Lnacui2api/delivery/PrintDoc.do?jobHandle=2825%3A403771...
The study's authors analyzed production data from more than 16,000 individual wells drilled in the Barnett Shale through mid-2011 to reach its conclusions.

Devon Energy and Exxon Mobil -- two of the larger producers in the play -- provided industry feedback on the report, while funding was provided by the nonpartisan Alfred P. Sloan Foundation.

Separately, the Bipartisan Policy Center based in Washington unveiled a detailed energy policy report that strongly advocated for increased domestic production of shale gas so long as it is in an environmentally-responsible manner.

"Whereas domestic production was thought to be on a declining trajectory as recently as four years ago, the US is now believed to have sufficient natural gas resources to meet demand for many decades and perhaps even a century at current rates of consumption," the report's authors said.

The report also urged legislators to support LNG exports from the US as well as further investment in "green" fuels such as natural gas-powered vehicles -- which provide a cheaper and more clean-burning alternative to gasoline (NGW Feb.25'13).

"We were pleased to see the Bipartisan Policy Center so clearly articulate how natural gas is creating economic opportunity and contributing to reductions in greenhouse gas emissions," said Erica Bowman, chief economist at America's Natural Gas Alliance.

Christi Shafer, Houston

LOAD-DATE: April 1, 2013

LANGUAGE: ENGLISH

PUBLICATION-TYPE: Newsletter

Copyright 2013 Energy Intelligence Group, Inc.
All Rights Reserved