



UT: Technically recoverable natural gas from future US shale wells on rise

HOUSTON, Dec. 17

12/17/2018

By Paula Dittrick

OGJ Upstream Technology Editor

A new analysis of the nation's major shale gas plays shows 20% more natural gas can be technically recovered from future wells compared with an estimate made 5 years ago. Researchers primarily attributed the increase to new drilling practices.

The [analysis](#) by the University of Texas at Austin's Bureau of Economic Geology examined production capabilities and estimated total gas in the Barnett, Fayetteville, Haynesville, and Marcellus plays. The study updated [2011-13 findings](#).

Svetlana Ikonnikova, the principal investigator of the study and a research scientist at the bureau, said that developments in drilling technologies, market conditions, cost structures, and improvement in geological characterization prompted the updated assessment.

"Five years ago, we hardly thought of

multilayer or stacked well drilling, or of quadrupling lateral well length,” she said. The team used 3D modeling and advanced data analytics to enhance the understanding of:

- Geologic reservoir characterization.
- Individual well decline and recovery analysis.
- Individual well geology and engineering improvements that increase productivity.
- Economically recoverable resource assessment.

Researchers found future wells in the four shale gas plays can technically recover about 780 tcf of gas in addition to 110 tcf already recovered by wells drilled by Dec. 31, 2017. The previous study found 650 tcf of technically recoverable gas.

Based on US gas consumption of 27 tcf in 2017, the new estimate suggests the addition of about 5 years of domestic consumption.

The projected increase comes largely from new drilling practices that increase recovery, reduce per-unit cost, and allow companies to continue drilling even during periods of low oil or natural gas prices.

New methods include stacked drilling, drilling wells closer together, and horizontal wells that can run for about 2 miles.

Contact Paula Ditrtrick at
paulad@ogjonline.com

OIL & GAS JOURNAL



[About Us](#) | [Site Map](#) | [Privacy Policy](#) | [Terms and Conditions](#)

© 2018 PennWell Corporation. Tulsa, OK All rights reserved.