

# Energy boom will last for decades, UT study finds

By Jennifer Hiller | February 28, 2013

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Get used to the domestic energy boom. Drilling for natural gas in shale rock formations across the country likely will continue for decades.

Results of a new well-by-well study of the Barnett Shale indicate that although production from the North Texas field will decline through 2030, there's still an enormous resource to tap profitably even at relatively low natural gas prices.

"The implication of this in a general sense is there's quite a bit of drilling still to be done and production still to come from shale," said Scott Tinker, director of the University of Texas at Austin's Bureau of Economic Geology and the co-principal investigator for the study.

The study is predicated on natural gas prices reaching \$4 per million British thermal units, about 50 cents above current prices, but below 2008 prices of \$12-plus.

The study likens the impact of shale drilling to the innovation of offshore drilling, which opened up new sources of petroleum decades ago, and says that tapping vast U.S. gas reserves has implications for energy, water and environmental policy.

"The shale basins will deliver enough in the next several decades that some long-term planning can be done," Tinker said.

The Barnett Shale is the grandfather of unconventional drilling - the place where operators first used both horizontal drilling and hydraulic fracturing, the process of sending a mix of water, sand and chemicals down a well at high pressure to crack open dense shale rock.

Tinker called the study, which involved about a dozen researchers working for about a year and a half, both exhaustive and "exhausting." They looked at production data from more than 16,000 wells drilled in the Barnett through mid-2011.

The nonpartisan Alfred P. Sloan Foundation funded the UT study. And in the wake of a searing report last year, UT researchers took pains to detail outside ties. Tinker sits on advisory boards of three oil and gas companies and is sometimes paid to speak to industry groups or private companies. Two other researchers hold stock in oil and gas companies.

Last year, an independent review panel said that a UT study that concluded hydraulic fracturing poses little risk of groundwater contamination "fell short of contemporary standards for scientific work." The panel also noted that the author sat on the board of an oil company but didn't disclose his conflict of interest.

*UT seeks feedback*

In this study, UT asked for feedback from industry and academic scientists, and hired a consulting company to critique draft manuscripts.

The study said that at a base price of \$4 per million British thermal units, the Barnett will produce 44 trillion cubic feet of natural gas through 2050.

The study challenges the conventional wisdom that the Barnett is waning, and says the industry will drill another 10,000 wells there by 2030. "There's still some pretty good rock to be drilled," Tinker said.

The research team has submitted five academic papers detailing the results and methodology, but on Thursday released an overview of its results.

UT also expects to release well-by-well study results for the Haynesville, a shale field in Louisiana and East Texas, and the Fayetteville in Arkansas by the fall. A comprehensive study of the Marcellus Shale in the Northeast, considered the largest U.S. gas field, should be complete by the end of the year.

### ***Eagle Ford***

The Eagle Ford Shale in South Texas has dry natural gas, but for now, depressed natural gas prices have prompted companies to shift drilling to areas that produce a greater percentage of crude oil or natural gas liquids.

The formation generally produces more oil on its northern arc; more natural gas, or so-called "dry gas" on its southern arc; and more natural gas liquids such as propane and butane in-between. Wells, however, usually bring up a bit of everything.

***Express-News archives contributed to this report.***