

US shale gas weakening Russian, Iranian petro-power, study finds

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Rising U.S. natural gas production from shale formations has already played a critical role in weakening Russia's ability to wield an "energy weapon" over its European customers, and this trend will accelerate in the coming decades, according to a new Baker Institute study, "Shale Gas and U.S. National Security." The study, funded by the U.S. Department of Energy, projects that Russia's natural gas market share in Western Europe will decline to as little as 13 percent by 2040, down from 27 percent in 2009.

"The geopolitical repercussions of expanding U.S. shale gas production are going to be enormous," said Amy Myers Jaffe, the Wallace S. Wilson Fellow for Energy Studies and one of the authors of the study. "By increasing alternative supplies to Europe in the form of liquefied [natural gas](#) (LNG) displaced from the U.S. market, the petro-power of Russia, Venezuela and Iran is faltering on the back of plentiful American natural gas supply."

The study concludes that timely development of U.S. shale [gas resources](#) will limit the need for the United States to import LNG for at least two to three decades, thereby reducing negative energy-related stress on the U.S. trade deficit and economy. By creating greater competition among gas suppliers in global markets, shale gas will also lower the cost to average Americans of reducing [greenhouse gases](#) as the country moves to lower carbon fuels.

The Baker Institute study dismisses the notion, recently debated in the

U.S. media, that the shale gas revolution is a transitory occurrence. The study projects that U.S. shale production will more than quadruple by 2040 from 2010 levels of more than 10 billion cubic feet per day, reaching more than 50 percent of total U.S. natural gas production by the 2030s. The study incorporates independent scientific and economic literature on shale costs and resources, including assessments by organizations such as the U.S. Geological Survey, the Potential Gas Committee and scholarly peer-reviewed papers of the American Association of Petroleum Geologists,

"The idea that shale gas is a flash-in-the-pan is simply incorrect," said Kenneth Medlock III, the James A. Baker III and Susan G. Baker Fellow for Energy and Resources Economics and co-author of the study. "The geologic data on the shale resource is hard science and the innovations that have occurred in the field to make this resource accessible are nothing short of game-changing. In fact, we continue to learn as we progress in this play, and it is vital that we understand and embrace the opportune circumstances that shale resources provide. U.S. policymakers should not get diverted from the real opportunities that responsible development of our domestic shale resources present."

Other findings of the study include that U.S. shale gas will:

- Reduce competition for LNG supplies from the Middle East and thereby moderate prices and spur greater use of natural gas, an outcome with significant implications for global environmental objectives.
- Combat the long-term potential monopoly power of a "gas OPEC."
- Reduce U.S. and Chinese dependence on Middle East natural gas

supplies, lowering the incentives for geopolitical and commercial competition between the two largest consuming countries and providing both countries with new opportunities to diversify their energy supply.

- Reduce Iran's ability to tap energy diplomacy as a means to strengthen its regional power or to buttress its nuclear aspirations.

More information: The study is available on line at www.bakerinstitute.org/publications/as-07192011.pdf/view

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