

Fracking: The Economic and Environmental Impact

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Economic Effects of Fracking

- US oil production:¹
 - 2008: 5M BPD
 - 2014: 7.4M BPD
- International Energy Agency predicts US will produce 11.6 M BPD by 2020¹
- Fracking has increased US GDP by 0.3% in 2013¹
- Expected to add at least 0.1% to GDP every year until 2020¹
- US Petroleum deficit has shrunk to 1.7% of GDP¹
 - Europe's has grown to 4% of GDP¹

¹Economist February 15th, Article Saudi America – The Economics of Shale Oil

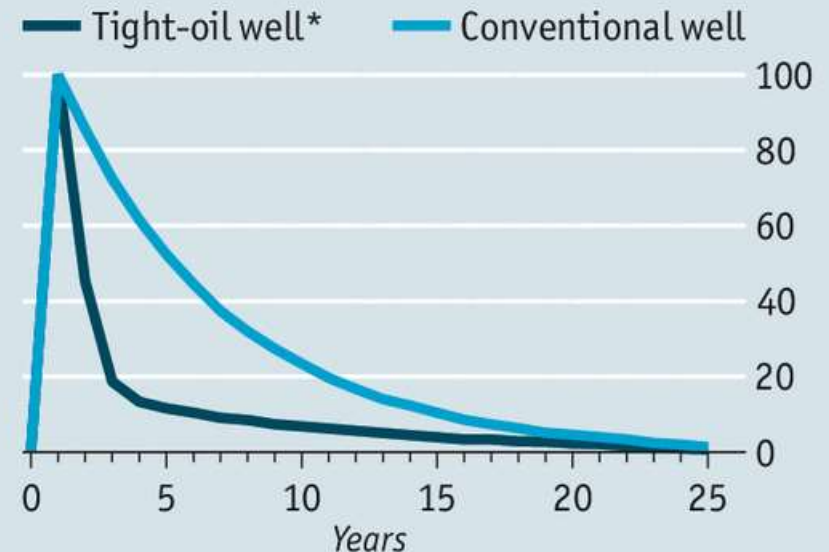
Moderating Energy Prices

- Conventional wells decline at 6%/yr
- “Tight wells” decline at ~30%/yr
- Maintaining Bakken Field production
 - 2,500 new wells/yr
- Conventional field: 60 wells/yr
- Oil Price Moderation

Quick hit v slow burn

Typical production curves of different kinds of oil well

Peak production=100%



Source: International Energy Agency

*Including shale

Safety and Environmental Concerns

- Fracking is in the national energy dialogue
- Significant environmental concerns being raised
 - Ground water contamination, toxic chemicals, radioactivity
- Popular culture/Hollywood is weighing in
 - Movie “Promised Land”, CSI Episode “Fracked”, You Tube campaign “What the Frack”

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