Transforming North America’s Energy Outlook

National Conference of State Legislatures
Minneapolis, August 21st 2014
“Please God, Just Give Me One More Oil Boom. I Promise Not to Blow It Next Time.”
How Not to Blow it This Time

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lower 48 states, onshore (conventional & enhanced oil recovery)
offshore, Gulf of Mexico (GOM), shallow
offshore lower 48 states non-GOM
Alaska
Offshore (deepwater)
tight oil (aka shale oil)

By Mason Inman for The Frack Lab (beaconreader.com/mason-inman), Aug 12, 2014
Data for crude oil and condensate; excludes natural gas liquids. Creative Commons Attribution 4.0 Int'l License
Lucas Gusher
Spindletop (Texas)
January 10th 1901
Welcome to the 20th Century
Bakken Shale
Somewhere in western North Dakota
2014
Production (in mmcf)

Source: Energy Information Administration
Natgas Price ($/mmBTUs)

Source: Energy Information Administration
The Benefits of the Boom
The United States, or Frackistan

- Jobs
- GDP boost
- Energy-rich = fastest economic growth
- Boost to manufacturing
- Lower cost of energy
- Lower balance of trade
- Taxes, royalties, bonuses
Downside of the Boom
- State vs. local control battles
- Industrialization of rural communities
- Loss of community
- Fear, anxiety
- Feeling of loss of control
- 15+ million people living close to a recently drilled & fracked well
Forksville, Pennsylvania
Wells were drilled well in advance of pipeline infrastructure.

- Flaring became routing in places.
- Crude by rail built because pipelines were too slow
- Companies didn’t study geology
- Communities were unprepared
“This came much faster than anticipated, and neither the regulator, the legislator, nor the industry was actually prepared to deal with the issues.”
How Long Will The Boom Last?

Two scenarios:
- Oil production flattens out by 2019, then drops
- Oil production continues increasing through 2040…and that’s when they stopped projecting
What will Power Mix Look like in 2030?

Source: Energy Information Administration, in billion kilowatt hours
Renewables + Nat Gas

Additions to power plant capacity slow after 2016 but accelerate beyond 2023

Figure MT-32. Additions to electricity generating capacity in the Reference case, 1985-2040 (gigawatts)

Extending tax credits supports increased residential use of renewable energy sources

Figure MT-13. Residential distributed generation capacity in three cases, 2009-40 (gigawatts)