

Institute for Regulatory Policy Studies Conference

April 26, 2012

And Then There Was Abundance

Natural Gas Supply and Market Potential

Richard Meyer

rmeyer@aga.org

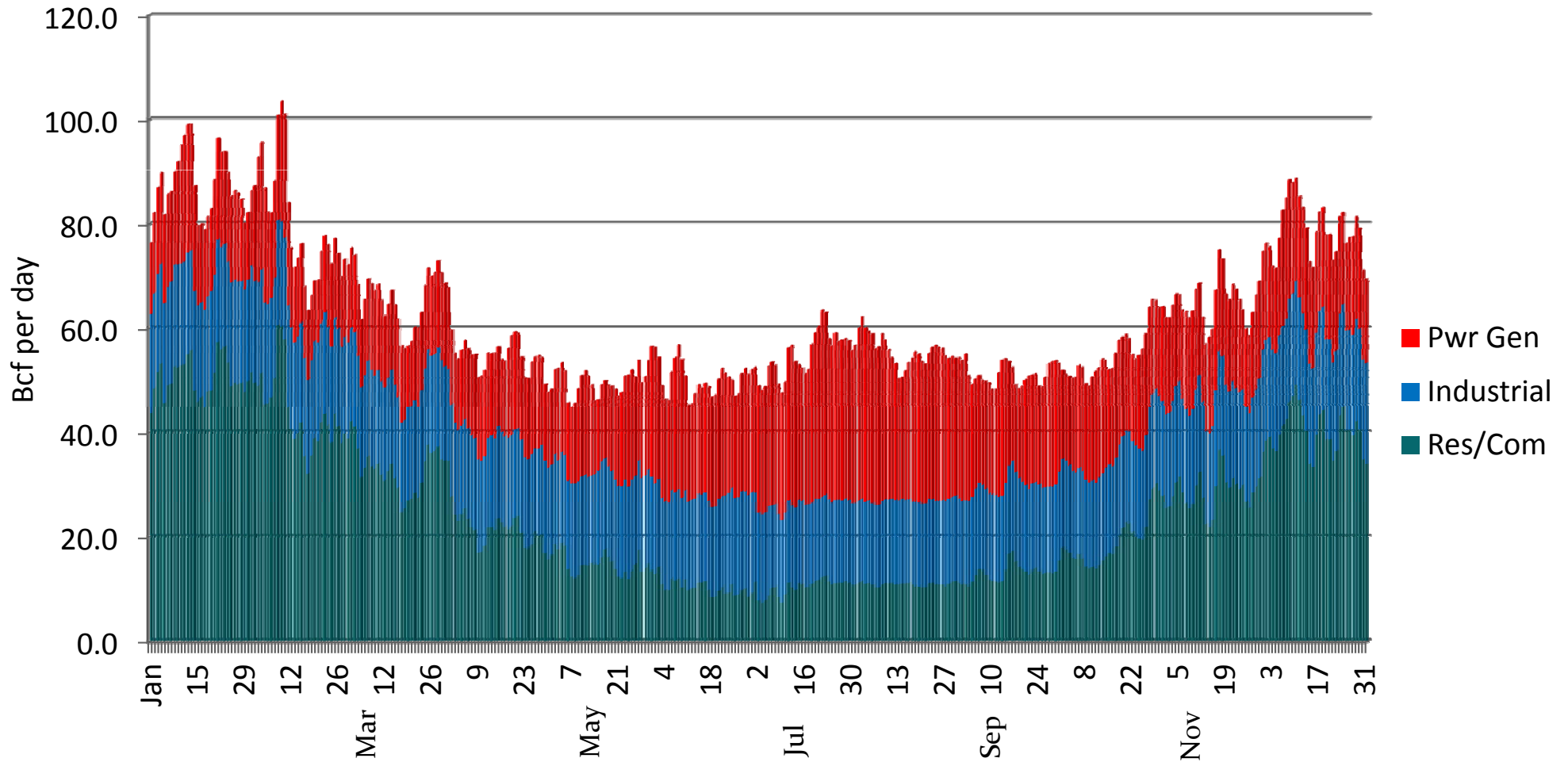
Delivering natural gas that fuels America's way of life

- The American Gas Association (AGA), founded in 1918, represents local natural gas companies that cleanly fuel the way of life of 175 million Americans nationwide
- 2.4 million miles of pipeline
- 92% of the residential and commercial customers receive natural gas from AGA member companies.



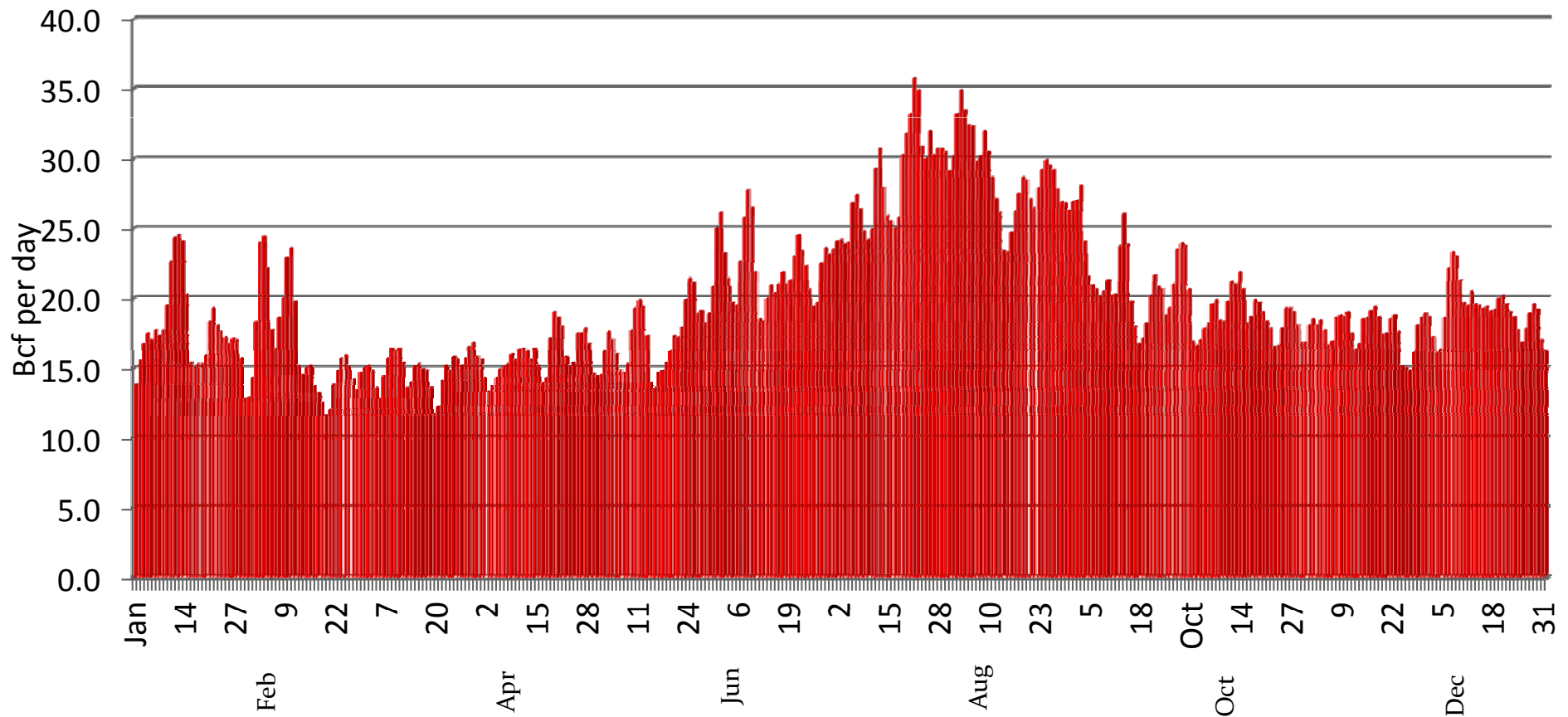
Daily Natural Gas Consumption by Sector

January 1-December 31, 2011



Power Generation Average Daily Natural Gas Consumption

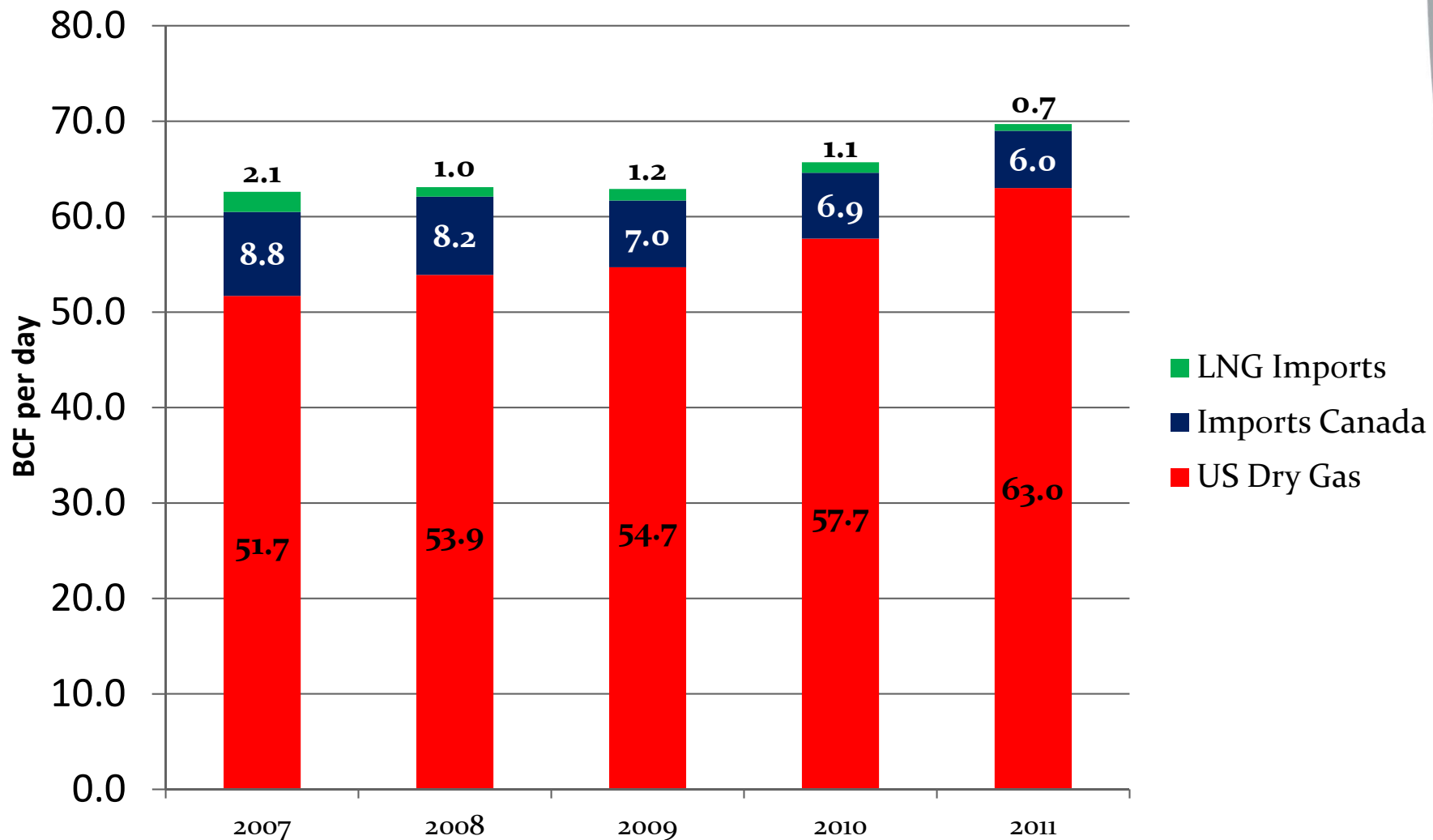
January 1-December 31, 2011



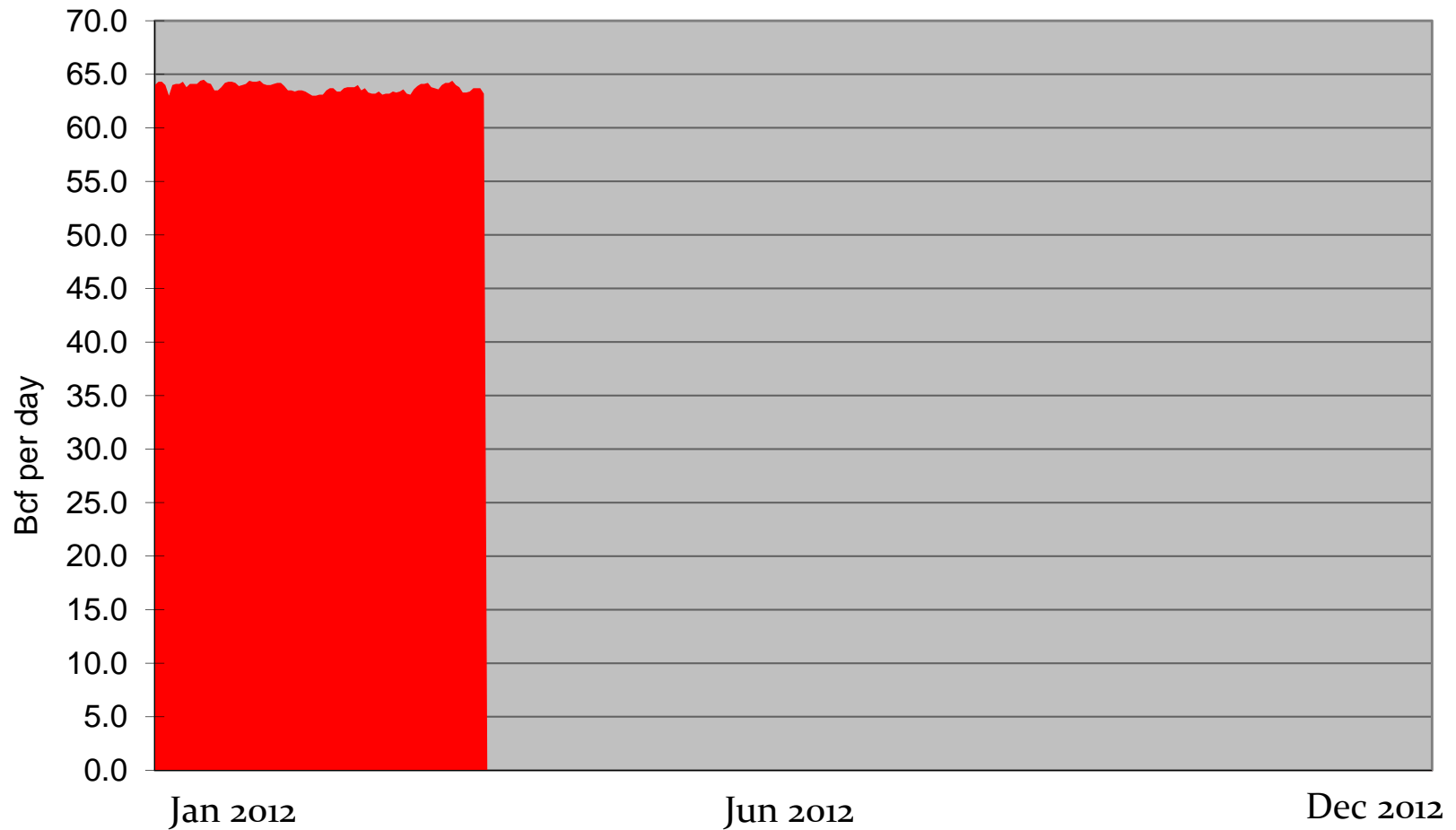
Source: Bentek Energy LLC, *Energy Market Fundamentals*, December 31, 2011.

Natural Gas Supply Sources

Average Daily U.S. Natural Gas Supply

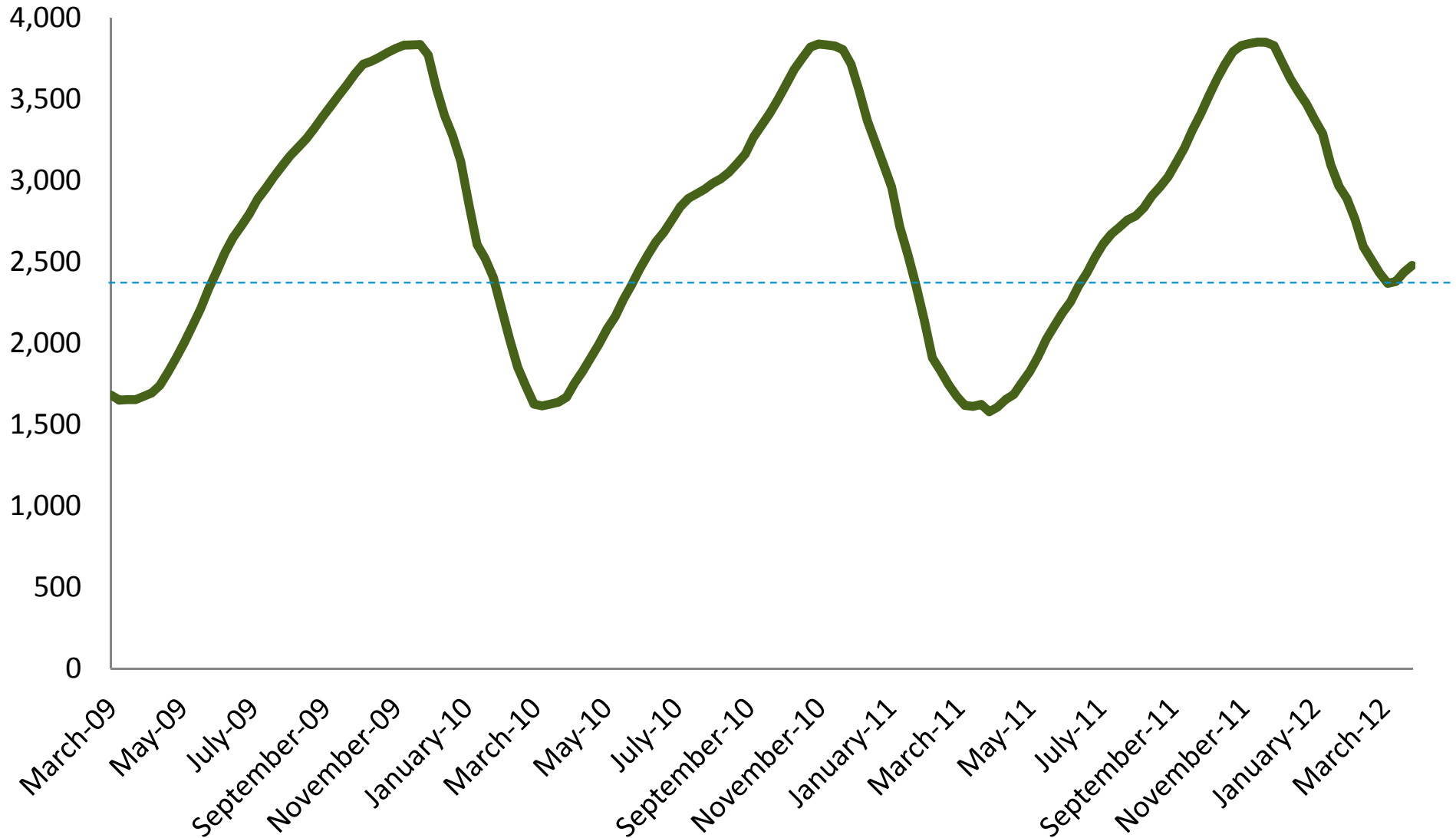


Daily Natural Gas Production



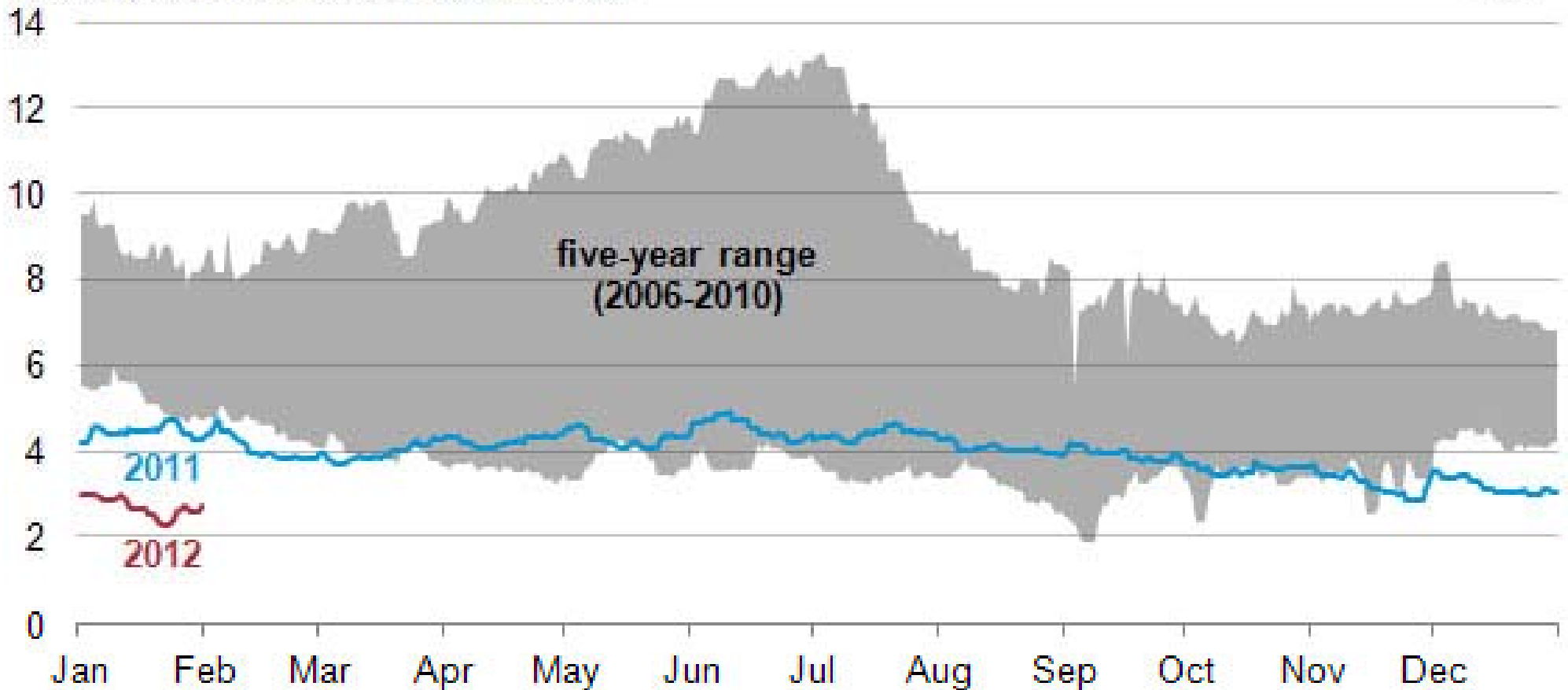
Source: Bentek Energy LLC, *Energy Market Fundamentals*, April 4, 2012.

Working Gas in Underground Storage Lower 48 States (Bcf)

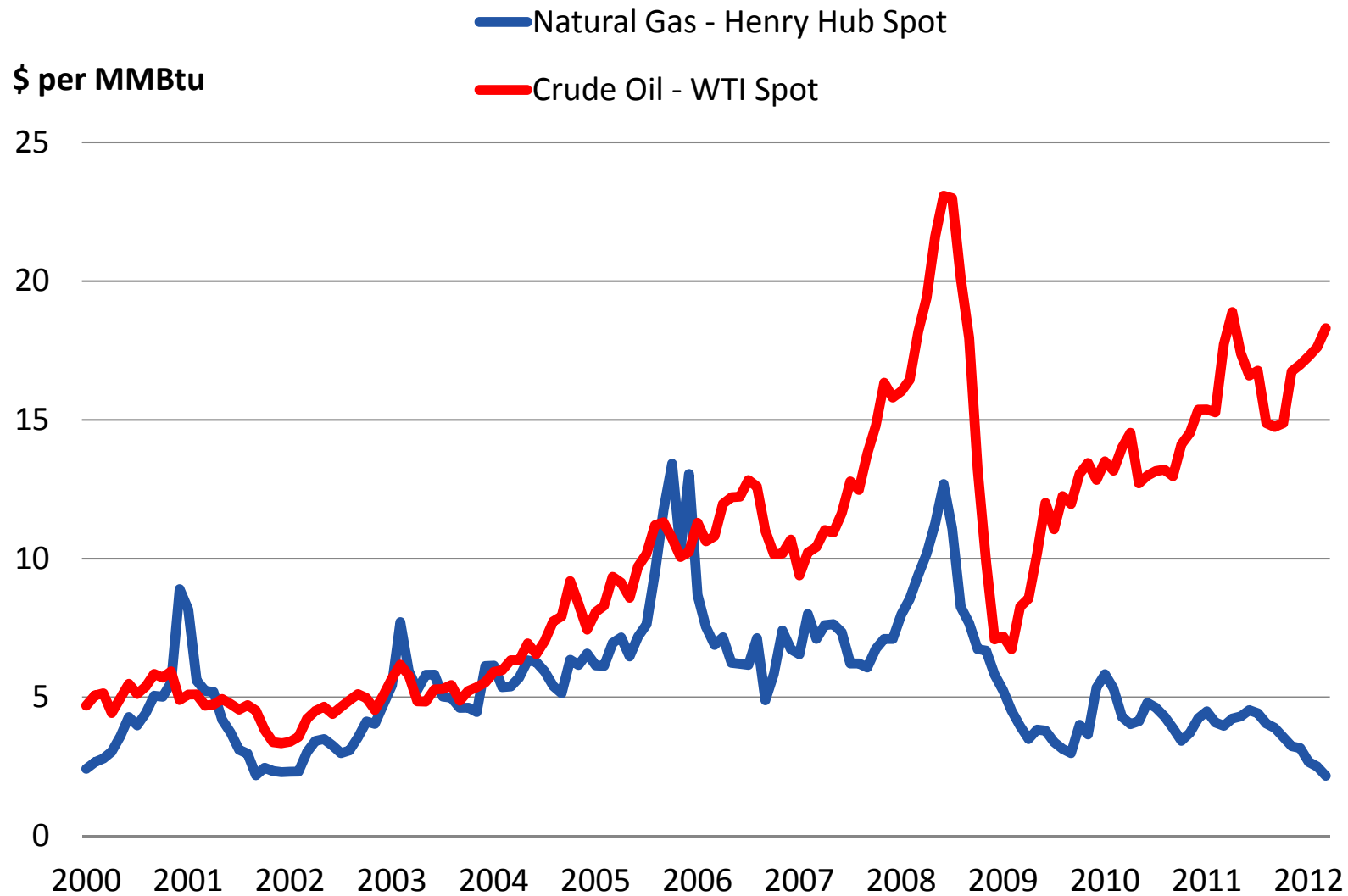


A real impact on natural gas prices

Spot Henry Hub natural gas price
dollars per million British thermal units

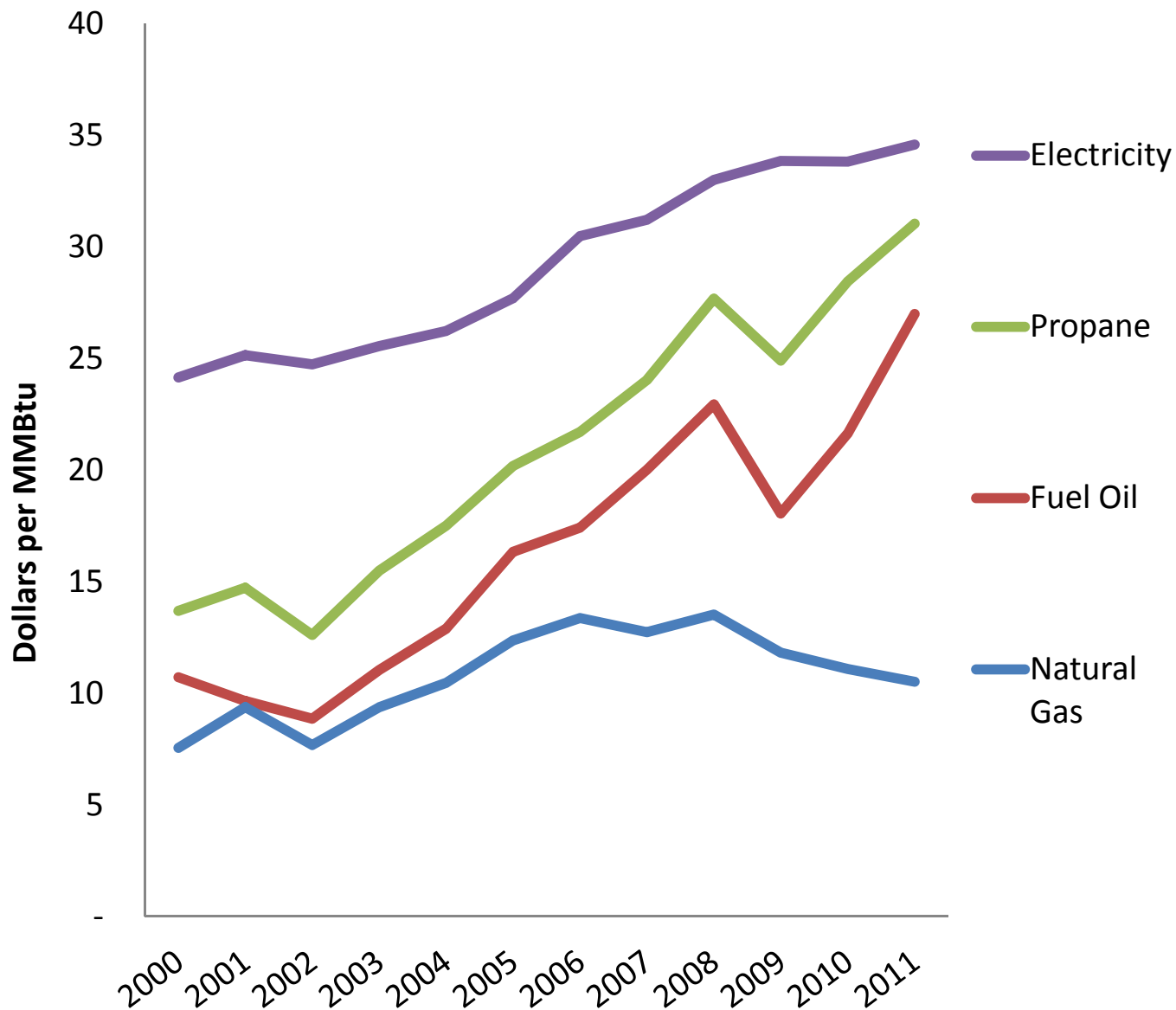


U. S. Natural Gas and Crude Oil Prices



Annual Energy Prices

TO RESIDENTIAL CONSUMERS



Natural gas is the most cost-effective home heating fuel available.

Fuel oil and propane are tethered to crude oil prices, which continue to rise.

Expenditures for electricity for heating purposes are greater than natural gas on average.

CONSUMERS SAVE

Estimated Annual Energy Bill for Typical New Household

	Natural Gas	Electricity	Oil	Propane
Space Heating	\$887	\$1,062	\$1,542	\$1,806
Other	\$388	\$731	\$710	\$790
Total	\$1,275	\$1,793	\$2,252	\$2,596

2010 Dollars

Customers will, on average, spend less for space heating, water heating, cooking, and clothes drying using natural gas than using any other energy source.

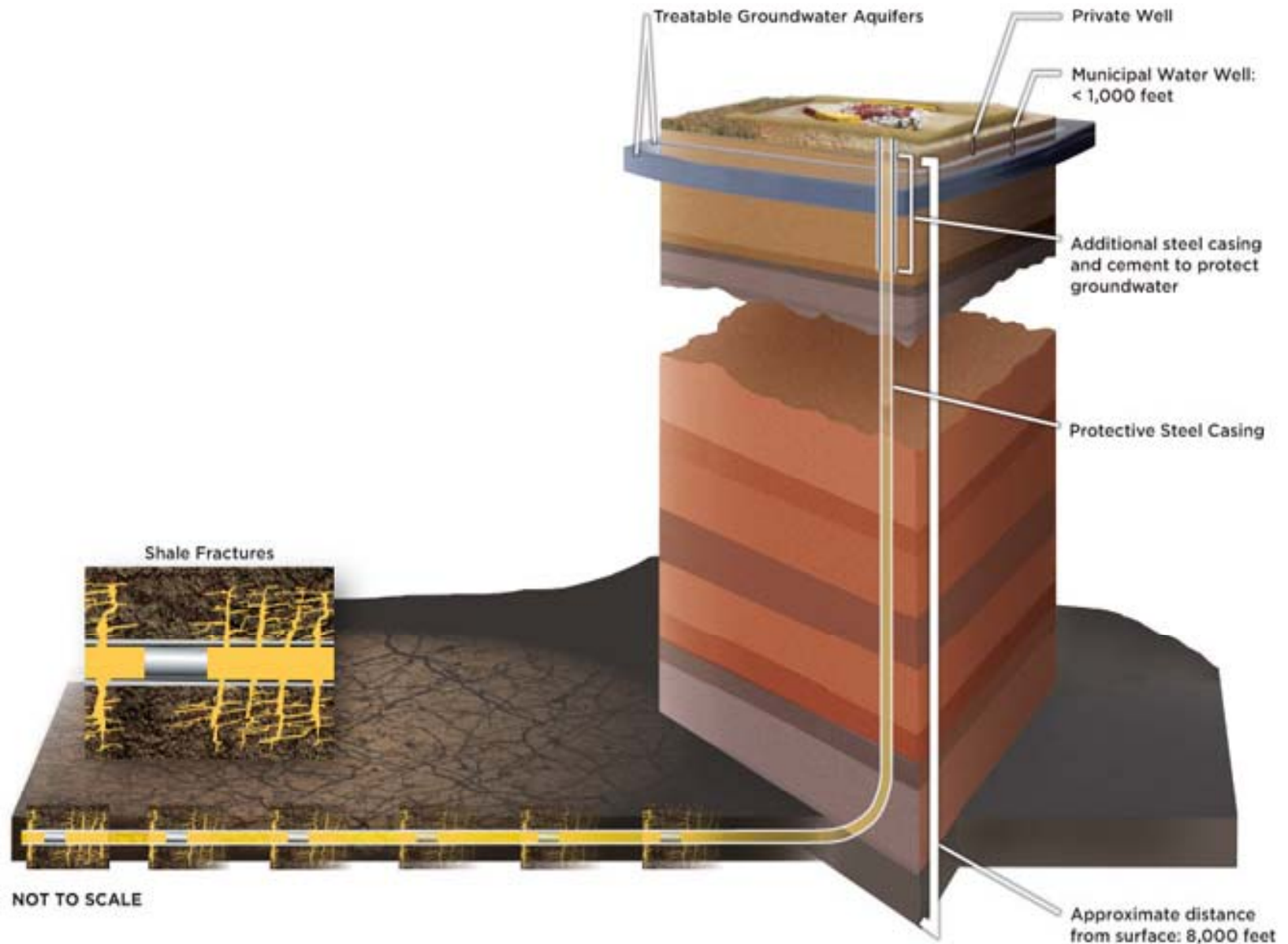


Wave “Hello” to where we are going



Source: www.wikipedia.org/wiki/Utica_Shale.

Hydraulic Fracturing



Source: Chesapeake Energy.

Hydraulic Fracturing Treatment Woodford Shale, Canadian County, Oklahoma



Source: JPTOnline, Society of Petroleum Engineers.

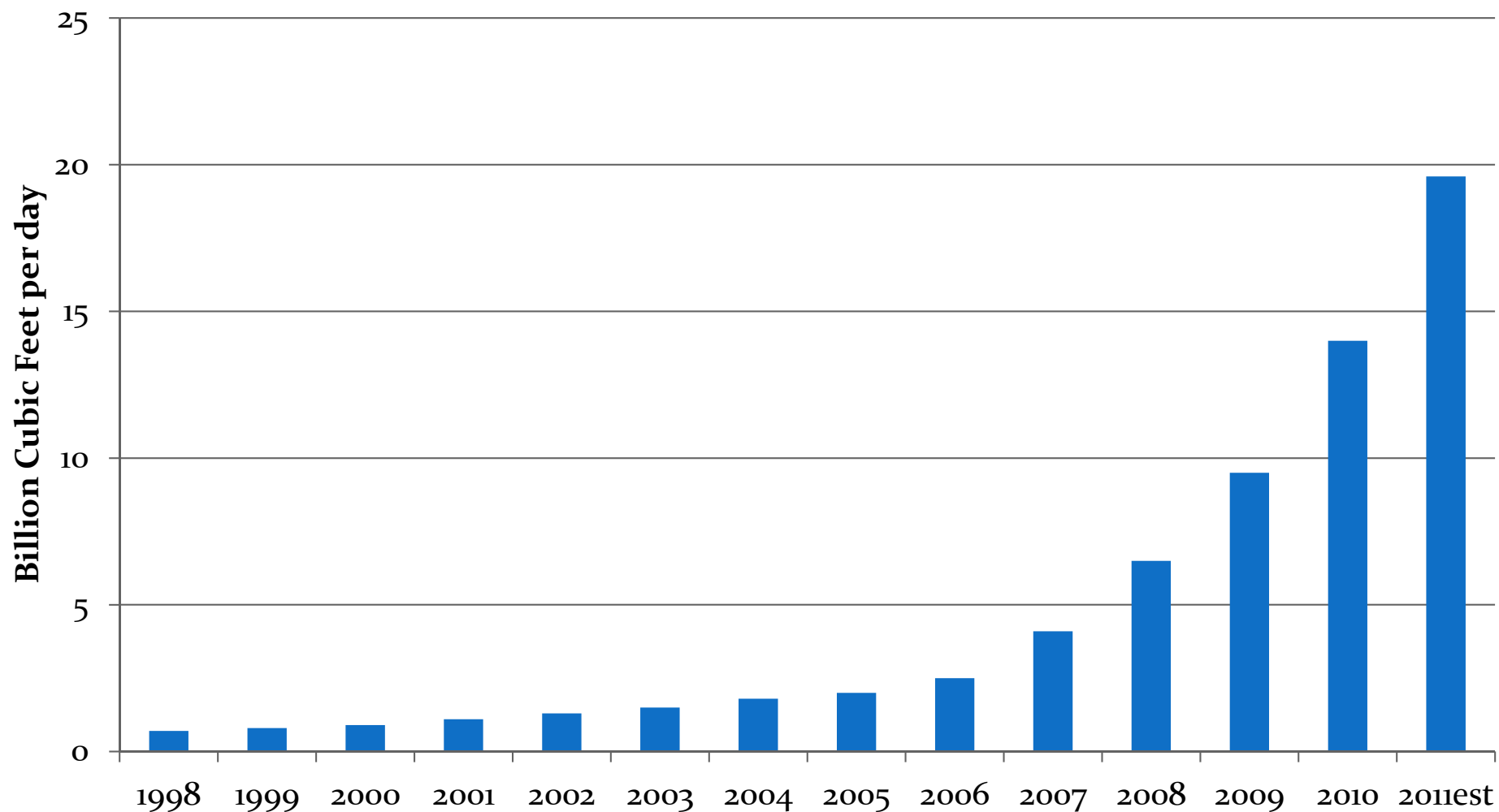
Producing Natural Gas Well



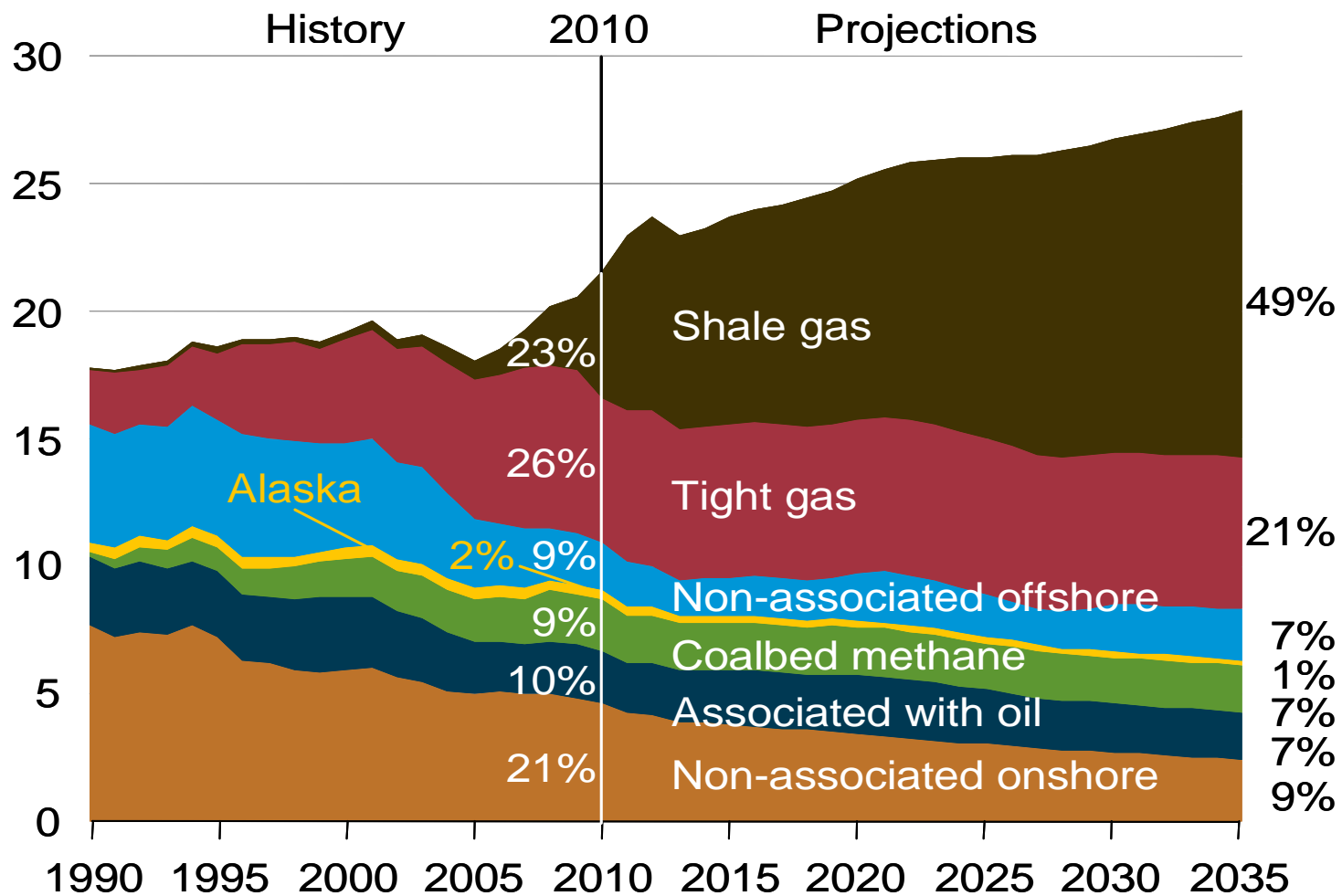
Photo courtesy J.M. Huber Corp.

US Shale Gas Production

Navigant Consulting 1998-2011



U.S. Natural Gas Production, 1990-2035 (trillion cubic feet)



2012 Annual Energy Outlook Early Release, Energy Information Administration.

Industry Critical Practices and Technology Opportunities

- Reduce Land Footprint
- Water Management
- Fugitive Air Emissions
- Well Integrity Best Practices
- Fracture-Fluid Chemistry
- Incident Response
- Basin Specific Baseline Data Acquisition
- Turning Sustainable Resource Development Principles into Actions

Economic Contributions of Domestic Shale Gas

- Nearly \$1.9 trillion in shale gas capital investments are expected between 2010 and 2035.
- 600,000 jobs supported by the shale gas industry to grow to 870,000 in 2015 and 1.6 million in 2035.
- Shale gas contribution to GDP to grow from \$76 billion in 2010 to \$231 billion in 2035.
- Savings from lower natural gas prices may add \$926 per year of disposable income per household, 2012-2015.

Source: *The Economic and Employment Contributions of Shale Gas in the United States*, IHS Global Insight, America's Natural Gas Alliance, December 2011.

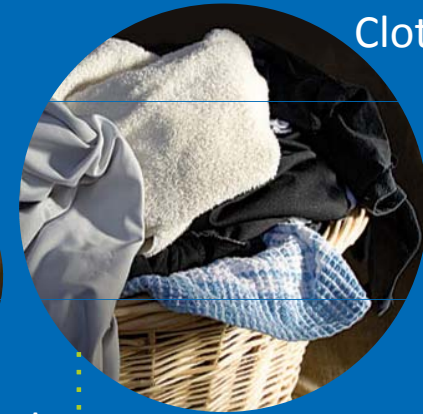
We Rely on Natural Gas Every Day



Hot Water



Fireplaces



Clothes Dryers



Cooking



Furnaces



Thank You

Richard Meyer

rmeyer@aga.org

202-824-7134

@RichardMeyerAGA





www.aga.org

The American Gas Association, founded in 1918, represents 201 local energy companies that deliver clean natural gas throughout the United States. There are more than 70 million residential, commercial and industrial natural gas customers in the United States, of which 91% — more than 64 million customers — receive their gas from AGA members. Today, natural gas meets almost one-fourth of the United States' energy needs.