Natural gas cost and supply trends

National Summit on RPS
Katherine Teller
September 23, 2014 | Washington, D.C.
What is the U.S. Energy Information Administration?

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy. EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA is the nation's premier source of energy information and, by law, its data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. government.
Today in Energy

**Coal-fired power plant operators consider emissions compliance strategies**

Operators of coal-fired power plants throughout the United States are currently developing strategies to comply with the EPA's Mercury and Air Toxics Standards (MATS). The costs of the equipment needed to control acid and toxic metal emissions, such as flue gas desulfurization (FGD) and dry sorbent injection (DSI), play a significant role in retrofitting and retirement decisions faced by coal plant operators. More
What We’ll Cover

• History of natural gas prices and factors driving prices
• Winter 2013-2014 and effect on prices
• Projections for prices, supply, and demand
Natural Gas Prices, January 2000 – September 2014

**Dollars per MMBtu**

- Hurricanes Katrina and Rita
- Summer 2008 oil price increases
- Winter 2013-2014
- September 2008 financial crisis
- Natural gas surplus and low demand

Source: Short-Term Energy Outlook, Natural Gas Monthly
U.S. dry shale gas production now accounts for 50% of total U.S. gas production.

Sources: EIA derived from state administrative data collected by DrillingInfo Inc. Data are through August 2014 and represent EIA’s official shale gas estimates, but are not survey data. State abbreviations indicate primary state(s).
Many Midwest and Eastern states had much below average winter temperatures in January through March.

Source: National Oceanic and Atmospheric Administration

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U.S. active underground natural gas storage facilities, by type (as of February 2014)

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Consumption last winter was the highest in the last 10 years.

Source: EIA, Short-Term Energy Outlook, September 2014
Working gas in storage this winter fell to historical lows

Source: Short-Term Energy Outlook, Natural Gas Monthly
Strong production growth in 2014 has supported the strong injection season

Source: Natural Gas Monthly, Short-Term Energy Outlook
The electric power and industrial sectors will continue to absorb growth in production

_Billion cubic feet per day_

Source: Short-Term Energy Outlook

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Prices will remain at relatively low levels through 2015

Source: Short-Term Energy Outlook
U.S. becomes a net exporter of natural gas in the near future

**U.S. dry natural gas**

trillion cubic feet per year

- **History**
  - Consumption
  - Domestic supply

- **2012**

- **Projections**
  - Net exports

![Graph showing projections and history of U.S. dry natural gas consumption, domestic supply, and net exports from 1990 to 2040.](https://example.com/graph)

Source: EIA, Annual Energy Outlook 2014 Early Release
Over the long term, EIA projects shale gas will make up the majority of production increases

U.S. dry natural gas production

trillion cubic feet

billion cubic feet per day

Source: EIA, Annual Energy Outlook 2014 Early Release
Annual average Henry Hub spot prices for natural gas in five cases, 1990-2040

natural gas spot prices
2012 dollars per million Btu

Source: EIA, Annual Energy Outlook 2014
For more information


Short-Term Energy Outlook | www.eia.gov/steo

Annual Energy Outlook | www.eia.gov/aeo

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer

State Energy Portal | http://www.eia.gov/state