

Bloomberg **GOVERNMENT**

America's Natural Gas Revolution

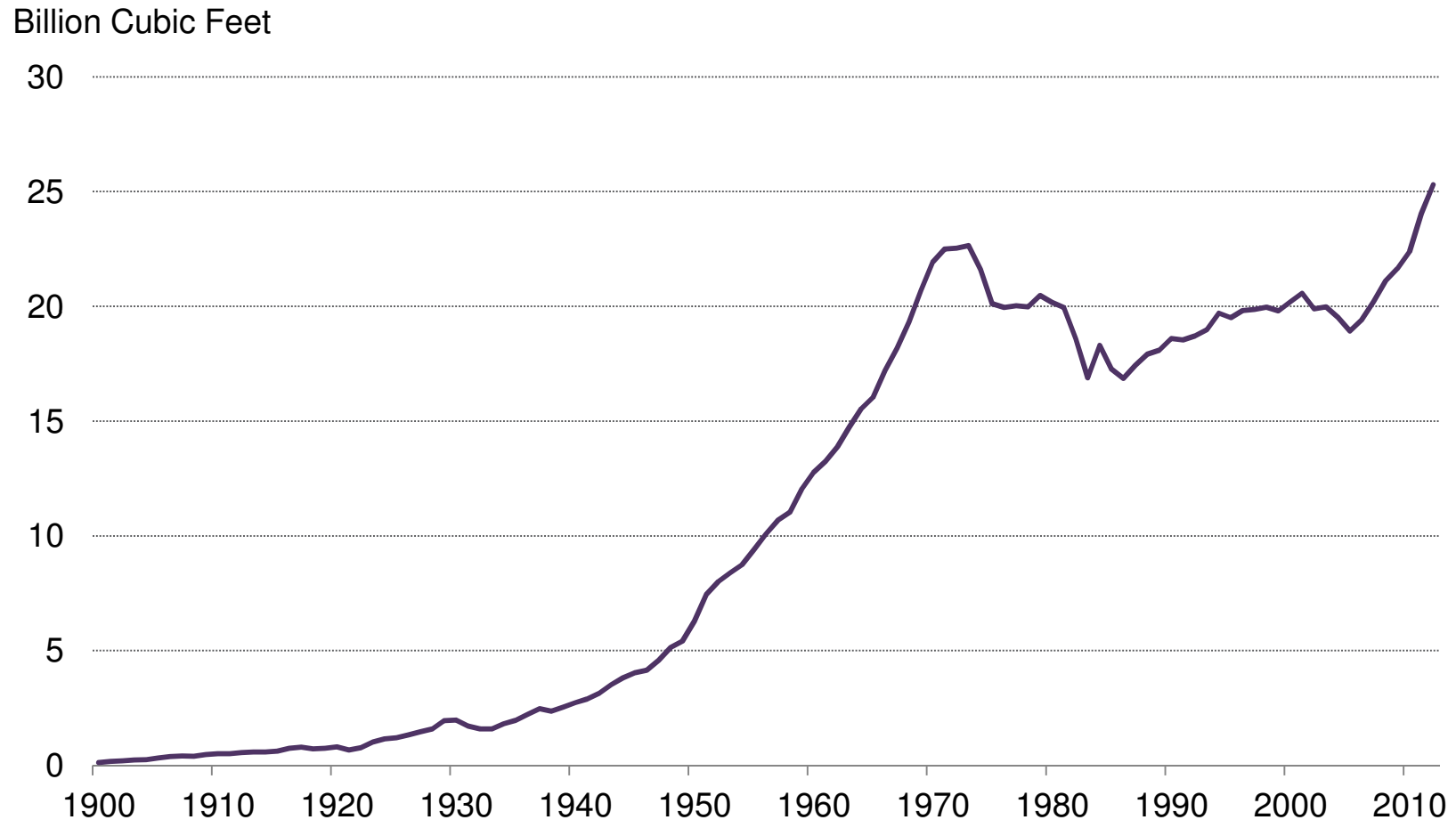
PGCE Meeting // AGA Offices, Washington DC

ROB BARNETT
Senior Energy Analyst

OCT. 9, 2013

TOTAL U.S. NATURAL GAS PRODUCTION

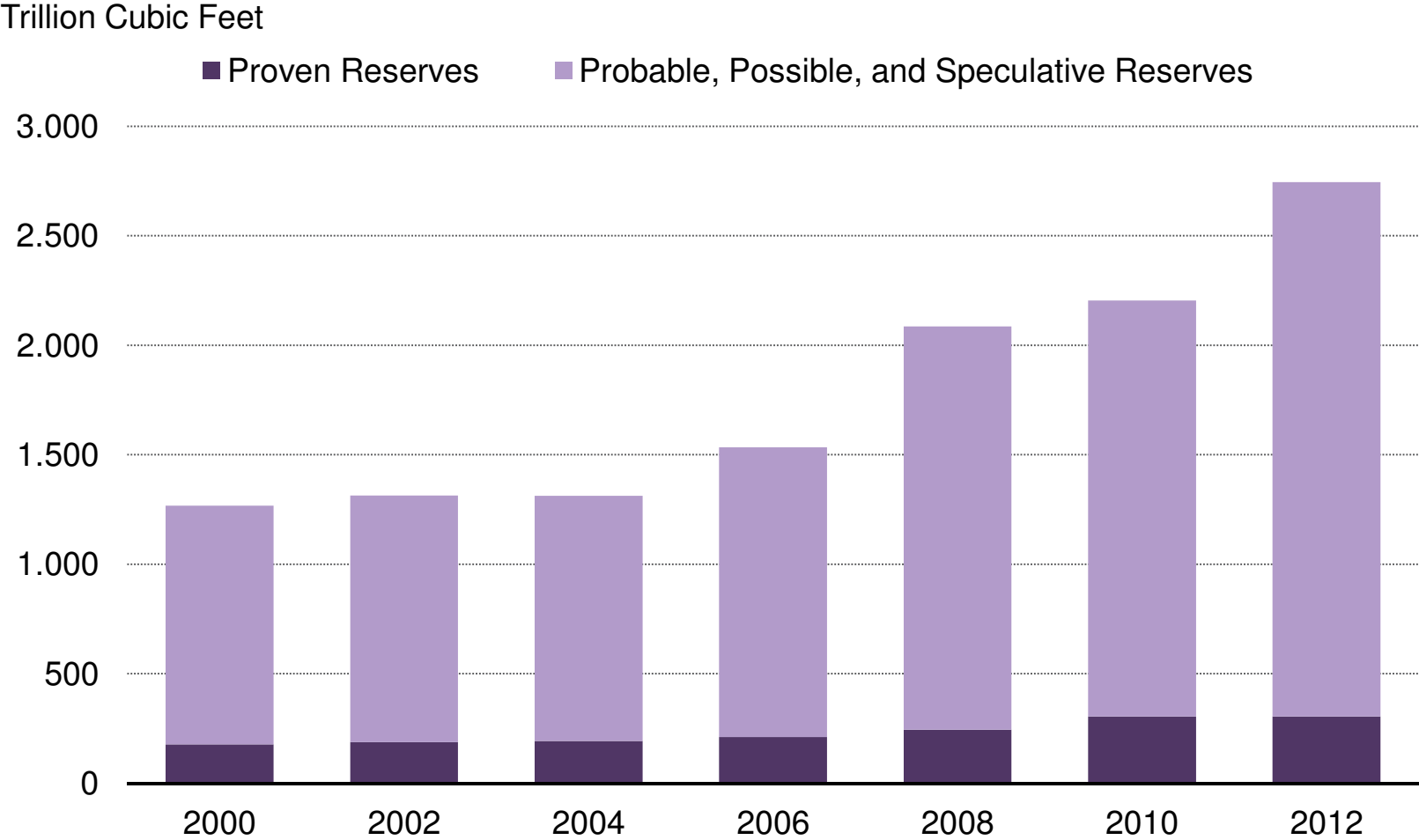
U.S. natural gas production reached its highest level ever in 2012.



Source: Energy Information Administration and Bloomberg Government
© 2013 Bloomberg Finance L.P.

U.S. NATURAL GAS RESOURCE ASSESSMENT

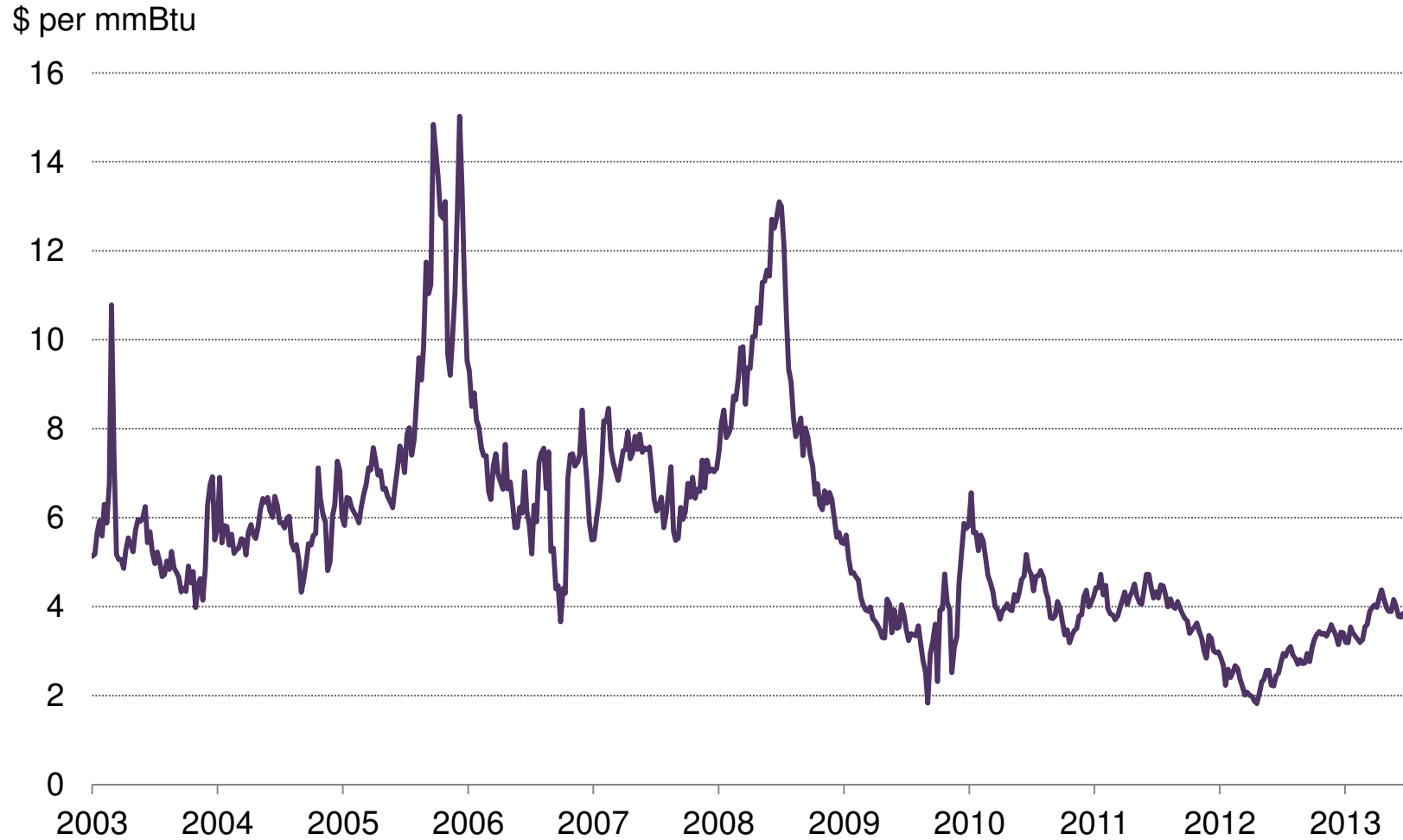
There are about 2.7 quadrillion cubic feet of natural gas reserves in the U.S., enough to last about 110 years at the current consumption rate.



Source: Energy Information Administration, Potential Gas Committee, and Bloomberg Government

U.S. NATURAL GAS PRICES (HENRY HUB)

At just below \$4 per mmBtu, U.S. natural gas prices are still a bargain compared with prices observed between 2004 and 2008.



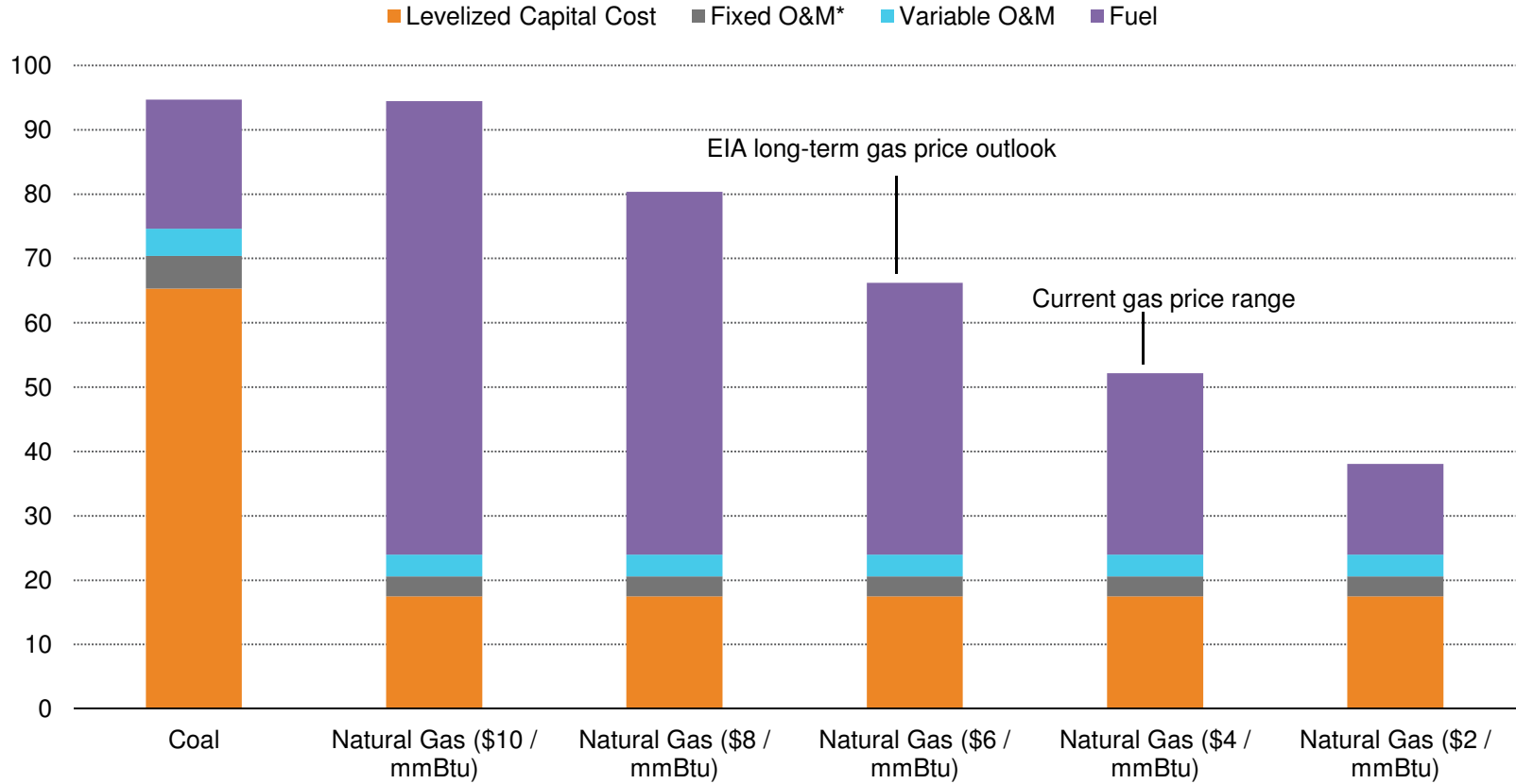
Source: Bloomberg Terminal

© 2013 Bloomberg Finance L.P.

NEW COAL POWER PLANTS ARE MORE EXPENSIVE

Even without EPA regulations, new coal-fired power plants are significantly more expensive over the life of the plant when compared with natural gas

Levelized cost of electricity in dollars per megawatt-hour

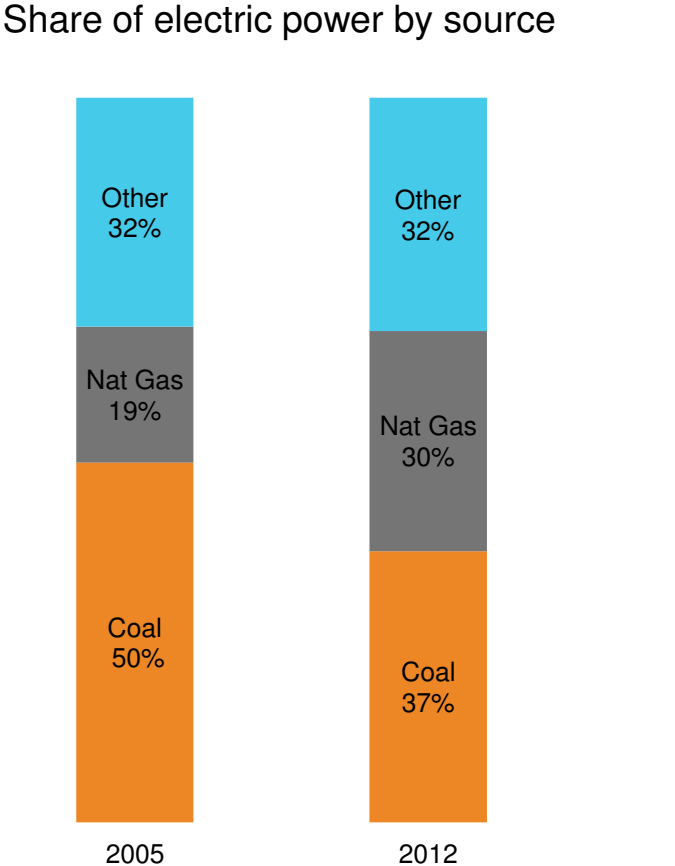
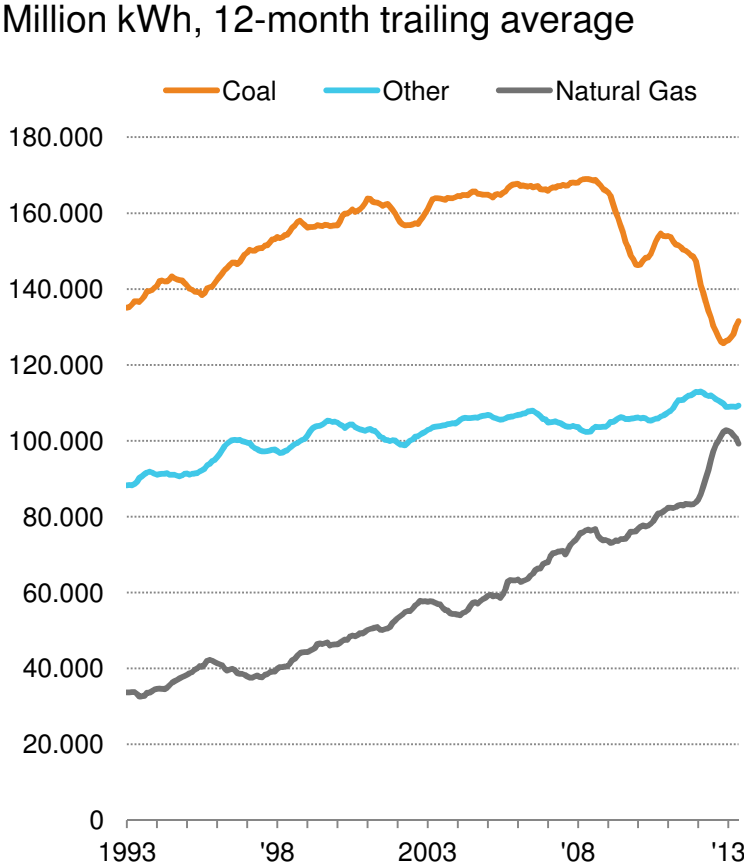


*O&M stands for operation and maintenance costs. Fixed O&M includes transmission investment costs in this example

Source: Bloomberg Government, Environmental Protection Agency

NATURAL GAS HAS BEEN DISPLACING COAL

Since 2005, coal use in the power sector has declined by 25 percent. During the same period, natural gas use has increased by 62 percent

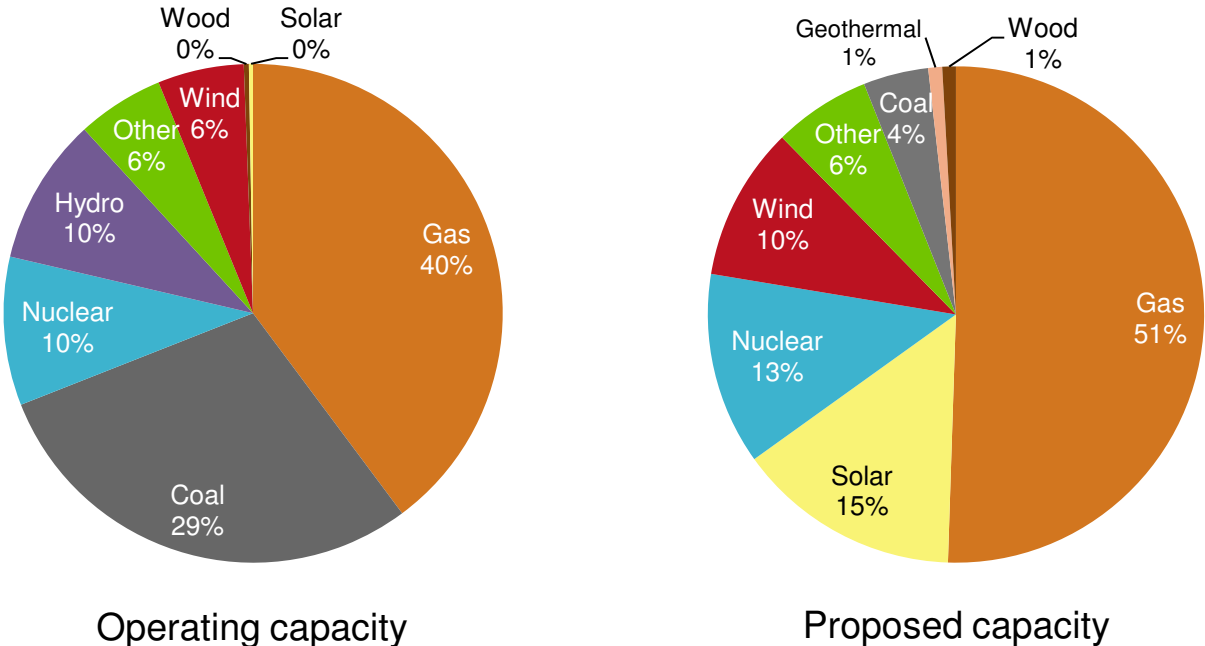


Source: Bloomberg Government, Energy Information Administration

GAS AND OTHER LOW CARBON TECHNOLOGIES DOMINATE PLANNED ELECTRIC CAPACITY ADDITIONS

About half of all proposed electric power plants would be fueled by natural gas. Solar, Nuclear, and Wind are the other dominant technologies.

Operating versus proposed electric capacity, 2012

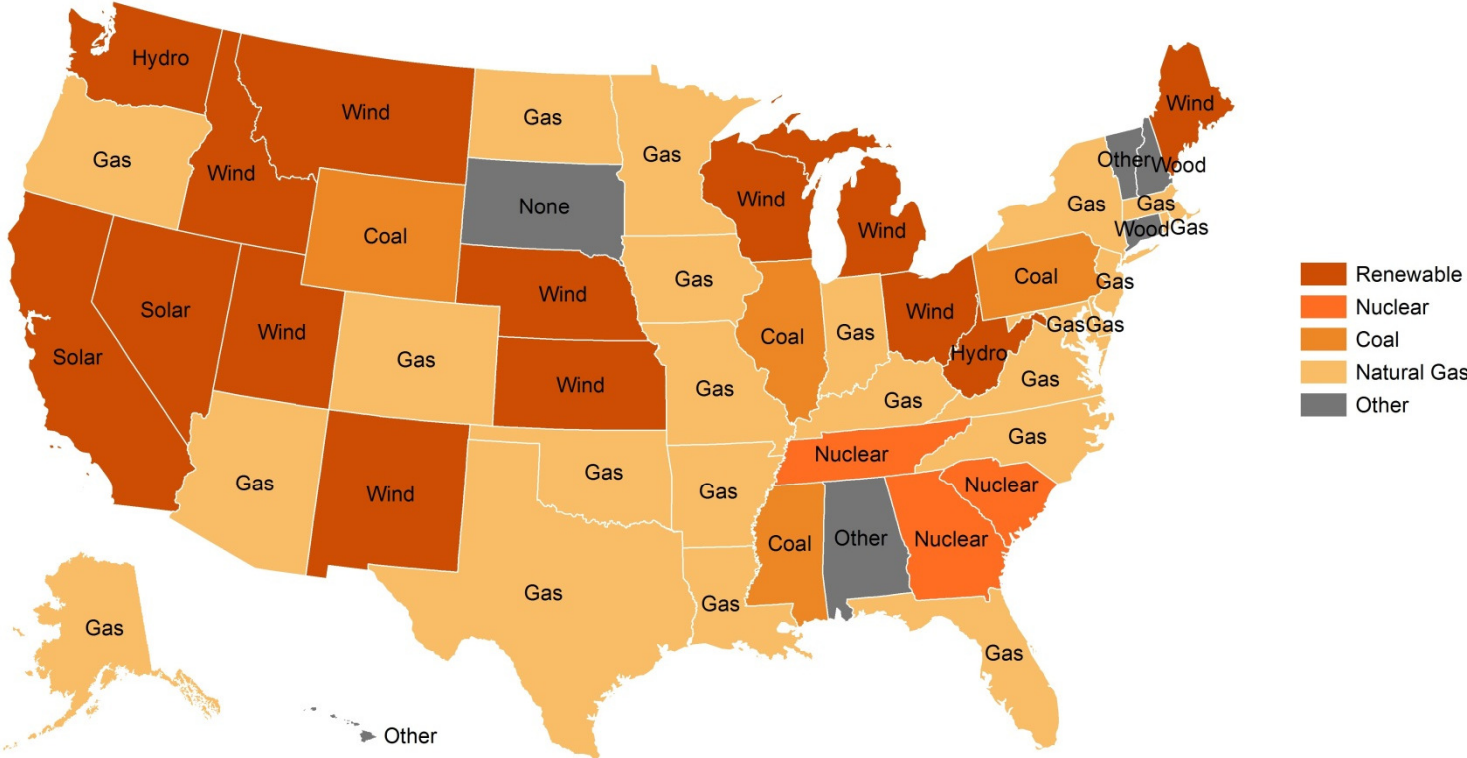


Source: Bloomberg Government, EIA
© 2013 Bloomberg Finance L.P.

GAS AND OTHER LOW CARBON TECHNOLOGIES DOMINATE PLANNED ELECTRIC CAPACITY ADDITIONS

A number of regions that were historically dominated by coal generation are shifting toward natural gas.

Dominant source of proposed electric capacity, 2012



Source: Bloomberg Government, EIA
 © 2013 Bloomberg Finance L.P.

ABOUT THE ANALYST



Rob Barnett, an energy analyst at Bloomberg Government, specializes in energy sector economics, environmental policy and strategy, and EPA regulations. Before joining Bloomberg, he was an associate director of Climate Change and Clean Energy at IHS Cambridge Energy Research Associates. At IHS CERA he led the environmental and energy analysis for various studies, including "Growth in the Canadian Oil Sands: Finding the New Balance," and "Crossing the Divide: The Future of Clean Energy." Before that, Barnett worked for Clemson's Power Quality and Industrial Applications Laboratory, where he modeled electric power systems to assess the impact of distributed generation.

Barnett holds a master's degree in economics from Boston University and undergraduate and master's degrees in electrical engineering from Clemson University.

rbarnett12@bloomberg.net

+1 202 416 3400

@barnettenergy

ABOUT BLOOMBERG GOVERNMENT

Bloomberg Government is a comprehensive web-based service that provides rich data, analytical tools, timely news and in-depth policy analysis, for those who need to understand the business impact of federal government actions. For more information, visit www.bgov.com or call +1 877 498 3587.

Follow us on Twitter: @BGOV

DISCLAIMER

Copyright 2013 Bloomberg Finance L.P. Not for redistribution except by an authorized BGOV user, and only as expressly permitted in the Bloomberg Government terms of service. All permitted uses shall cite BGOV as a source.