



Transforming our Nation's Transportation Sector

The Role of Natural Gas

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*Alternative Fuel Vehicles Forum
Pennsylvania Public Utility Commission
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Drive Natural Gas Initiative

Who We Are:

- Over fifty participating companies - distributors and producers of natural gas
- Representing the natural gas supply chain from production to delivery
- Working to support market growth for natural gas vehicles and the infrastructure to support them nationwide.

Natural gas: Clean, domestic, secure, affordable energy for transportation

Clean. NGVs produce 60 to 90 percent lower emissions of criteria pollutants.

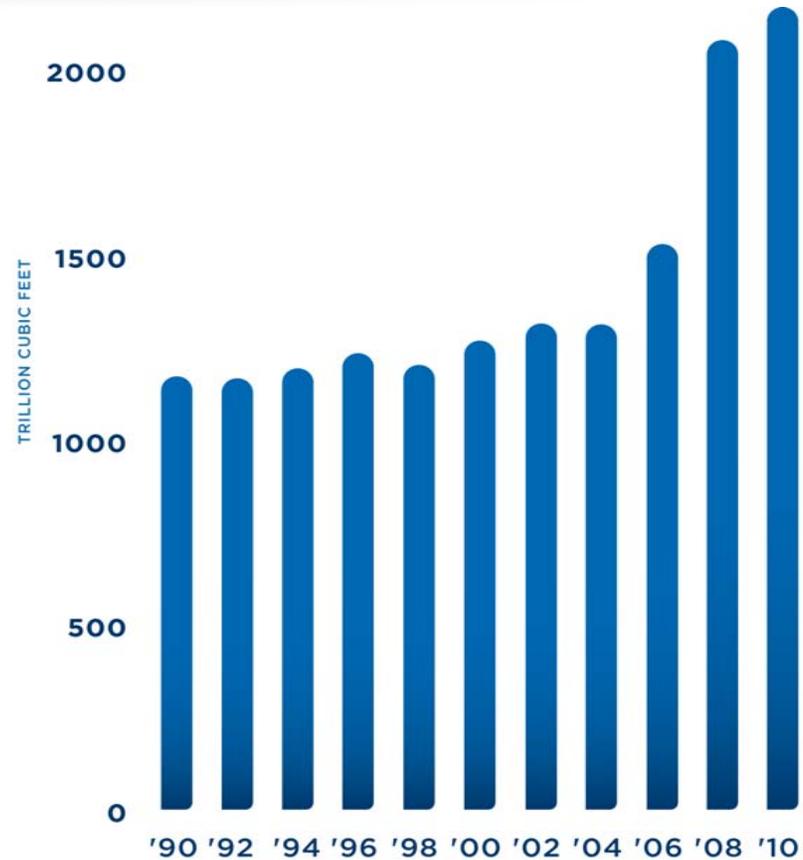
Affordable. Natural gas prices are projected to remain low and stable compared to gasoline and diesel, benefiting consumers and budgets for cities and school districts.

Job Creating. Supports local economies and can improve the national balance of trade.



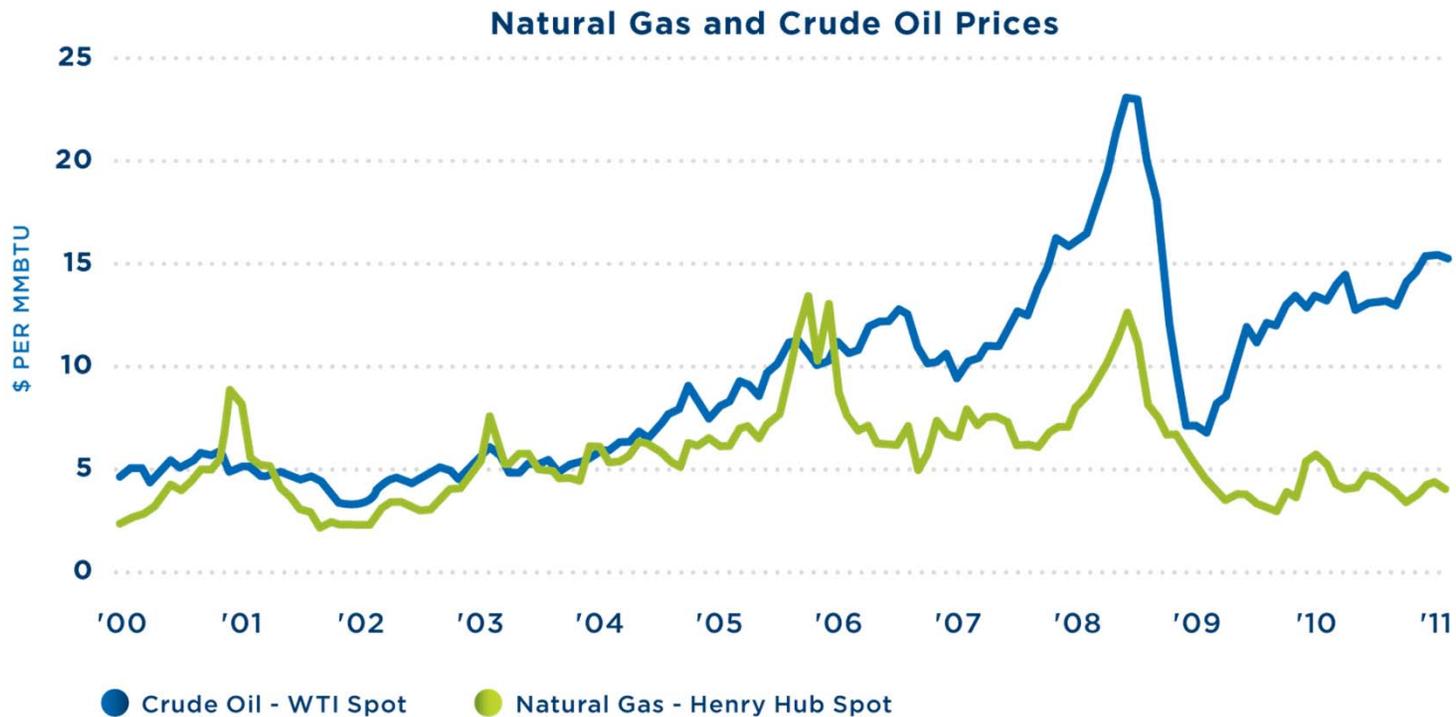
AND THEN There Was Abundance

According to the Energy Information Administration and the Potential Gas Committee, the U.S. has enough natural gas to meet America's diverse energy needs for 100 years.



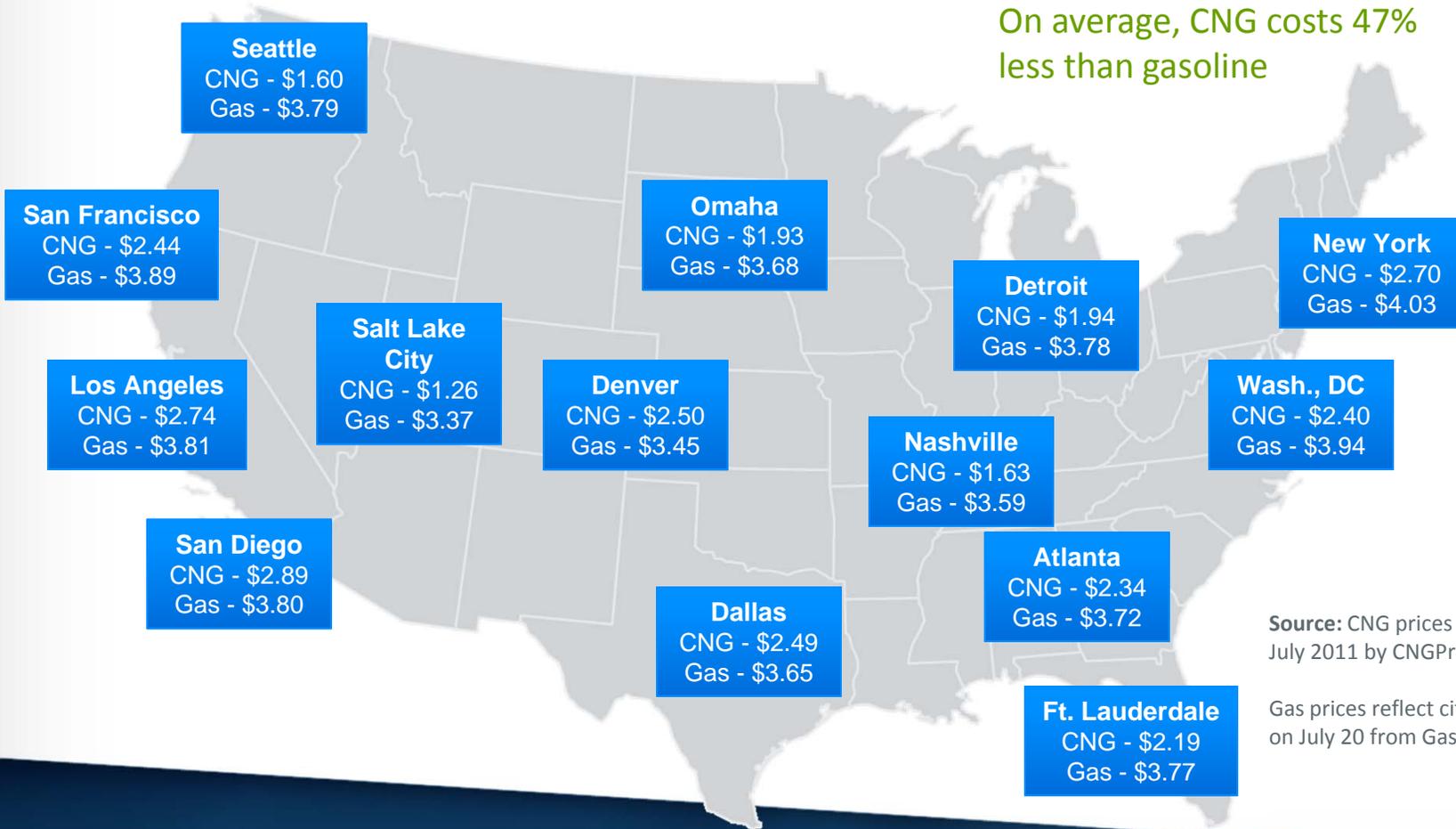
The oil market uncertainty we're seeing due to the turmoil in the Middle East has caused crude oil prices to soar, but natural gas prices are *relatively low and stable*.

The U.S. national average price of CNG is nearly 50 percent cheaper than gasoline or diesel fuel.



Natural gas vs conventional gasoline

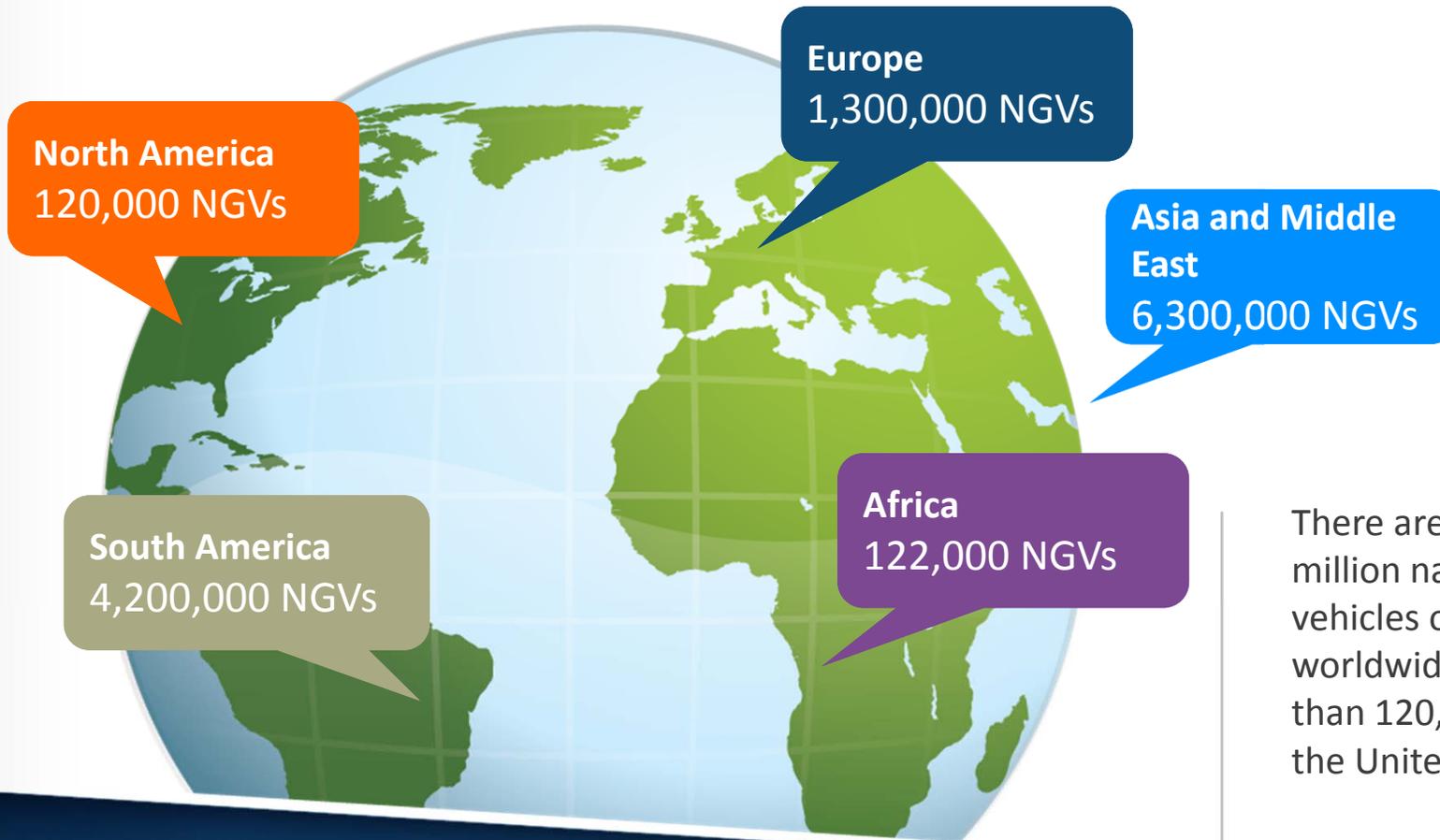
On average, CNG costs 47% less than gasoline



Source: CNG prices captured in July 2011 by CNGPrices.com

Gas prices reflect city average on July 20 from GasBuddy.com

Other nations are realizing the potential of natural gas vehicles and moving forward.



There are over 12 million natural gas vehicles on the road worldwide – but less than 120,000 are in the United States.

Realizing the Potential: Natural Gas as a Transportation Fuel

Identifying the Opportunities: Fuel Consumption by Transportation Market Segment

Total Transportation Energy Market Equivalent to 61.6 Bcf/day



Major vehicle manufacturers are bringing NGVs to the North American market.

Medium and Heavy Duty



Light Duty



Recent OEM Announcements:

Bi-Fuel Pickup Trucks Hit the U.S. Market



Chevrolet Silverado and GMC Sierra 2500 (bi fuel)

- 650 miles of combined natural gas and gasoline range
- GM previously ended NGV production in 2006 – but is now returning.

Chrysler Ram 2500 (bi-fuel)

- America's only factory-built, CNG-gasoline bi-fuel pickup truck
- OEM built means more than \$6,000 in savings over comparable vehicle conversions.



RAM photo at allpar.com:
2012 Ram 2500 with CNG / gasoline
capability

Leading the Way: NGVs in Fleets Across America

- Waste Management announced on May 11th it will convert its entire fleet – over 18,000 trucks – from diesel to CNG.
- UPS, AT&T, Comcast, Sysco, and Ryder have made significant commitments to NGVs in their national fleets.
- One-fifth of city transit buses run on natural gas today, and market share of is growing.
- More than 35 U.S. airports use NGVs in their fleets or encourage NGVs in private fleets operating on premises.



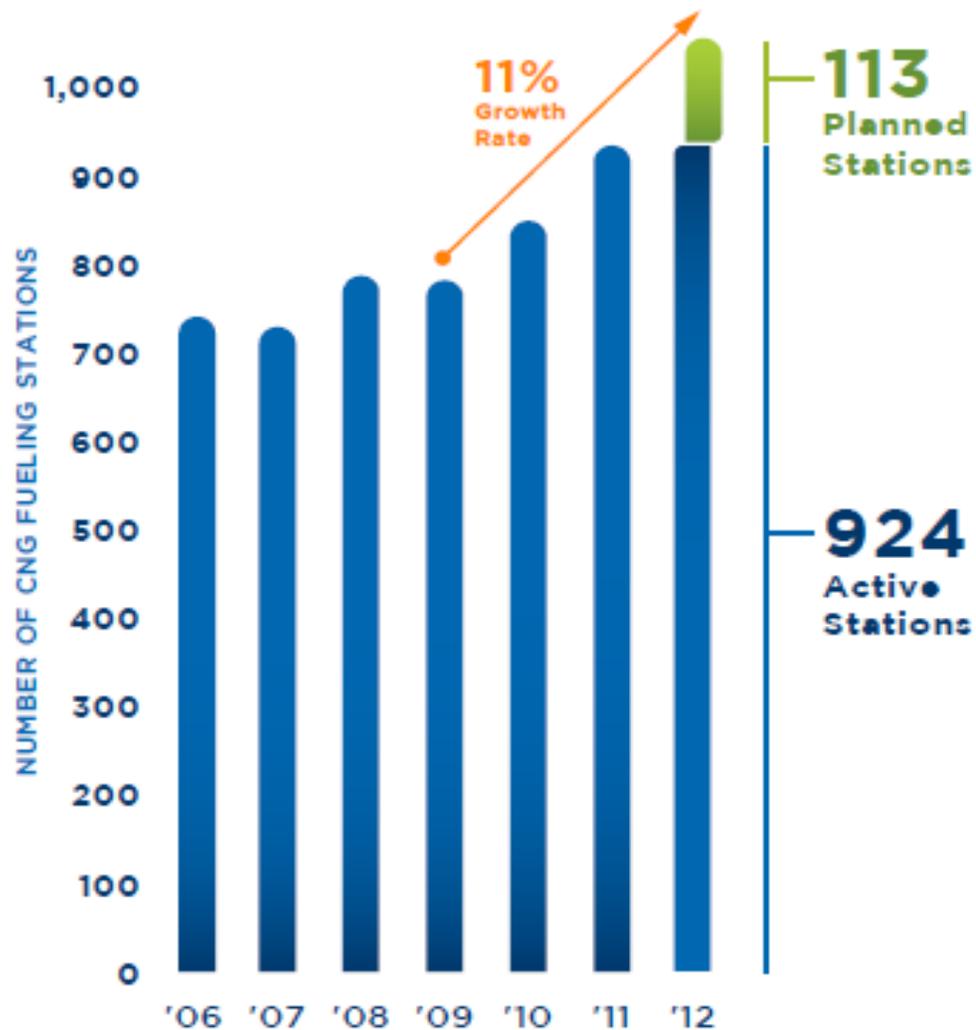
“The economics and payback of natural gas are so strong that it dwarfs any other technology.”

- Eric Woods
Vice President of Fleet and Logistics
Waste Management



Natural Gas Utilities will play an important role in building and supporting an national NGV fueling infrastructure.

- Many business models, and many market participants, will be needed to build out a national NGV refueling infrastructure.
- Innovative regulatory approaches are emerging in other jurisdictions:
 - *In Georgia, Atlanta Gas and Light received approval last fall to use their Universal Service Fund to assist investors in retail stations, and a pilot program for leasing home refueling appliances.*
 - *In California, Southern California Gas is seeking approval for provision of natural gas compression services to retail station operators.*



Our national CNG refueling infrastructure is growing each year. The period between 2009 to 2012 shows a growth rate of 11 percent annually.

Building a National Fueling Infrastructure: Progress along the Interstate Highway System

This partnership between Chesapeake, Clean Energy, and Flying J will build the backbone of a national L/CNG infrastructure .



State Governments Leading the Way:

- Led by CO, OK, PA and WY, states are joining together to use NGVs in state fleets
 - Aggregate vehicle purchase numbers for vehicle manufacturers to issue a joint RFP
 - Commit to converting state fleets (county, municipal, and other government)
 - ME, UT, NM, WV, KY, TX, OH, MS, LA have joined and others are in progress



Memorandum of Understanding

This Memorandum of Understanding (MOU) describes a coordinated effort between the undersigned States (States) to attract automobile manufacturers in the U.S. to develop a functional and affordable original equipment manufacturer (OEM) fleet natural gas vehicle (NGV) that will also meet public demand. The States recognize the benefits and unique attributes of clean burning natural gas and understand the significant opportunity compressed natural gas (CNG) presents to save State and taxpayer dollars by encouraging an energy future that utilizes domestic energy resources to fuel our nation's transportation needs. Through the joint solicitation of a Multi-State Request for Proposal (Joint-RFP) that aggregates annual State fleet vehicle procurements, the States will endeavor to provide a demand base sufficient to support the design, manufacture, and sale of functional and affordable OEM NGVs by automotive manufacturers in the United States.

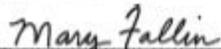
In anticipation of soliciting a Joint-RFP, the States will endeavor to coordinate with local agencies, municipalities, and companies to determine the number of NGVs each State can commit to purchase and the required specifications necessary to meet fleet needs. The Joint-RFP shall require that the ultimate cost of an OEM NGV should be comparably priced to an equivalent gasoline powered model and that warranty and reliability concerns are not compromised. Simultaneously, the States understand the need for continued development and expansion of CNG fueling infrastructure and should endeavor to encourage private investment, predicated on demonstrating an anticipated increase in State NGVs, to meet growing demand.

Pursuant to the terms of the Joint-RFP, to be executed at a later date, the States intend, where practical, to transition new fleet vehicle acquisitions, in committed volumes, to a resulting OEM NGV. Such future acquisitions should, when economically feasible, rely on traditional distribution channels that incorporate local businesses in procurement processes. In continued recognition of the benefits of CNG, the States should also endeavor to pursue fleet vehicle conversions to CNG, where economically compelling, based on a life-cycle cost analysis. The States will also reach out to fellow Governors to determine broader interest and participation in the principles and process outlined in this MOU.

This MOU embodies the principle understandings of the States but shall not create any legal relationship, rights, duties, or obligations binding or enforceable at law or in equity. Notwithstanding the foregoing, each State shall in good faith endeavor to reach a mutually agreeable and economically beneficial Joint-RFP, as contemplated herein. This MOU does not create additional state power, enhance existing state power, or interfere with federal authority or law. This MOU shall continue to demonstrate the States' understanding until execution of the Joint-RFP, or until otherwise discontinued by either State.

Set forth by:

State of Oklahoma


Mary Fallin, Governor

State of Colorado


John Hickenlooper, Governor



Transforming the transportation sector to meet our energy and environmental goals:

America's natural gas industry is committed to being a part of the solution.



Drive Natural Gas Initiative Participating Companies

Distributors – AGA Members

AGL Resources
Alagasco
Atmos
Avista
Cascade Natural Gas
CenterPoint Energy
Citizens Energy
DTE Energy
Integrlys
Intermountain Gas
Metropolitan Utilities District
MDU Resources Group:
Montana Dakota Utilities/Cascade Natural
Gas / Intermountain Gas /
Great Plains Company

National Fuel
National Grid
New Jersey Natural Gas
NiSource
ONEOK: Texas Gas Service
Piedmont Natural Gas
Questar Gas
Sempra: San Diego Gas &
Electric/Southern California Gas
Southwest Gas
TECO Energy
UGI
Vectren

Drive Natural Gas Initiative Participating Companies

Producers – ANGA Members

Anadarko Petroleum Corporation
Apache Corporation
BG Group
BHP Billiton
Bill Barrett Corporation
Cabot Oil & Gas Corporation
Chesapeake Energy Corporation
Cimarex
Devon Energy
El Paso
Encana Corporation
Energen
EQT
High Mount Exploration &
Production LLC
Laredo Petroleum

Linn Energy, LLC
Newfield Explorations Company
Noble Energy, Inc.
Petrohawk Energy Corporation
Pioneer Natural Resources
Plains Exploration & Production
Company
QEP Resources
Range Resources
Seneca Resources
SM Energy Company
Southwestern Energy Company
Talisman Energy Inc.
Ultra Petroleum Corp.
Williams Company
XTO Energy Inc.