Transforming our Nation’s Transportation Sector

The Role of Natural Gas

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Natural gas: A foundation fuel for our energy security
Our dependence on foreign oil has increased over the past decades.

Last year, the United States imported 1.5 billion barrels of oil from dangerous, unstable nations.
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.
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.

- **North America**: 120,000 NGVs
- **South America**: 4,200,000 NGVs
- **Europe**: 1,300,000 NGVs
- **Asia and Middle East**: 6,300,000 NGVs
- **Africa**: 122,000 NGVs

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

Strong Market Growth

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

Medium and Heavy Duty
- Peterbilt
- Freightliner
- Kenworth
- Volvo

Light Duty
- Honda
- GM
- Chrysler
- Ford
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.
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
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
**Natural gas:** Clean, domestic, secure, affordable energy for transportation

*Clean.* Greenhouse gas emissions 29% lower than comparable gasoline light-duty vehicles.

*Secure.* Domestic gas production accounts for 89% of natural gas consumed in the United States.

*Affordable.* Natural gas prices are decoupled from petroleum, with abundant resources to support stable prices for years to come.
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.