

# GOVERNOR TOMBLIN'S ENERGY SUMMIT 2014



# ANTERO HIGHLIGHTS

- *Antero entered the WV O&G field in 2008*
- *Largest Producer of natural gas in WV*
- *Most active driller in WV*
- *Antero exceeds 1 bcf of natural gas production a day*
- *Governor's Natural Gas Vehicle Task Force*

# CNG HISTORY

- *January 2012: Antero began partnering with affiliates to build a CNG station*
- *August 2012: Antero converted it's first truck to CNG*
- *September 2013: First CNG station opens in Bridgeport, WV*
- *September 2013: Antero begins converting its entire fleet*
- *Governor's Natural Gas Vehicle Task Force*

# CNG FLEET USAGE

- *How many vehicles does Antero have running CNG?*
  - *40 CNG powered trucks*
  - *All light duty ½ and ¾ ton trucks*
- *What are our future goals?*
  - *1yr: Antero has 30 trucks ready for immediate conversion*
  - *3yr: All vehicles purchased will be converted*
  - *5yr: Antero's entire fleet will be powered by CNG*

# THE CONVERSION PROCESS

- *Antero partnered with a local provider:*
  - *Jeff's Performance WV*
- *Cost of Conversion*
  - *\$10,000-\$12,000 per vehicle once EPA kit is available*
- *Time needed for conversion*
  - *Chevrolet 1500: ~1 week*
  - *Ford F-150: ~3 days*

# VEHICLE PERFORMANCE

- *CNG performance is comparable*
  - *Fuel mileage is comparable (gasoline 15.3mpg, CNG 15.0mpgge)*
  - *Consider the different fuel types (liquid and gas)*
  - *Consider the engine/drivetrain design (to run gasoline)*
  - *No significant loss of power or functionality using CNG*
- *Vehicle maintenance*
  - *All routine auto manufacturer maintenance applies*
  - *Plus CNG filter maintenance during engine oil changes*
  - *Plus CNG annual system check*

# CNG CONVERSION ECONOMICS

- *Conversion cost:* (\$12,000)
- *WV State Tax Credit:* \$7,500  
(\$4,500)
- *Average total fuel savings:* \$10,334
- *Realized Saving per vehicle converted:* **\$5,834**

*Assuming current WV regular gasoline price of \$3.89/gallon and current WV CNG price of \$2.34/GGE  
Assuming vehicle is converted at purchase and CNG usage is equivalent to 100,000 miles  
Assuming an average 15mpg vehicle usage for duration of 100,000 miles*

# CNG CONVERSION ECONOMICS

- *Payback*
  - *Year 1: ~30,000 miles*
    - $(\$4,500) + \$3,100 = (\$1,400)$
  - *Year 2: ~30,000 miles*
    - $(\$1,400) + \$3,100 = \$1,700$
  - *Year 3: ~30,000 miles*
    - $\$1,700 + 3,100 = \$4,800$
  - *Year 4: ~10,000 miles*
    - $\$4,800 + \$1034 = \underline{\underline{\$5,834}}$
  - *Vehicles replacement @ ~100,000 miles*



# ADDITIONAL CONSIDERATIONS

- *Natural Gas is locally produced compared to foreign oil*
- *Natural Gas is cleaner burning (95% fewer carbon monoxide released compared to diesel emissions)*
- *Natural gas is less expensive (\$2.34 GGE in WV, \$1.99 GGE in PA)*
- *CNG is a safer fuel (stronger fuel tanks, natural gas disperses in air)*
- *Tax credits are available*

# CLOSING REMARKS

- *Antero is committed to CNG powered:*
  - *Vehicles*
  - *Drilling Rigs*
  - *Hydraulic Fracturing Equipment*
- *Antero is committed to the efficient, economic use of natural gas.*

# THANK YOU!

