



# NATURAL GAS: A WORKHORSE IN WAITING FOR PENNSYLVANIA

*Heating your home, cooking your dinner, getting you to work—natural gas can do it all. And should.*

Natural gas is the cleanest and most versatile fossil fuel in existence today. It's an energy resource that is essentially mercury-free, has very little sulfur dioxide (SO<sub>x</sub>), and has lower emissions of nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) than coal and oil. It's also among the most reliable and affordable energy sources available today, thanks in large part to the huge influx of new natural gas supply that responsible development of the Marcellus has made possible.

Here in Pennsylvania, natural gas continues to be deployed across all four sectors of our economy – residential, commercial, industrial and transportation. As it relates to this final sector, Pennsylvania ranks in the top 10 nationally in the use of natural gas to power our vehicles, and over the past 10 years, natural gas has increasingly been used as a source of clean electricity for residents of the Commonwealth.

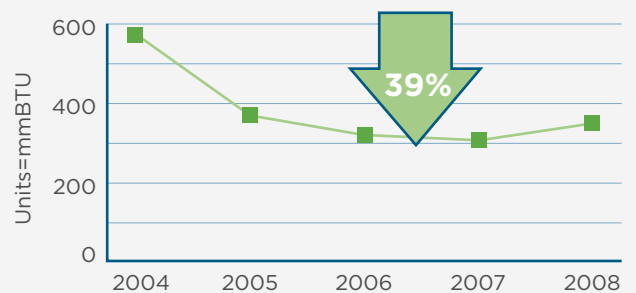
But natural gas could be used to accomplish so much more. Pennsylvania may be among the top 10 in natural gas vehicles nationwide, but our neighbors in New York State use 10 times the amount of natural gas for transportation that we do. California uses 36 times more. European Union nations have well over 1.3 million natural gas vehicles. And when it comes to leveraging the advantages of natural gas for the generation of electricity, Pennsylvania finds itself far behind its neighbors once again.

It's time to put natural gas to work for and on behalf of the Commonwealth.

Use of Natural Gas for Transportation (2008, Million Cubic Feet, mmBTU)

1. California	12,623
2. New York	3,160
3. Arizona	2,304
4. Texas	2,141
5. Georgia	1,185
6. Maryland	1,047
7. Massachusetts	803
8. Washington	578
9. Nevada	466
<b>10. Pennsylvania</b>	<b>354</b>

Despite Top 10 Status, Use of Natural Gas for Vehicles in PA Down Since 2004



Energy Information Administration, 2008 (latest available)

## By the Numbers: Natural Gas Vehicles and the Environment

- 70%:** Reduction in carbon monoxide emissions relative to gas-powered cars
- 87%:** Reduction in the emission of nitrogen oxides (NOx) compared to gas-powered cars
- 22%:** Reduction in carbon dioxide emitted from tailpipe, relative to diesel
- 29%:** Reduction in carbon dioxide emitted from tailpipe, relative to gasoline

## Quick Facts: Natural Gas Vehicles and Your Wallet

- On average, natural gas costs one-third less at the pump than conventional gasoline.
- Those who convert their vehicles to run on natural gas are eligible for a federal income tax credit that covers the full cost of the retrofitting and converting the vehicle
- Homeowners who already rely on natural gas for heating and cooking purposes may be able to tap into that supply to fill their vehicle overnight.

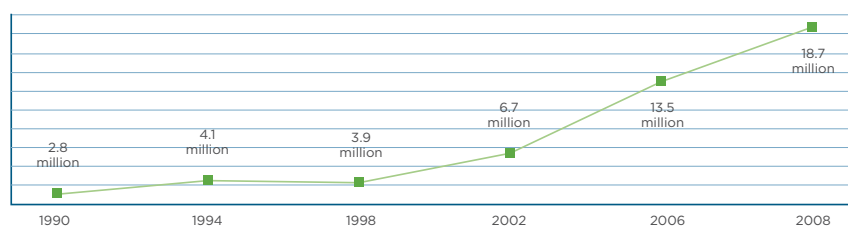
EIA 2008; *Natural Gas Vehicles for America, 2010*

## Natural Gas for Electricity

According to EIA, our nation will need to bring an additional 420 gigawatts of electric generating capacity online by 2030 to meet America's growing need for power.

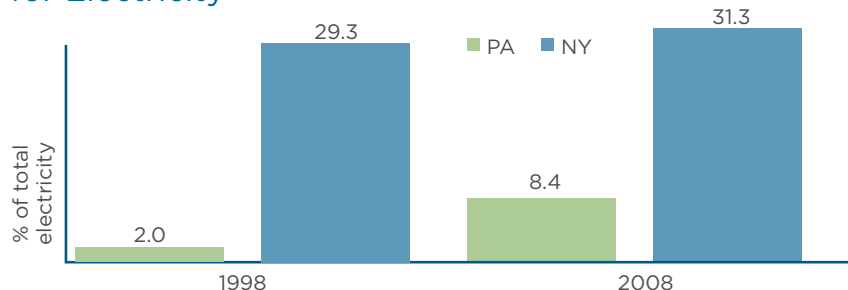
That will require 840 new power plants to be built over that span — just to keep pace with minimum demand. EIA predicts the use of natural gas to generate that electricity will increase 40 percent in the next 20 years.

## It's Electric: Natural Gas Sees Eight-Fold Expansion in PA Power Sector Since 1990 (megawatthours)



EIA 2008

## ...But NY Still Far Ahead of PA in Use of Natural Gas for Electricity



## PA Compressed Natural Gas (CNG) Success Stories

Area Transportation Authority of North Central OA (ATA): Operates 16 CNG buses

Berks Area Reading Transportation Authority (BARTA): Operates 11 CNG buses

Centre Area Transportation Authority (CATA): Operates 50 buses that almost all run on CNG

Erie Metropolitan Transportation Authority (EMTA): Operates 12 CNG buses

Indiana County Transit Authority (IndiGO): Operates five CNG buses

Lower Merion School District: Operates over 60 CNG buses

Port Authority of Allegheny County (PAT): Operates five CNG buses

Rabbittransit (York County): Operates 2 CNG transit buses, with plans to add more