

Southeast Regional Alternative Fuels Market Initiatives Program

**Georgia Environmental Conference
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Municipal Gas Authority of Georgia*



Agenda



- Brief Background on Municipal Gas Authority of Georgia
- Natural Gas as a Transportation Fuel: Why Now?
- Challenge to Wholesale Adoption
- Fleets: *Leading the Way*
- NGV Market Development



Gas Authority Background



- Largest non-profit, joint-action gas agency in the nation
- Established in 1987 by Georgia law
- Primary purpose is to provide adequate, dependable and economical supplies of natural gas to municipal distribution systems

Our Mission:

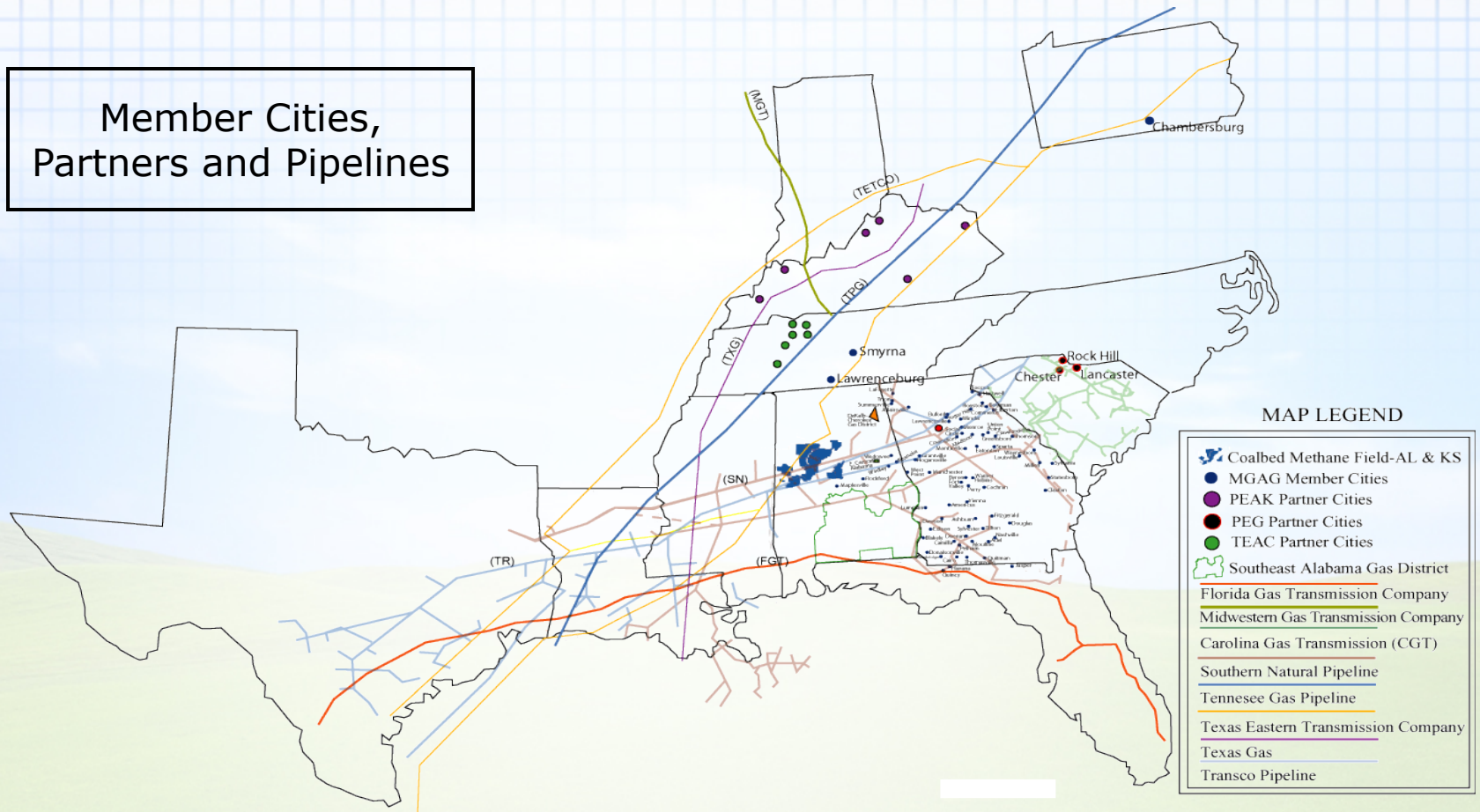
To provide municipalities a reliable, economical supply of natural gas and to assist them in developing and growing their gas systems to optimize the benefits of public ownership.



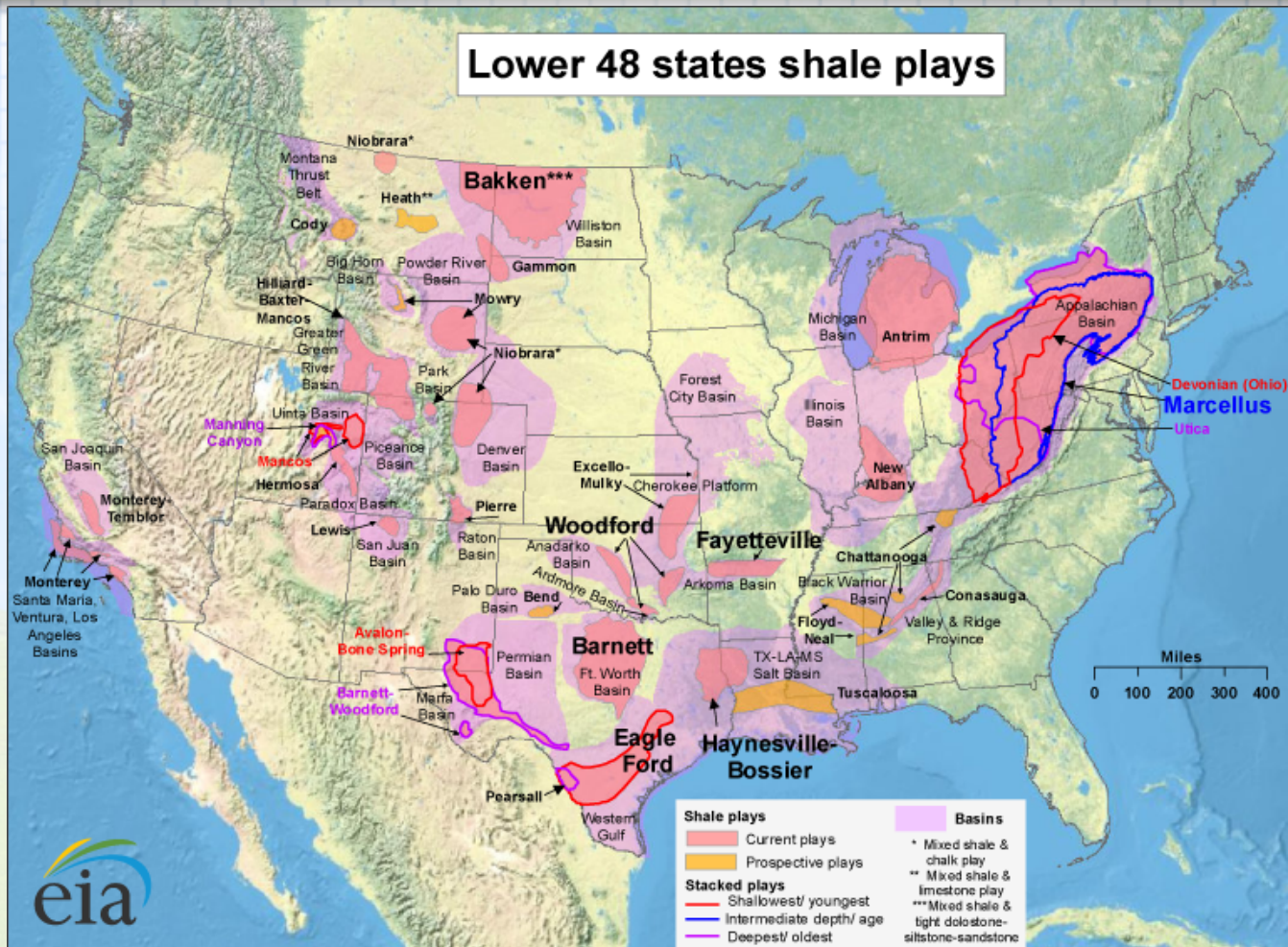
Gas Authority Background



Member Cities, Partners and Pipelines



Transportation Fuel: Why now?



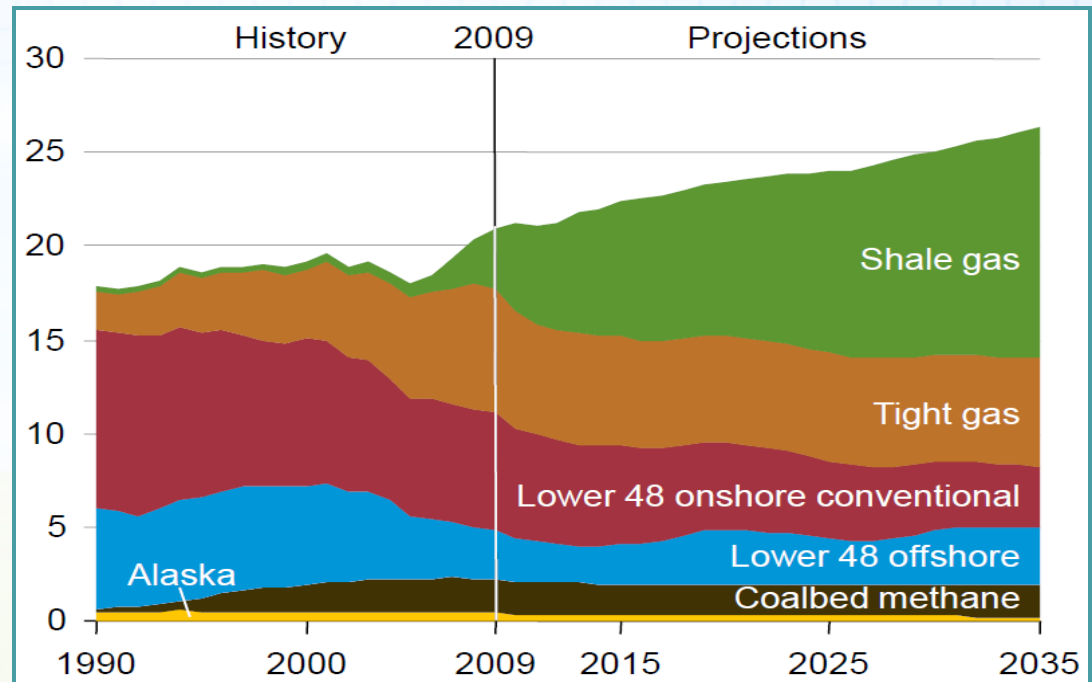
Source: Energy Information Administration based on data from various published studies.
Updated: May 9, 2011

Transportation Fuel: Why now?



Drilling Technology Leading to a Robust Supply Picture

- Seismic technology
- Horizontal drilling
- Fracturing technology
- Ultra-deep water



SOURCE: EIA Annual Energy Outlook



Transportation Fuel: Why now?



CNG Protects Against Commodity Price Volatility for Retail Fuel

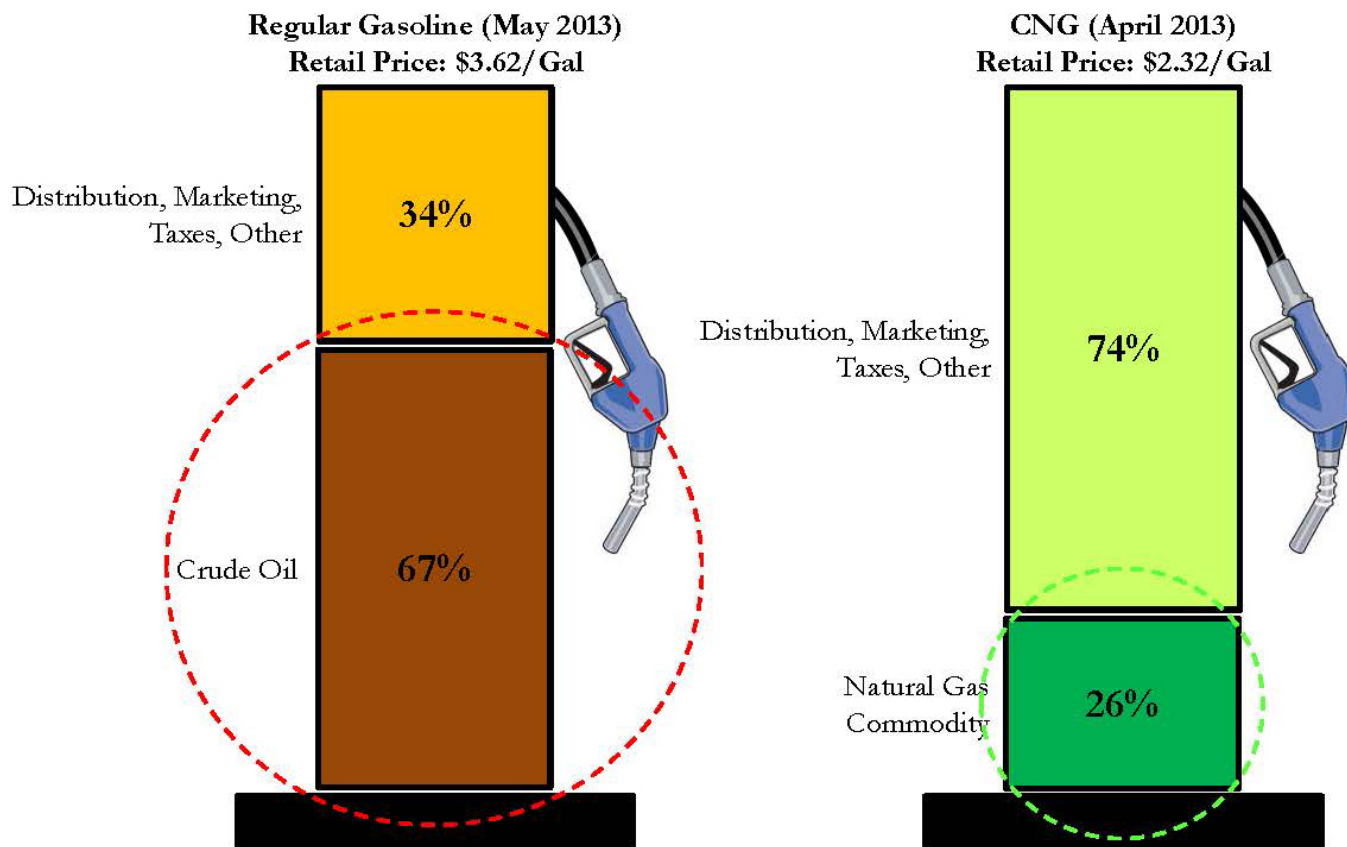


Illustration Source: VNG.co



Transportation Fuel: Why now?



Operating cost advantages, Lower emissions, & Energy Independence

Prompting both public and private sectors to enter the market

Dillon Trucking Company – Sample ROI Calculation

$$\frac{10 \text{ Trucks} \times 200,000 \text{ MPY}}{5 \text{ MPG}} = 400,000 \text{ DGE/YR}$$

$$400,000 \text{ DGE/YR} \times \$1.50 \text{ fuel savings} = \text{\$600,000 savings fuel costs per year}$$

$$\text{Incremental cost of NGV truck } \$50,000 \times 10 \text{ vehicles} = \$500,000$$

Project Payback Period – 10 months



Challenge to Wholesale Adoption



NGV Market at a “Tipping Point”

Weak infrastructure is a major obstacle to development of the NGV market – despite the considerable cost advantages

***Lack of NG
stations –
65%***

***Lack of tax
incentives –
24%***

***Complicated
fuel tax –
22%***

***High relative
cost of NG
vehicles – 8%***

Recent national survey – most important factors for NGV market development

Source: FC Business Intelligence



Fleets: *Leading the Way*



Public Sector: The Municipal Natural Gas System *In a position to accelerate NGV market development*

- Fleet Operators – Municipal fuel savings over gasoline and diesel
- Natural gas providers – Increased revenues and margins for the natural gas business enterprise
- Access to low cost capital –
Participate in NGV station design, planning, & construction
- Community & business relationships –
Promote the utilization of NGV fueling among private and public fleet operators



Thomasville Time-Fill Station



Fleets: *Leading the Way*



Private Sector Fleets

In a position to accelerate NGV market development

➤ Frito Lay

- ✓ Seven public CNG stations across the U.S., 2013
- ✓ 200 (+) CNG tractors, 20% (FL) fleet
- ✓ One of the largest CNG fleets in U.S.
- ✓ YR One: 2 million gallons/year, YR Five: over 8 million gallons/year
- ✓ Trillium CNG and Questar Fueling to construct the stations



KEY DRIVERS:

- *Fuel Savings*
- *Greenhouse gas emissions profile*
- *Reduce the use of foreign oil*



Fleets: *Leading the Way*



Private Sector Fleets

In a position to accelerate NGV market development

➤ Waste Management

- ✓ 50 natural gas fueling stations, as of July, 2013
 - 18 public access stations
- ✓ Average annual reduction 8,000 gallons diesel / per diesel truck
- ✓ Average annual reduction 22 metric tons GHG emissions / per diesel truck
- ✓ Waste Management owns the stations, purchases the fuel, funds their construction
- ✓ 2200 (+) AFVs – over 2,000 NGV trucks



KEY DRIVERS:

- *Fuel efficiency / savings – 15% by 2020*
- *Sustainability goals / reduced emissions – 15% by 2020*
- *Reduced dependence on single fuel source*



NGV Market Development



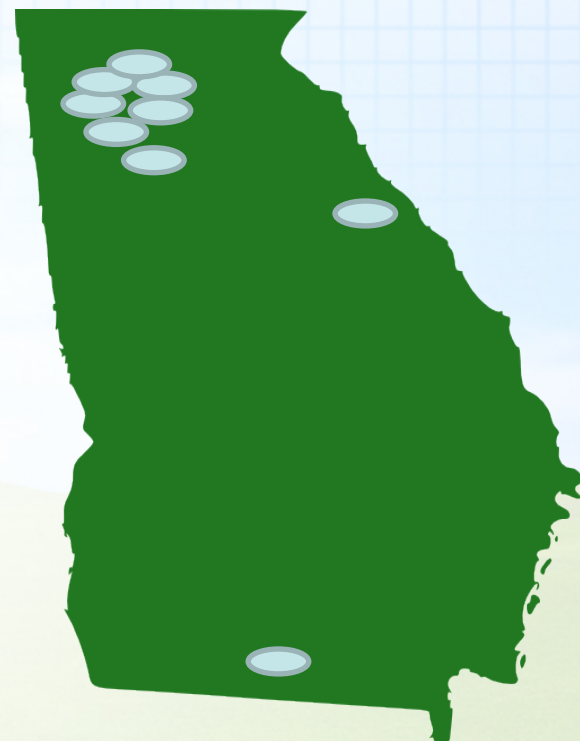
NGV Public Access Stations in Georgia

CNG Station Investment – Accelerated by Fleet GGE Demand

Operational CNG Stations

- City of Atlanta (3) – American Fueling Systems, PS Energy* (2)
- City of College Park (1) – Clean Energy
- City of Ellenwood (1) – Dekalb County
- City of Lithonia (1) – PS Energy
- City of Tucker (1) – PS Energy
- City of Augusta (1) – City of Augusta
- City of Valdosta (1) – Langdale Fuels (opened, July, 2013)

*PS Energy Stations operated by Clean Energy

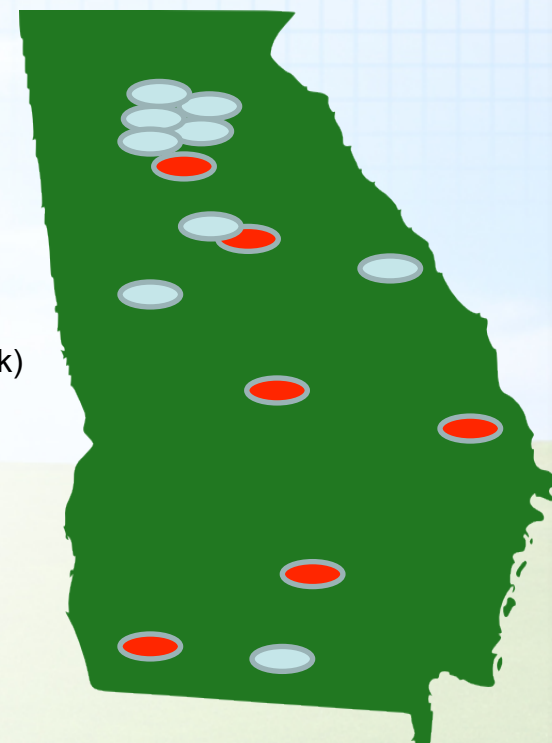
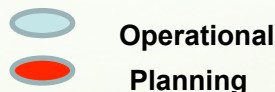


NGV Public Access Stations in Georgia

CNG Station Investment – Accelerated by Fleet GGE Demand

Planning / Construction Phase (Open 2013-14)

- City of Covington (I-20) – Under construction, open 2014 (Covington)
- City of Perry (I-75) – Open October, 2013 (Trillium CNG)
- City of Thomasville – Under construction, open 2014 (ZEIT Energy)
- City of Tifton – Planning, open 2014 (Trillium CNG)
- City Savannah – Under construction, open 2014 (Colonial Group, Enmark)
- City of Atlanta – Under construction, open 2013 (Premier Trans.)



NGV Market Development



Natural Gas Utility Investment in NGV Market Development

AGL CNG Infrastructure Program

- To invest \$11.57 million from Universal Service Fund (USF)
 - AGL will not be the CNG Retailer
 - AGL will install, own and maintain the CNG compressors, storage, controls, etc. ("CNG Equipment")
 - CNG Retailer/Applicant to lease land for CNG Equipment
 - CNG Retailer to install, own, and maintain the dispensers, card readers, etc. and make any site improvements
 - Requires fleet commitment to use 20% of station capacity
 - Includes Home Refueling Appliance (HRA) lease option
- 1) Fleet Operator – Contract to Utilize minimum 20% station capacity, minimum 30,000 GGEs / YR for 5 years
 - 2) CNG Retailer – Perform retail function for a minimum of 5 years, accept all major credit cards, purchase gas from certified AGL marketer
 - 3) Property Owner – Commit to lease space for a minimum term of 5 years, accessible to public 24/7

MGAG Fueling Program

- Invest \$5 million in NGV infrastructure from Authority reserves
 - Joint Public / Private Venture
- Strategic locations along major corridors in Georgia



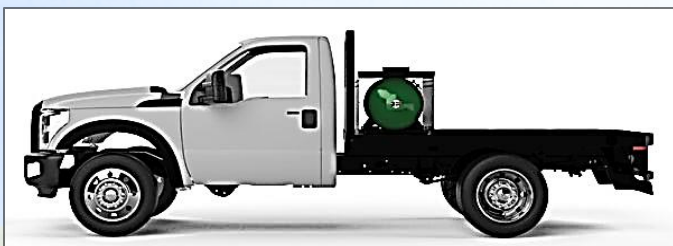
NGV Market Development



Westport Wing – Largest Ford QVM (Qualified Vehicle Modifier)



- Westport Wing – CNG Power Systems for Light-Duty Trucks
- Ford F-250 / F-350 Super Duty Trucks
- Bi-Fuel Chassis Cabs / F-350 / F-450 / F-550 Trucks
- Ford's largest partner – QVM Program, 8 commercial CNG vehicles, 150 Ford Dealerships



- Ford F-150 Pickups – Deliveries First QTR/2014



NGV Market Development



Transitioning to CNG Light Duty Vehicles – Broader Market Appeal

The CARLAB and Landi Renzo

- Lower cost & payback
- Appealing vehicles
- No compromise – driving patterns
- CNG Capacity: 3 GGE – 8 GGE



NGV Market Development



Federal and State Legislative Update

Federal

- American Taxpayer Relief Act of 2012 (Extended through 2013)
- Refueling Equipment Tax Credit – 30%, up to \$30,000
- Credit per GGE sold - \$0.50; seller of the fuel
- Senator James Inhofe (R-OK) – S. 1355; Incentivize manufacturers to produce NGVs by restructuring Corporate Average Fuel Economy (CAFÉ) standards

State

- HB 348 (Rep. Don Parsons) – Tax Credits for Alternative Fuel Vehicles
- Re-introduce during the 2014 General Assembly Session

Note:

State of Florida recently passed a bill offering a 50% tax credit on NGVs up to \$25,000 per vehicle funded at \$6 million/year for 5 years, and a five year exemption from the state motor fuel tax.



Resources



- www.cngnow.com
- www.ngvc.org
- http://www.afdc.energy.gov/vehicles/natural_gas.html
- rdill@gasauthority.com | PH: (678) 819-0914

