



**2011 APTA Bus and Paratransit Conference  
Alternative Fuels Technology  
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# About NGVi

- ❖ Established in 1989
- ❖ North America's leading provider of NGV and fuel station education, training and technical assistance.
- ❖ Conducts both public and in house training for fleets operating NGV's.
- ❖ Trained nearly 15,000 students in the U.S. and more than 500 internationally.



# CNG Market Update Presentation Overview

- ❖ Legislative Activity
  - 2011 Natural Gas Act
  - NGV's Take the Hill
  - Energy and Power Subcommittee
- ❖ Supply Side Scramble
  - New discoveries of major reserves
  - Infrastructure Development
  - Role of LNG
- ❖ Vehicle/Engine Availability
- ❖ New Natural Gas Projects
  - Transit
  - Trucking



# CNG Market Update

## Legislative Activity

### ❖ 2011 Natural Gas Act HR-1380

- Introduced in the House on 4/6/11
- Proposed 5 year duration to jump start market
- Over 180 co-sponsors to the Bill
- Unprecedented bi-partisan support
- Includes expanded tax credits
  - ✓ Seller Excise Tax credit
  - ✓ Infrastructure
  - ✓ Vehicle purchases



# Nat Gas Act – HR 1380

## Tax Credits

### ❖ Seller Excise Tax Credit

- Currently in effect and will expire 12/31/2011
  - ✓ CNG - \$0.50 per GGE
  - ✓ LNG - \$0.50 per liquid gallon (\$0.85 DGE)

### ❖ Infrastructure

- Currently in effect and will expire 12/31/2011
  - ✓ 30% of Fuel Station cost up to \$30K
- 2011 Nat Gas Act
  - ✓ 50% of Fuel Station cost up to \$100K



# Nat Gas Act – HR 1380

## Tax Credits

### ❖ Vehicle Purchases

#### ➤ Light Duty

- ✓ 80% of cost differential up to a max. of \$7.5K

#### ➤ Heavy Duty

- ✓ 80% of cost differential up to a max of \$65K

### ❖ Vehicle OEMs

- Additional tax incentives for NGV producers



# Legislative Activity

## ❖ NGV's Take the Hill

- Organized by NGV's for America (NGVA)
- April 13, 2011
- CNG vehicles (14) viewed by both Senators and Representatives

## ❖ Energy and Power Subcommittee

- On May 5, 2011, R. Kolodziej, President of NGVA testified on natural gas



# Supply Side Scramble

- ❖ New discoveries of major gas reserves
    - Increasing domestic supply = lower prices
      - ✓ Natural Gas price decouples from oil
      - ✓ DOE forecasts price stability going forward
- Price currently approx. 50% of diesel
- New fuel suppliers enter the market
    - ✓ Encana
    - ✓ Chesapeake Energy
    - ✓ AGL Resources





# Supply Side Scramble

## ❖ Infrastructure Development

- New private stations with public access
  - ✓ Required for Federally funded projects
  - ✓ Waste Management
  - ✓ UPS
- Interstate Corridors
  - ✓ Clean Energy & Flying “J”
  - ✓ I-15 Salt Lake to San Diego
  - ✓ I-75 Atlanta to Tampa
  - ✓ I-10 New Orleans to Jacksonville



# Supply Side Scramble

## ❖ Role of Liquefied Natural Gas

- Port drayage to distribution centers
- Long haul goods transportation
- Infrastructure - Corridors
  - ✓ Limited pipeline access
  - ✓ Heavy truck traffic
- Availability of peak shaved product
- Imports from more stable nations
- Fuel quality is controllable



# Vehicle/Engine Availability

## ❖ Big 3 Auto Manufacturers

### ➤ Ford

- ✓ E Series vans
- ✓ F Series pick-ups

### ➤ General Motors

- ✓ Chevy Express
- ✓ GMC Savana

### ➤ Chrysler

- ✓ Will sell NGV's in the U. S. (2017)



# Vehicle/Engine Availability

## ❖ Transit

- Market size approx. 5,000 units per year
- Gillig offers CNG
- VPG offers CNG model MV-1

## ❖ Refuse

- Market size approx. 15,000 units per year
- All chassis manufacturers
- Most body builders



# Vehicle/Engine Availability

## ❖ Over the Road Trucks

- Market size approx. 250K units per year
- All chassis manufacturers
- Many LNG models available
- Navistar now offers CNG

**Prices will be driven down due to competition and economies of scale.**



# Vehicle/Engine Availability

## ❖ Heavy duty engines

### ➤ Cummins

- ✓ Mature & reliable ISLG 8.9L
- ✓ Performance test of new 11.9L
- ✓ Potential for new “B” type 5.9L

### ➤ Emissions Solutions (ESI)

- ✓ EPA certification for 7.6L Phoenix
- ✓ Based on the International DT-466
- ✓ In production at Navistar



# Vehicle/Engine Availability

## ❖ Westport Innovations

- Model GX – 15L dual fuel HPDI diesel pilot

## ❖ Doosan

- Model GK12-11L Repower only (SCR & DPF)

## ❖ Clean Air Power

- Testing in Navistar Class 8 truck

For more information on engine availability  
visit NGVAmerica @ [www.ngvc.org](http://www.ngvc.org)



# New Natural Gas Projects

## ❖ Transit

- Conversion complete
  - ✓ LAMTA retires last diesel vehicle
- Retiring LNG Nova Buses
  - ✓ Dallas orders 450+ CNG
- Taking a break from hybrids
  - ✓ NYC
  - ✓ WMATA
- Phoenix bid more LNG





# New Natural Gas Projects

## ❖ Trucking

### ➤ Ryder Truck Leasing

- ✓ Offers NG at 3 leasing centers in California
- ✓ Freightliner M2 with ISLG – 182 units
- ✓ Peterbilt 386 Westport Innovations LNG – 20 units

### ➤ UPS

- ✓ Kenworth – Westport Innovations LNG – 48 units



**Thank you for your attention**

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