



***Clean Energy***<sup>®</sup>

*North America's leader in clean transportation*

**Greg Martin, Business Development Manager  
Solid Waste, Mid-Atlantic Region**

**Howard Harris, Business Development Manager  
Transit, Mid-Atlantic Region**

- **Largest provider of vehicular natural gas (CNG & LNG) in North America**
  - Over 75 million gallons sold in 2008
- **Comprehensive Services**
  - Design, build & operate CNG/LNG fueling stations
  - LNG production & delivery for HDVs
  - Grant writing services
  - Vehicle and Station Financing
- **Background**
  - Founded in 1997 as Pickens Fuel Corp
    - Became Clean Energy in 2002
  - Based in Seal Beach, California
  - Publicly-Traded as **CLNE** on NASDAQ
- **Industry Leader**
  - 180+ CNG/LNG fueling stations across N. America
  - Fuel over 16,000 customer vehicles daily
  - Serve over 320 fleets daily



# Natural Gas for Transportation



*Cleaner*



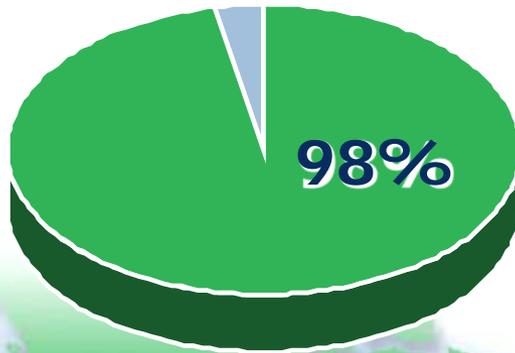
*Cheaper*



*Domestically  
Available*

# Large, Secure, Domestically Available Supply of NG

## Natural Gas



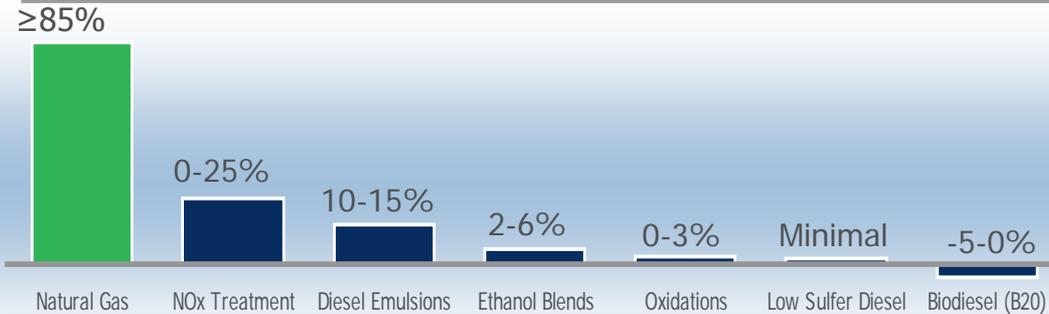
- Supplied From US and Canada
- Imported

- 80+ Years of Domestic Reserves (30-40 Years Longer Than Oil)\*
- World NG Reserves Estimated at 3x that of Oil
- Reduces Dependence on Foreign Oil
- 4% of Existing Supply will fuel 11 Million autos
- 20% of today's use is for Power Generation
  - Could fuel 55 Million autos
- Bio-Methane available from Landfills, Agriculture & Wastewater

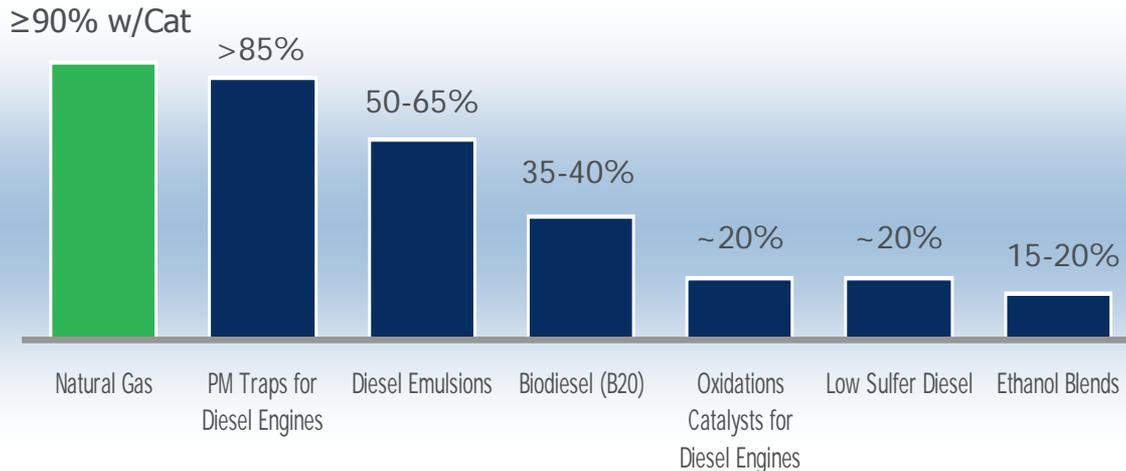
\*Based on Current Rate of Consumption  
Sources: EIA 2006, Clean Energy

# NGVs Produce Significantly Less Smog, Soot, and GHG's

## NOx Reduction: Less Smog



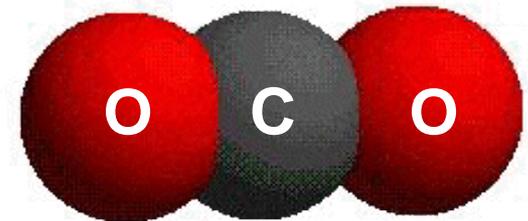
## PM Reduction: Less Soot



## Greenhouse Gases

### CEC's Well to Wheels Study

- 23% GHG reduction compared to diesel fuel
- 30% GHG reduction compared to gasoline fuel



Source: South Coast Air Quality Management District 2007 Air Quality Management Plan Summit Panel

# Clean Energy Fast-Fill Stations



City of College Park, Atlanta Hartsfield Airport



Los Angeles International Airport



Phoenix Sky Harbor (Eastside Station)



Dallas Fort Worth

# Clean Energy Time-Fill Stations



# Why Natural Gas Refuse Trucks?

- Natural Gas is:
  - Cheaper
  - Cleaner
  - Domestic
  - WORKS!!



- Natural Gas Refuse Trucks:
  - Provide significant NO<sub>x</sub>, PM, and GHG reductions
  - Provide significant noise reductions – 90% quieter
  - Displace imported oil on a gallon for gallon basis
  - Replacing one diesel garbage truck with one that operates on natural gas has the same emissions benefits as taking 325 cars off the road per year

# Why Natural Gas Refuse Trucks?

- Currently, there are over 2,500 natural gas refuse trucks running daily in the US
  - Autocar announced an increase in natural gas truck sales vs. last year
  - Natural gas refuse trucks are cleaner and quieter
- CE fuels over 1000 refuse trucks daily including: Waste Management, Allied Waste, Burrtec Waste, Central Jersey Waste, etc.
- More municipalities across the US are selecting natural gas trucks for residential collection services including:
  - Boise, ID; Brookhaven, NY; Hamilton, NJ; New York City; San Antonio, TX; Seattle, WA; College Park, GA; Montgomery County, MD



# Natural Gas Refuse Trucks



## Natural Gas for Public Transit

- Over 11,000 Natural Gas buses operating in the U.S. today
- Over 22% of all new transit bus orders are Natural Gas
- Clean Energy fuels over 16,000 Natural Gas vehicles per day including over 5,000 buses at:
  - Boston MBTA
  - NY MTA
  - WMATA
  - Akron Metro
  - Los Angeles Metro
  - San Diego MTS
  - Foothill Transit
  - Las Vegas RTC
  - El Paso Sun Metro
  - Trans Link, Vancouver, BC
  - Others in AZ, CA, CO, MD, NM & TX



MBTA's Cabot Yard, Boston

# 29' 30' 32' 35' 40' 60' & 65 foot NG Transit Buses

## OEM's:

- Orion
- New Flyer
- NABI
- El Dorado
- DesignLine



## Para-Transit & On-Demand Vehicles

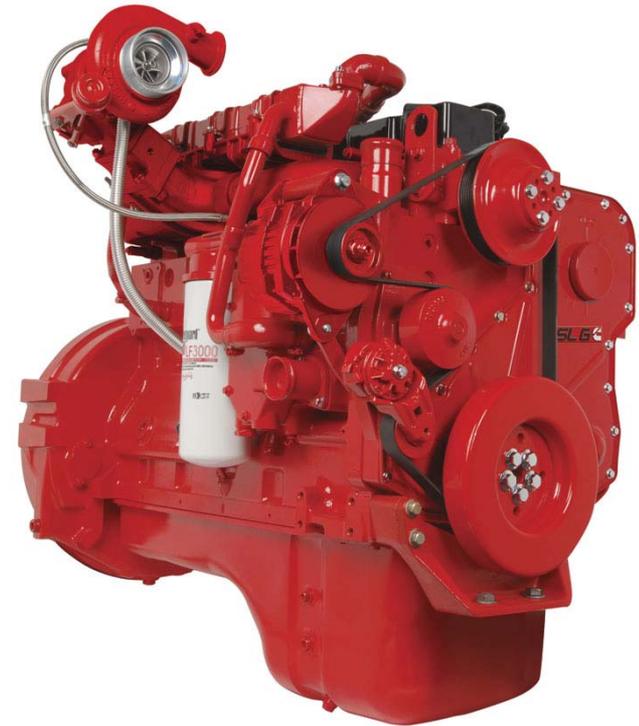
- VPG's new CNG "MV-1"
- Ford E450
  - BAF 6.8L V10
- Chevrolet C4500 & C5500
  - Baytech 8.1L
  - 6.0L Vans
- Int'l 3200/3300 series with DT 466
- Freightliner Custom Chassis MB55
- Mercury Marquis
- Lincoln Town Car



# Cummins Westport ISL-G: Proven Technology



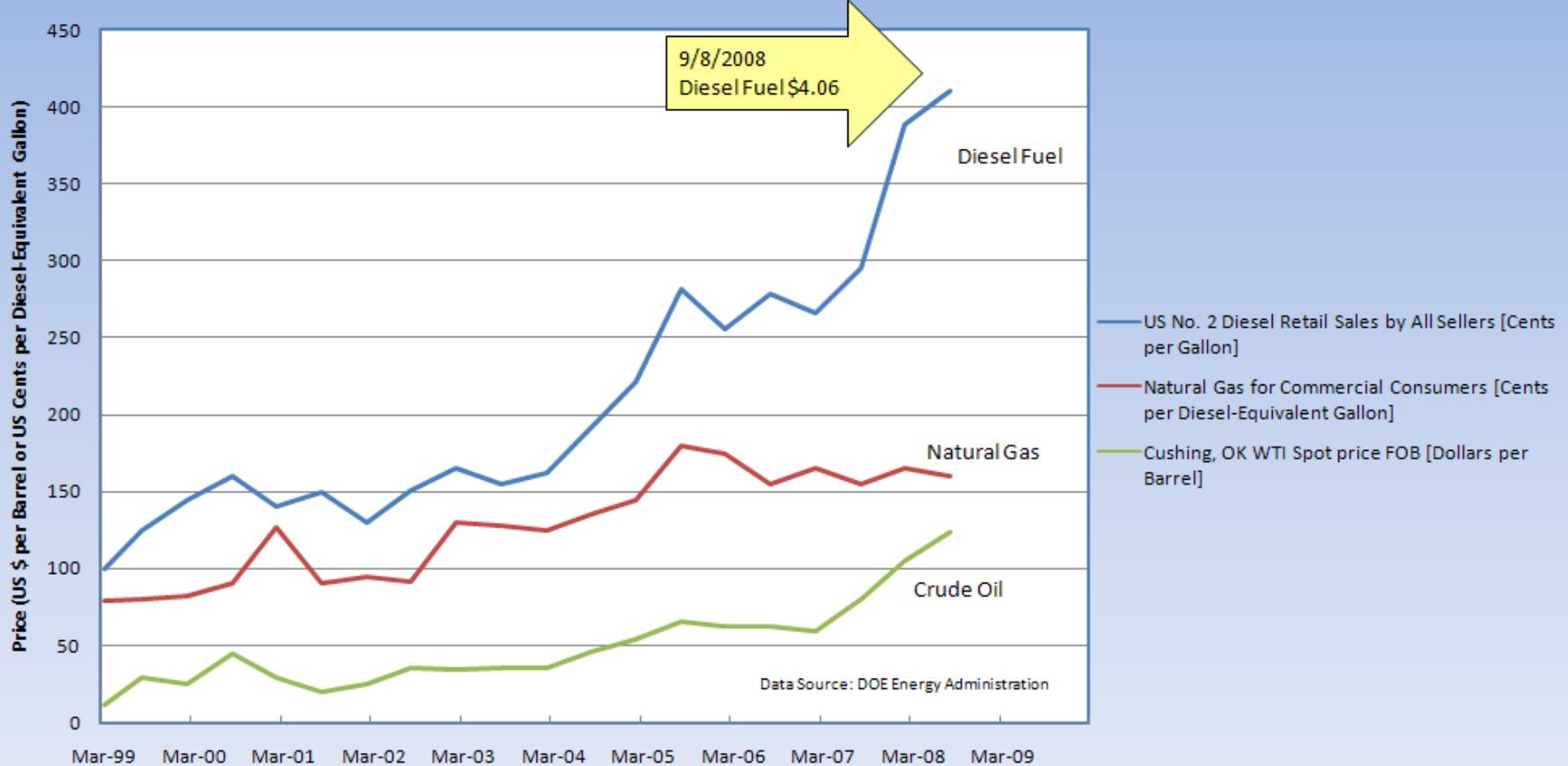
- 2007 ISL G met the 2010 emissions standards ahead of schedule
- Diesel-like performance
  - 34% more torque at idle than 2006 L Gas Plus
- Improved fuel economy
- Maintenance Free Exhaust System
- **No Particulate Traps, Filters, or Urea Fuel Additive**
- Engine Available in Multiple Chassis
  - Front, side, and rear loaders
- Refuse Truck Manufacturers offering ISL G
  - Autocar
  - Mack
  - Crane Carrier
  - Peterbilt



**ISL G**

# Fuel Price History: Lets Not Forget!!

Price History for Crude Oil, Diesel Fuel and Pipeline Industrial Natural Gas



Natural gas has been 25 - 61% cheaper than Diesel over last 10 years

## President's Energy Bill Tax Credits Effective January 1, 2006

Allows for up to **80% of incremental cost** of dedicated natural gas vehicle based on vehicle's GVWR (Gross Vehicle Weight Rating)

- GVWR < 8,500 lbs= \$14,000 (**\$4,000 up to 80%**)
  - Honda Civic, Ford Crown Victoria, Chevy Astro, GM SUVs
- GVWR 8,500-14,000 lbs= \$16,000 (**\$8,000 up to 80%**)
  - Ford F-150, 250, 350 Sierra/Silverado pickup, Express/E350 van
- GVWR 14,000-26,000 lbs= \$20,000 (**80% = \$16,000**)
  - Ford E450 or GM 8.1L shuttle bus
- GVWR > 26,000 lbs= \$40,000 (**80% = \$32,000**)
  - Dump Truck, **Refuse Truck**, Transit Bus, Street Sweeper



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