Clean Energy®

North America's leader in clean transportation

Compressed Natural Gas: Greening Your Fleet - Domestically

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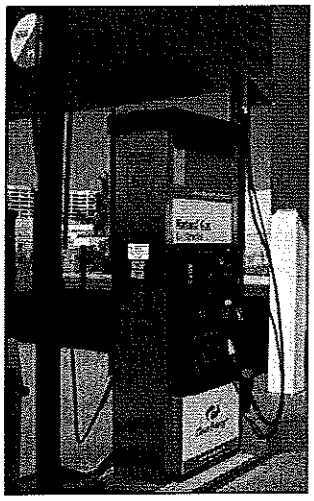
Company Profile - Clean Energy

Clean Energy®

- **Largest provider of vehicular natural gas (CNG & LNG) in North America**
  - 100 million gallons sold during 2009
  - Fuel 20,000 + customer vehicles daily
- **Full service**
  - Design, Build & Operate Stations
  - Fuel and Fleet Marketing
  - Vehicle Grants (Awarded over $220 Million)
  - Financing
- **Operating Territory**
  - 200+ stations
  - 16 U.S. States
  - 25 Airports
  - 9 Airports In Development
- **Publicly-traded as CLNE on NASDAQ**



What's the problem?

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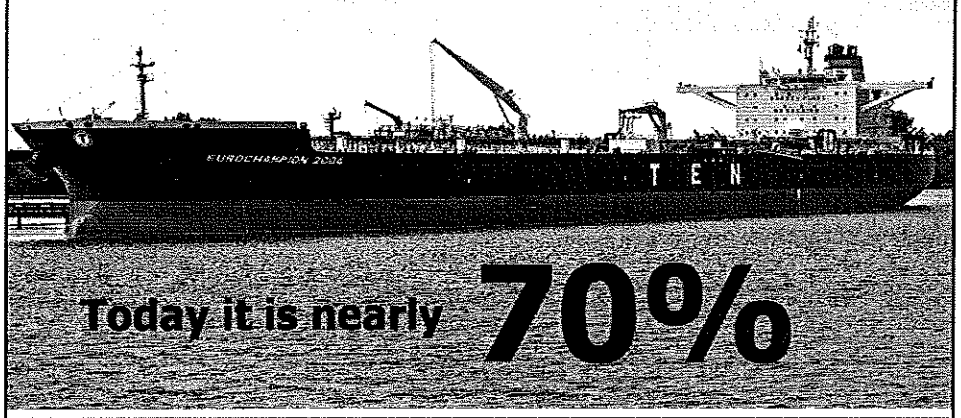
In **1970**, we **imported 24%** of our oil.



Today it is nearly **70%**

Out of Balance

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Worldwide Increasing Demand For an Ever Decreasing Supply of Oil

China = **19%**

India = **16%**

Why Natural Gas for Transportation?

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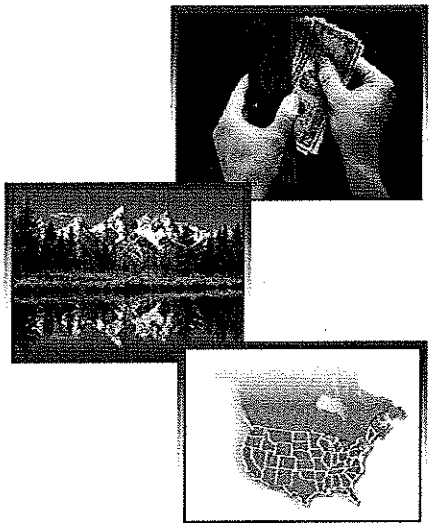
- **Cheaper**
  - $0.50 - $1.00 less per gallon than gasoline
- **Cleaner**
  - Cleanest burning fuel available
  - Reduces GHG emissions by up to 30% and NOx emissions by 85%
- **Domestic**
  - 97% domestically produced
  - Gallon per gallon displacement of foreign oil
  - 120+ year supply



Natural Gas is Cheaper

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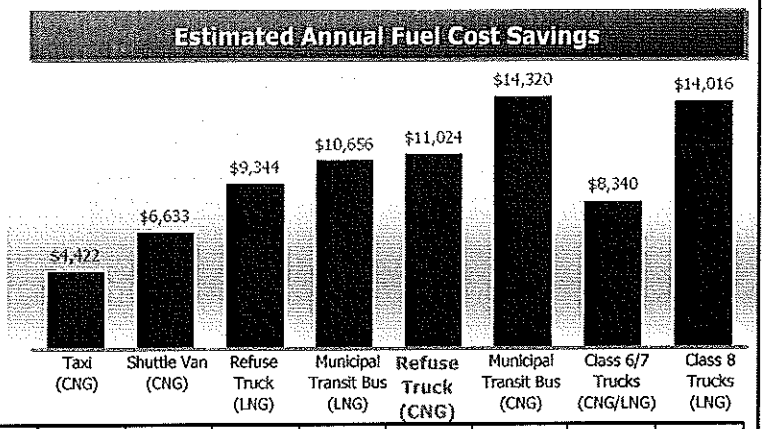

Incremental Cost*	$7,000	$7,000	$8,000	$8,000	**$8,000**	$8,000	$8,000	$18,000
Annual Fuel Usage (Gallons)	6,000	7,500	11,120	16,680	**11,024**	16,680	8,340	16,680
Comparison Fuel	Gas	Gas	Diesel	Diesel	**Diesel**	Diesel	Diesel	Diesel

* Includes Vehicle Tax Credit of $32,000

Natural Gas is Cleaner

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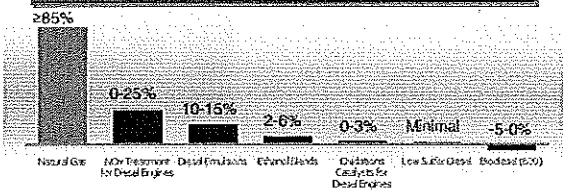
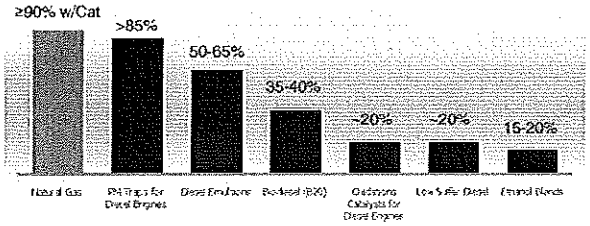
NOx Reduction: Less Smog



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

Natural Gas is Domestic & Plentiful

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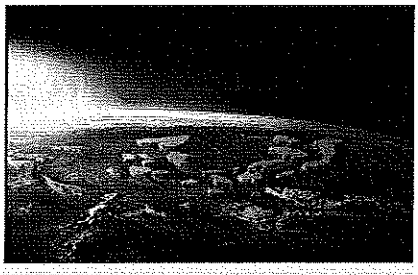
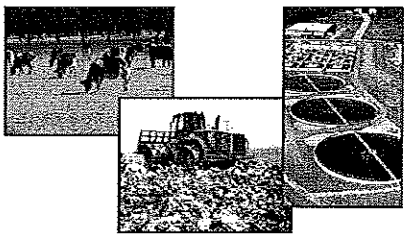
98% Supplied from the U.S. and Canada

Non-Renewable Sources (2,074 TCF)



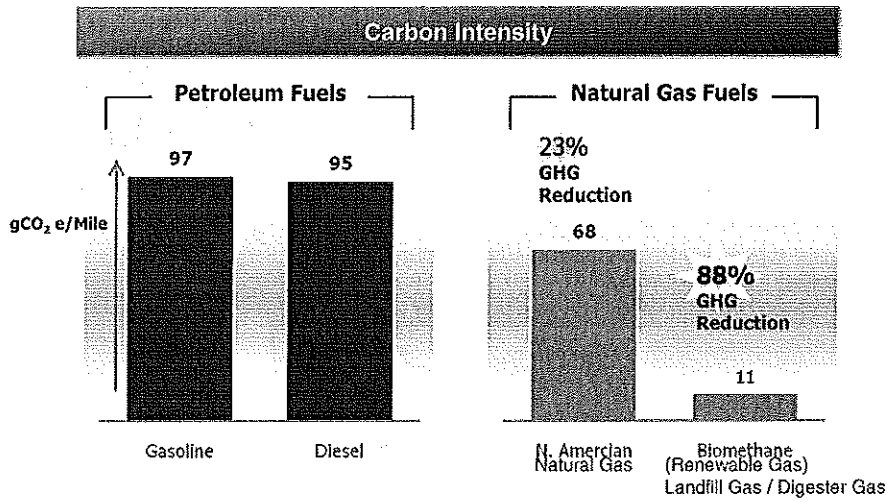
- 22 Shale Basins in 20 States
- 118> years of Domestic Reserves
- 35% increase in Reserves last 2 years

Renewable Sources (1,750 landfills)



- Landfill Gas (Biomethane)
- Dairy Farms
- Digester Gas (Sewer Treatment)
- Can be nominated CNG stations to achieve greater GHG reductions

Natural Gas Reduces GHGs



Source: CARB Fuel Pathways Analysis

NG Opportunity for Petroleum Displacement

- What can Natural Gas Displace?
  - **40% of on-road diesel = 16 billion gallons of diesel = 1 million trucks**
  - **28% of on-road gasoline = 38 billion gallons of gasoline = 30-50 million LD vehicles**
- Natural gas is only fuel that can achieve significant foreign oil displacement

Proven Technology – Cummins Westport ISL G

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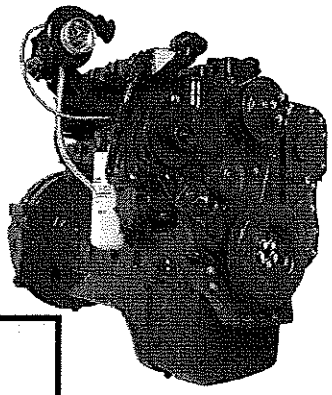
- 2010 emissions standards met in 2007
- No Particulate Filters or SCR (Urea) Required
- Diesel-like performance
  - 34% more torque at idle than 2006 L Gas Plus
  - Great Startability & Gradability
- Improved fuel economy
- Maintenance Free Exhaust System
- Engine Available in Multiple Chassis – Manufactured Installed – Seamless Warranty
  - Front, Side, & Rear load, Recyclers, Roll-off



Westport AUTOCAR Mack FREIGHTLINER Peterbilt

CNG is a perfect fit for refuse industry

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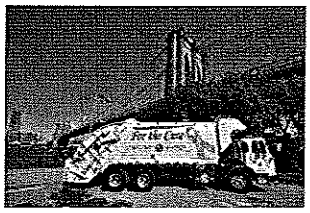
- Refuse industry increasingly moving to CNG:
  - Currently, over 4,000 refuse trucks run on natural gas
    (doubled in three years)
  - Truck OEMs: CNG fueled Refuse Trucks is approaching 40% of their refuse market production
  - 90% reduction in engine noise
  - CNG fuel price stability for long-term municipal contracts



CNG Stations

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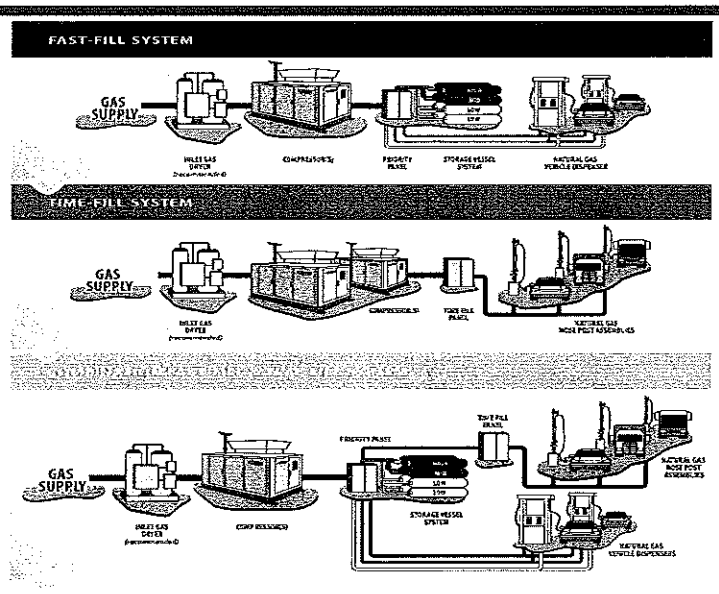

Typical Refuse Station Time Fill & Fast-Fill

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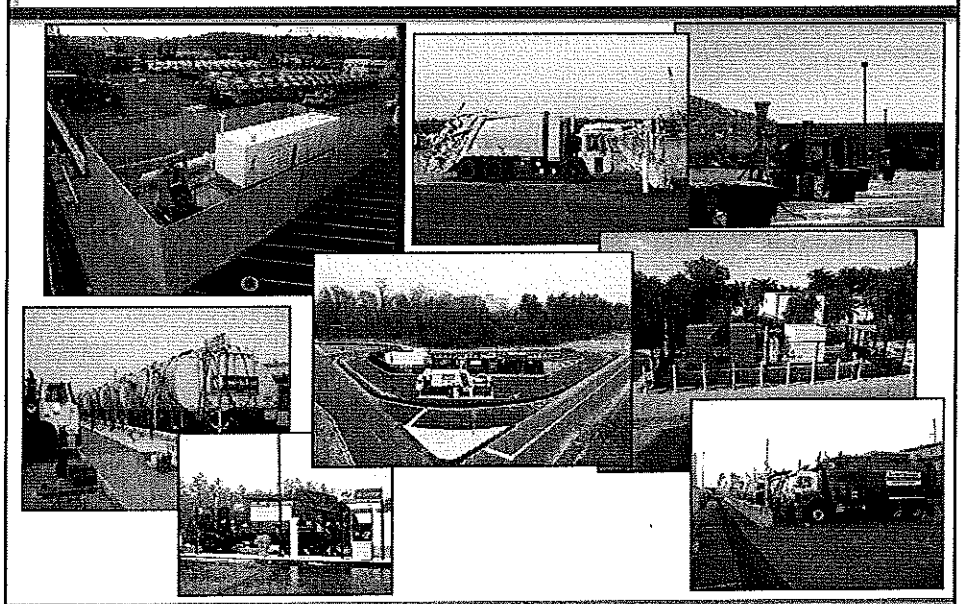

CNG DISPENSERS: FAST-FILL & TIME-FILL

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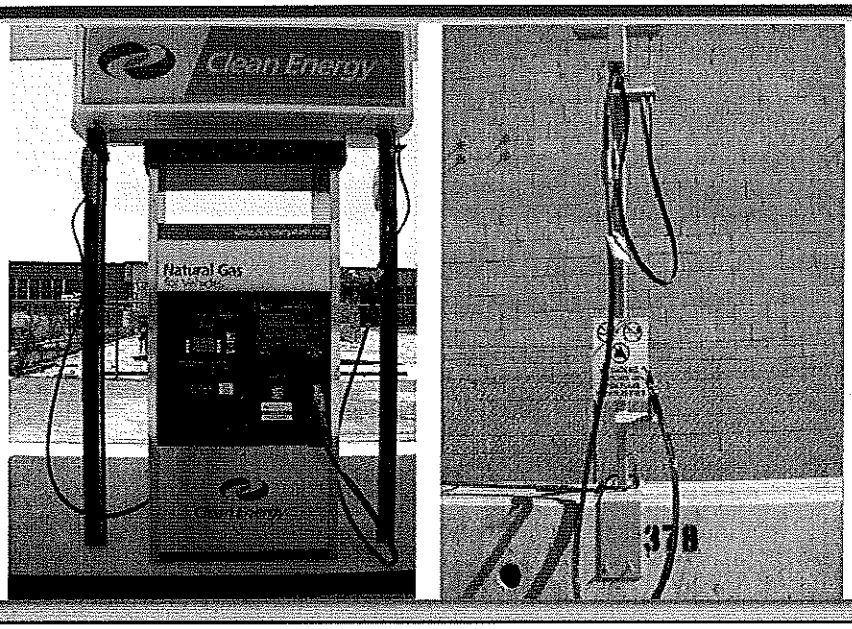

What's in it for You?

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- Cleaner, Cheaper, Domestic and Abundant
- No Particulate Filters or DEF Diesel Exhaust Fluid (Urea) Required
- No diesel soot = Longer engine life
- Significantly Reduce Fleet Greenhouse Gas Emissions
- Improve environmental stewardship recognition

Conclusion

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- The benefits of natural gas for vehicles is that it is CLEANER, CHEAPER, and DOMESTIC
- Natural gas refuse trucks can reduce GHG by over 23% vs. diesel
- Cities and private companies are making the transition to natural gas vehicles due to economic and environmental reasons
- Public policy is driving further interest in natural gas for low carbon and domestic energy security reasons
- Excellent examples exist across the US for municipalities and private companies to emulate

Questions?

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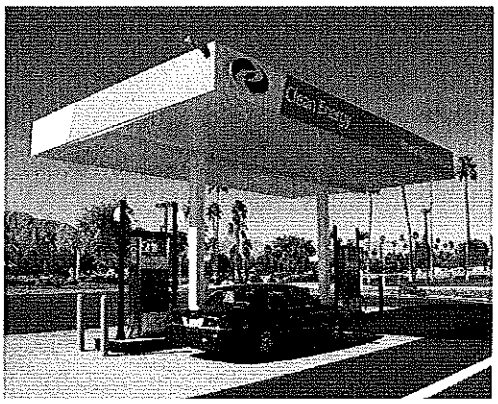

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