

# Propane Autogas Station Development Program






*Right Here  
Right NOW  
Fuel*




# Why LPG Autogas?


- **Availability**

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- Made in the USA – limited importing
  - Large pipeline and storage facilities across US
  - Retail supply available in every US state & city

- **Environmental**

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- Compared to gasoline, propane yields 87% less smog-producing hydrocarbons, up to 90% less carbon monoxide, 12% less carbon dioxide, 50% less nitrogen oxide and 50% fewer toxins and other smog-producing emissions.
  - Propane can play an important role in mitigating climate change, because it is among the lowest life-cycle greenhouse gas emissions of all commercially available fuels.
  - Listed as an approved alternative fuel in Clean Air Act of 1990 and the National Energy Policy Act of 1992 and 2005.

- **Economics**

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- Lower cost per mile vs. other fuels
  - The low carbon and oil contamination characteristics of propane have resulted in documented engine life of up to two times that of gasoline engines.
  - Fuel pricing stability and fuel mgmt programs
  - Federal and local incentive programs
  - Low infrastructure development costs



# Why LPG Autogas?

- **Technology**

- Liquid propane injection engine systems
- Bi-fuel engine systems
- OEM vehicle platforms
- State of the art dispensing systems
- Plug and play conversion systems





- Clean Start Project

- 16 Cities in the USA
- ConocoPhillips along with CFUSA & Propane Marketers to install 8 to 10 public stations in each city
- Rush and CFUSA to offer service & installation support for fleets in each city
- TSTC to train and certify mechanics with propane vehicle specific curriculum
- PERC and DOE Clean Cities to support with fleet marketing & outreach

- Selected Cities & Support

- Phase 1
  - Houston, Dallas/ Ft. Worth, Austin, San Antonio, Louisiana Corridor and Atlanta
- Phase 2
  - Chicago, OKC, Denver, Sacramento, Phoenix, Indianapolis & Orlando
- Phase 3
  - St. Louis, San Diego, Los Angeles, & Seattle
- Support From;
  - Energy Offices from Each State, Governors, City Leaders, Clean Cities Coordinators from each city





# Clean Start



# Program Partners

- LPG Fuel Marketers
  - Local retail fuel supply and storage tank installation
- Propane Education & Research Council
  - \$2.3 mm for propane fleet marketing
  - Funding for contractor's ready to drive “City Plans”
  - Funding for market research
- CFUSA
  - Key “Marketer” to Potential Fleet users
    - Fueling equipment supplier
    - Fueling network operator
    - Propane Engine Technology integrator
- ConocoPhillips
  - Wholesale Propane supply
  - Multi state branded marketing sites
    - Corporate approval for Propane Marketing to work directly with retailers
- AmeriGas
  - Nation’s largest retail propane marketer
  - Over 650 locations nationwide





- Headquartered in Georgetown, Texas
- Established in 1993
- Manufacturer of motor fuel dispensers and fueling infrastructure - LPG & E85
- Provide fuel supply services and contracts
- Owns or franchises 34 fueling locations in California, Arizona, Texas and Colorado.
- Develop liquid propane fuel injection systems
- Offices in Detroit, MI and international offices in India and Argentina



# CleanFUEL USA

provides a complete alternative fuel solution

- Vehicle Fuel Systems
- Fueling Infrastructure
- Fuel Management
- Fuel



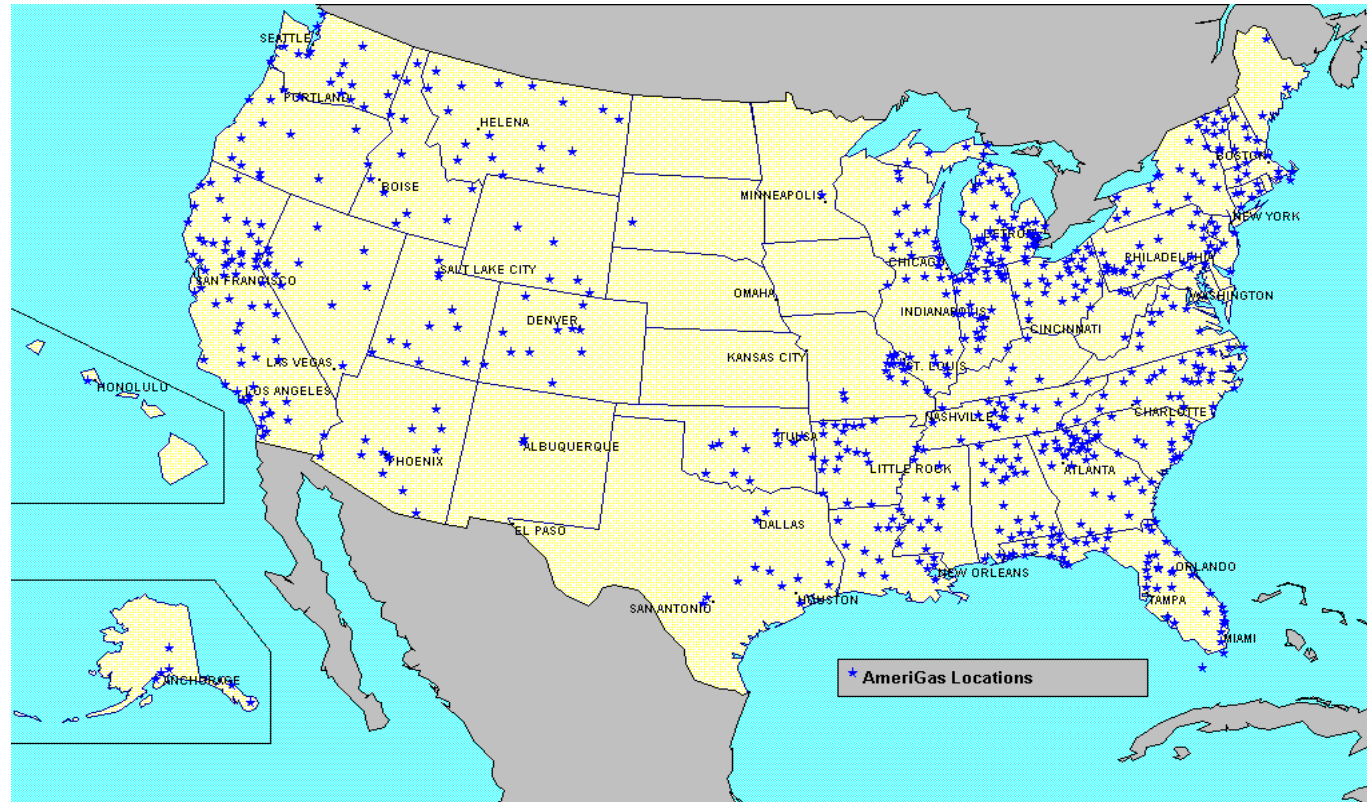
# ConocoPhillips Company

- Third largest integrated energy company in the United States
- Seventh Largest holder of proved reserves Worldwide
- Fourth largest refiner Worldwide, Second largest Refiner in the United States with 12 refineries in US
- About 31,000 employees Worldwide
- Reserves: 10 billion barrels of oil equivalent (BOE)
- Production: 2.2 billion BOE per day
- Marketing: Approximately 8,340 outlets in North America marketing under Conoco, Phillips 66 and 76 Brands
- Headquarters: Houston, Texas



# Why Does Being the Largest Make AmeriGas the Best?

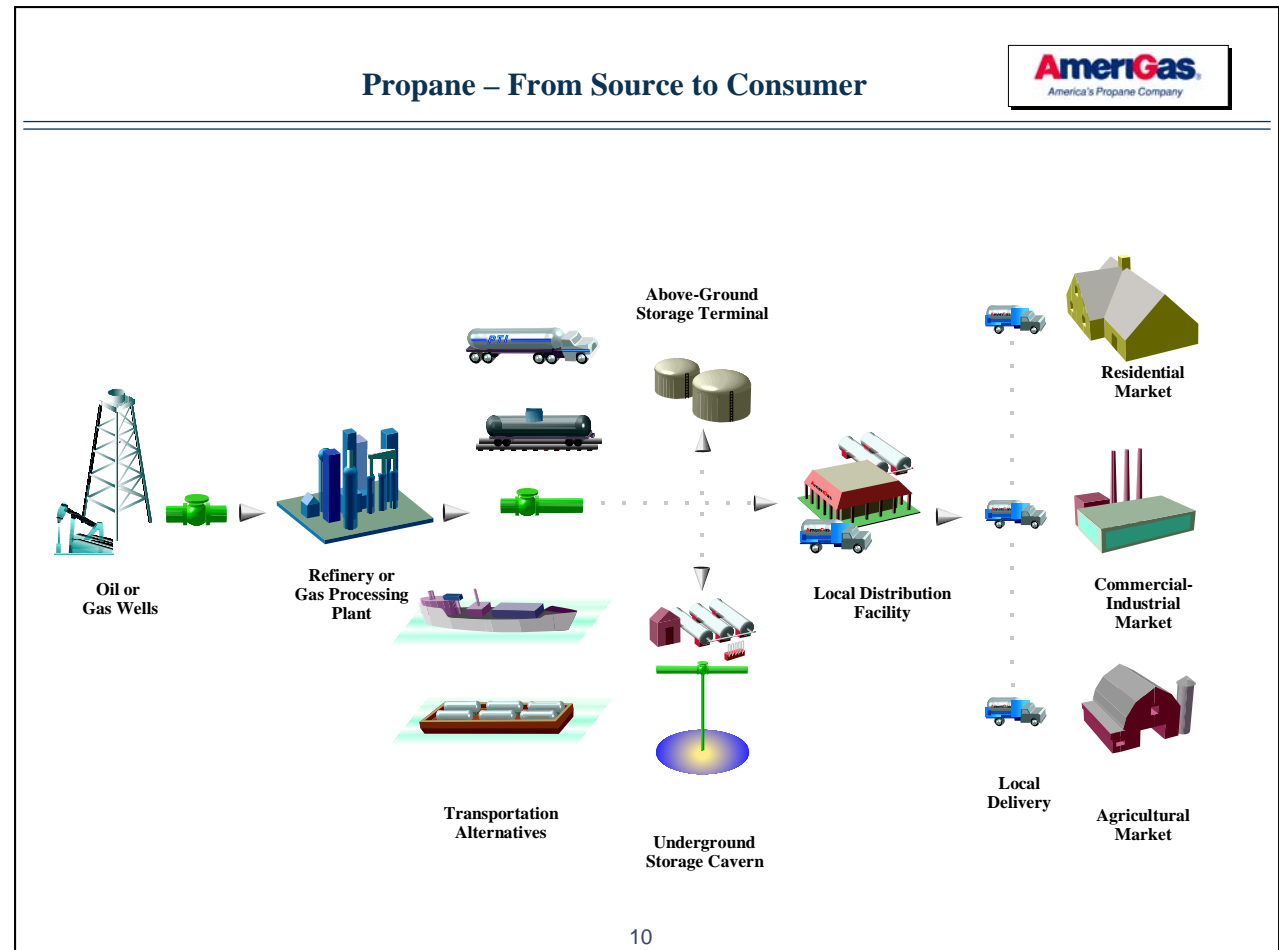
- Footprint
- Quality
- Survivability
- Expandability
- Transferability



# Assured Supply

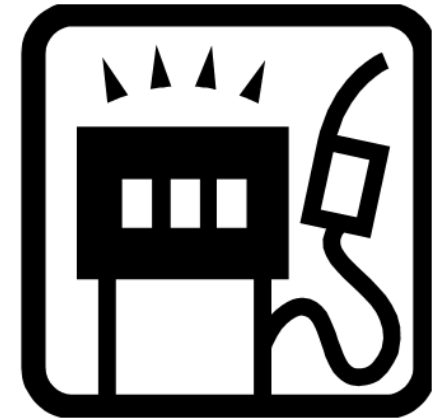
## *What Does It Mean to You?*

- Trucks
- Tanks
- Railcars
- Allocation



# Program Development

- **Targeted metropolitan markets**
  - Fleet metrics in area
  - Regulatory programs and support
  - COP retail locations and supply
- **Select Retail locations**
  - Site operational functionality
  - Fleet usage potential
  - Site regulatory review
  - Geographical evaluation



# Why should the City of Houston be involved with this project?

- Proof of leadership in alternative fuel arena by appointment of development project personnel
- Support of federal, state and local government
- Support of Federal AARA funds (Stimulus)
- Support energy independence
- Utilize a byproduct of crude oil and natural gas processing as Houston is USA National Energy Hub
- Reduce financial strain of fluctuating oil prices on city fleets

