### CleanFUEL USA California Propane Refueling Infrastructure Project

As California and the United States strive to develop cleaner burning and more cost effective transportation fuel alternatives to gasoline and diesel produced from foreign oil, CleanFUEL USA (CFUSA) is committed to delivering alternative fuel solutions for today's public and private fleet operators. CFUSA has been a leader in the propane motor fuel industry since 1993 by developing engine technology, implementing refueling infrastructure and promoting propane as an effective, clean-burning domestic transportation fuel.

Propane has recently experienced a resurgence of interest among government policy makers over the past few years. It continues to gain considerable popularity as a domestically produced alternative fuel with unique economic and environmental benefits. CFUSA, in collaboration with GM, Roush and Blue Bird Bus Corporation, has pioneered propane vehicles in several growth-oriented market segments such as: Medium-duty Trucks, Shuttle Bus Applications, Delivery Utility-Service Trucks and School Buses. Currently, thousands of public and private vehicles in California rely on propane as an engine fuel. Demand for propane transportation fuel will increase as fleet owners begin replacing vehicles with these new propane fueled trucks and busses.

To meet this increased propane fuel demand, CFUSA has partnered with ConocoPhillips in an effort to strategically expand propane refueling in California. CFUSA and ConocoPhillips will be providing 24-hour refueling infrastructure to anchor fleets throughout California.

## **PROJECT GOAL:**

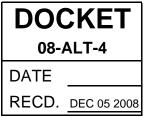
CFUSA's infrastructure goal for California is to develop, build, and implement approximately forty (40) new public and private propane motor fuel filling stations throughout California. These new stations will service both fleets and public consumers.

**Project Target Markets** (approximately 10 locations each):

- a. Los Angeles / Orange County / Inland Empire
  - b. San Francisco / Oakland East Bay
  - c. Greater Sacramento / San Joaquin Valley
  - d. San Diego / U.S-Mexico Border Crossing Transportation Corridors

### Project Benefits:

- 1. Reduction of toxic emissions:
  - a) PM, NOx, CO<sub>2</sub> and HC
- 2. Reduce consumption of gasoline and diesel fuels:
  - a) Support national energy independence and California energy policies
- 3. Fuel cost savings:
  - a) Historically 20 to 30% less p/gallon than gasoline, highly competitive with diesel
- 4. Cost effective infrastructure
- 5. Reduction of fuel consumption:
  - a) Convenient, strategically located refueling infrastructure will require fewer miles driven by fleets refueling with propane in key regions and urban centers



6. Increase alternative fuel use

Estimated Project Costs: (approximately 40 Stations / 4 Market Regions):

- 1. Equipment = \$1,400,000
- 2. Site Preparation = \$600,000
- 3. Construction = \$1,600,000
- 4. Estimated Total Project Cost = \$3.6M
- 5. Proposed CEC 118 Cost Share Funding Over 3-Years = \$1.2M (33% Cost Share)

# **PROJECT PARTNERS AND ANCHOR FLEETS**

### 1. Project Partners:

- a. <u>ConocoPhillips</u>
  - i. Real Estate at select 76 Branded Stations for 24-hour public refueling
  - ii. Marketing and Development Assistance
  - iii. Fuel Supply
  - iv. Cost Share Funding
- b. CleanFUEL USA
  - i. Station Development
  - ii. Equipment and Design Build Engineering
  - iii. Marketing and Promotions
  - iv. Fleet / Consumer Education and Safety Training
  - v. Ongoing Fleet and Fuel Market Development
  - vi. Cost Share Funding

## 2. Anchor Fleets:

- a. CalTrans (1300 vehicles)
- b. County of Los Angeles (Street Sweepers, Shuttles Buses, Utility Vehicles)
- c. Primetime Shuttle Service (LAX, Ontario & Orange County Airports 200 Vans)
- d. Park N' Fly; LAX (10)
- e. Destinations Shuttles; LAX (10)
- f. USC Shuttle Service (10)
- g. Mobility Services (200) Vans
- h. School Bus Fleets in Southern California that have purchased (380+) Blue Bird Propane-powered school buses
  - i. LA Unified (140)
  - ii. William S. Heart (12)
  - iii. Moreno Valley (20)
  - iv. Redlands (12)
  - v. Pope Valley (1)
  - vi. Lucia Mar (3)
  - vii. Atlantic Express (20)
  - viii. Durham Transportation (81)
  - ix. Student Transportation of America (71)

x. First Student (20)

## SUMMARY

Increasing the number of propane-powered vehicle offerings is paramount in our efforts to grow the fuel market and displace gasoline and diesel fuels. Following the success of the CFUSA "LPI" / GM 8.1L engine for medium-duty trucks and Blue Bird school bus, CFUSA has been working with PERC to develop additional GM and Ford propane engine certifications, as well as researching heavy-duty engine options and possible propane-hybrid platforms. In addition, other fuel system manufacturers such as Roush and BayTech continue their development of additional 50-state certified propane engines and vehicles. Yet, providing an increasing number of propane engine alternatives is just part of the solution. It is critical that public and private propane vehicles have access to affordable and convenient refueling infrastructure.

CFUSA, in collaboration with the Western Propane Gas Association and the Propane Education & Research Council (PERC), has been actively working with the Energy Commission and Air Resources Board management and staff to develop strategies for a sustainable propane motor fuel market in California. The importance if developing additional 24-hour propane stations throughout California cannot be understated. It is an important and necessary step in propane's fuel market development for fleets and consumers. Expanding competitively priced propane will serve as a positive indicator to the industry, automakers, Tier-II OEMs and the general public that one of our nation's cleanest-burning, domestic fuels is fully supported by the state of California.