



December 14, 2008

TO: Obama Energy Transition Team  
Dr. Steven Chu  
Senator Barbara Boxer

FROM: John Boesel, President and CEO

RE: Economic Stimulus Measures to Reduce Oil Dependence and  
Greenhouse Gas Emissions

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The following is a summarized list of recommendations for an economic stimulus package that would create jobs in the next 3-18 months, while laying the foundation for a future of reduced oil dependence and greenhouse gas emissions. CALSTART is in a unique position to provide these suggestions as we have 130+ member companies that represent the full spectrum of clean transportation technologies and fuels. We also work closely with fleets and ports to help them improve the environmental and economic performance of their operations.

The following recommendations would support the growth of a variety of fuels and technologies. In total, we are recommending that \$12.5 billion be dedicated to stimulus investments in the energy sector.

#### **Low Emissions Trucks in Severe Non-Attainment Regions (\$2 billion)**

Tens of millions of Americans still suffer from severe air pollution. A sum of \$2 billion should be provided to the EPA to replace dirty diesel trucks with alternative fuel or hybrid trucks that reduce both greenhouse gas and criteria emissions. In some states, such as California, significant investments are already being made to replace the worst polluting trucks. In 2006, in California alone, voters approved a \$1 billion bond measure to reduce pollution from the goods movement sector. The federal funds should be used to match state funds and focused on technologies that will not only reduce criteria emissions, but also greenhouse gas emissions.

#### **Low Carbon Fuel Infrastructure (\$350 million)**

In two key areas, cars are now available to run on alternatives to oil, but sufficient refueling infrastructure does not exist. Construction can begin within three months once the contracts for federal funds are finalized. The investment should be focused on biofuels and hydrogen.

#### *Biofuel Retail Stations and Infrastructure*

Presently of the more than five million flex-fuel vehicles in the United States only a small portion operate on E85, primarily due to a lack of refueling stations. An investment of \$250 million would result in the construction of 2,500 E85 pumps throughout the country, allowing existing and future flex-fuel cars to run on E85. An alternative distribution network for the ethanol industry would make it less dependent on the oil industry. A robust E85 network would also help facilitate next generation ethanol products that are not derived from corn.

A 2006 DOE grant to CALSTART has resulted in the construction of 14 California E85 stations, most of which are combined with biodiesel pumps. CALSTART is currently working with various low carbon fuel providers to create 500 stations in the state over the next five years.

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### *Hydrogen Stations*

Several car companies are continuing to pursue fuel cell vehicle technology and have made significant progress in lowering the cost and improving quality of the vehicles. However, despite proclamations to the contrary, the oil industry is not building any new hydrogen refueling stations. To support the fuel vehicles planned for deployment over the next several years, the DOE should concentrate station funding in a few key regions. Presently, within California alone, a minimum of 50 stations are needed.

### **High Efficiency Truck Incentives (\$50 million)**

Most truck manufacturers are now selling medium- and heavy-duty hybrid trucks, however the purchase price of the hybrid trucks will remain high as long as the volumes remain low. At least \$50 million is needed to help jumpstart the industry and increase early volumes by providing purchase incentives. In recent weeks, we've learned that due to the slowdown of the economy, many fleets have cancelled all plans to purchase trucks in 2009. It is likely that the size of this investment may have to be increased 2-3 times to achieve its goal and get at least 1,500 trucks deployed.

### **Demonstration Biomethane Truck and Production Plants (\$40 million)**

Capturing methane when biomass degrades, converting it into biomethane, and using it to power vehicles is one of the single best strategies to reduce greenhouse gases. Additionally, throughout the country, agricultural waste products are often causing water and soil pollution. In Sweden a comprehensive program has been put in place to convert agricultural waste into biomethane which can then be used in the gas pipeline or to power vehicles. To quickly build a biomethane industry in the United States, \$40 million should be invested to build production plants (digesters and gas cleaning systems), construct refueling stations, and purchase methane-powered trucks. This investment could help build 20 plants in a variety of states using different feedstocks and technologies.

### **Low Carbon Technology Manufacturing Loan Program (\$10 billion)**

A low interest loan program would help support the manufacturers and suppliers of vehicle components that can reduce greenhouse gas emissions and dependence on oil. For example, low interest loans could be provided to U.S. manufacturers to build plants and buy equipment to produce batteries, electric motors, and controllers. This financing would provide immediate assistance to those start-up businesses and existing automotive suppliers seeking to manufacture the next generation technology that will dominate the future global automotive industry.

### **Commuter Rail Innovation (\$50 million)**

While much can be done to improve the efficiency of vehicles and lower the carbon content of fuels, we need to simultaneously pursue options that provide alternatives to car transportation. A number of innovative companies are pursuing advanced, lighter-weight and lower cost rail technologies that could make rail viable in cases where traditional light rail is unaffordable. A \$50 million investment would allow for the proof-of-concept demonstration of three different personal or group rapid transit systems.

For more information on these recommendations contact:

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