

Testimony of  
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Before the  
Subcommittee on Select Revenue Measures  
and the  
Subcommittee on Oversight  
House Committee on Ways & Means  
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Mr. Chairmen, Members of the Subcommittees.

My name is Andrew Littlefair. I am the President and Chief Executive Officer of Clean Energy Fuels which is the largest provider of vehicular natural gas (both Compressed Natural Gas and Liquefied Natural Gas) and related services in North America. I am also the immediate past Chairman of the NGV America, a national trade association of over 120 companies involved in natural gas vehicles and related production, distribution and transmission.

I am here to speak in favor of H.R. 1380 – the NAT GAS Act, introduced on April 6 by Rep. John Sullivan. I am pleased that so many members of the Subcommittees have co-sponsored the legislation, including both Chairmen. I would like to focus on the advantages to our economy of jump-starting a natural gas vehicle industry in the United States. The change over from diesel to natural gas is going to happen over the next 10 to 15 years. What I am suggesting is, with this short-term boost, we can accelerate that to just five years and achieve our goal of energy security.

In addition, I will touch on job creation, revenue generation, national security implications, and environmental advantage of moving a significant number of vehicles from largely imported diesel to domestic natural gas.

The benefits of natural gas are numerous, wide ranging, and vital to America's national interests. I believe that is why, as of today, H.R. 1380 has 183 bipartisan co-sponsors. With what you have just gone through, having that many members from both sides and from all regions of the country coming together on a single piece of legislation is noteworthy in, and of, itself.

Natural Gas is Abundant.

Natural gas is one of the most abundant natural resources in America. In the summer of 2009, the "Potential Gas Committee" under the auspices of the Colorado School of Mines released its groundbreaking report calculating the enormous amount of natural gas contained in the vast shale deposits in Texas, Louisiana, Arkansas and the Appalachian basin states. The Marcellus Shale, extending through Pennsylvania, West Virginia, southern New York and eastern Ohio, has received the lion's share of attention over the past year.

We in business and in government don't think strategically as often as we probably should. It is one thing for report after report to state we have a 100-year supply of natural gas, or a 150-year

supply or a number that continues to grow with advances in drilling technology. It is something else for us to consider how best to deploy such a domestic natural resource – a resource with so many uses, which is already so widely distributed, and which can benefit all Americans by providing more jobs, a cleaner environment, a reduction in our trade deficit, and cheaper food and commodity prices.

Unlike battery and hydrogen technologies which are works in progress, natural gas is a proven vehicle fuel. There are some 13.2 million natural gas vehicles operating in the rest of the world. Globally, over 4,000 NGVs are being put on the road and eight new natural gas fueling stations are being opened every day. However of the 250 million cars and light trucks on America's highways only about 110,000 are NGVs.

The argument against moving from gasoline or diesel to natural gas as a principal transportation fuel has been a matter of infrastructure. If there are not enough fueling stations to support NGVs, then the public won't buy them. If the public won't buy NGVs then companies like Clean Energy Fuels won't build facilities to fuel them.

This "closed loop" thinking has stymied us for decades.

We can talk about the availability of natural gas refueling facilities, as opposed to gasoline stations, for passenger cars but the fact is as long as gasoline was so relatively cheap, there was no need for people to ask for natural gas vehicles (NGVs), there was no reason for the automobile manufacturers to build them, and no need for filling stations to put in natural gas islands.

My focus today will be on medium and heavy-duty trucks which currently burn imported diesel. In the jargon of the Transportation Department these are Class 3 through Class 8 trucks – everything from express delivery and utility company vehicles all the way up to refuse and recycling trucks; and 18-wheelers.

Even if we built a million passenger cars per years to run on natural gas, that would represent only four-tenths of one percent of the U.S. fleet.

However there are only about eight million class five through eight – heavy-duty – trucks in the U.S. These trucks range from refuse recycling trucks to over-the-road 18-wheelers and use upwards of 35 billion gallons of fuel annually. Helping the owners of these vehicles replace their diesel trucks with trucks running on CNG or LNG can have an immediate, measurable effect on our trade deficit, our environment, and on the profitability of these fleets.

Over-the-road trucks tend to run the same routes on a regular schedule. We have determined that the beginnings of a nationwide network is possible with only 150 natural gas stations at existing truck stops along Interstate highways can provide fuel coast-to-coast and border-to-border. Refuse recycling trucks, municipal buses, dump and cement trucks, and express delivery and utility trucks all go home to "the barn" every night and so refueling them is a simple matter.

The private sector is doing its part. Recently my company announced an investment by Chesapeake Energy to help build 150 strategically located LNG truck stops. This process, too, can be greatly speeded up though common sense incentives in the bill.

All that is left is to help trucking companies in the short term defer the additional cost of buying vehicles which will run on natural gas. Because there has been a trickle of a market for heavy trucks running on natural gas, the costs of manufacturing them is far higher than the highly-developed lines building diesel engines. H.R. 1380 takes direct aim at the premium which keeps many truck owners and manufacturers from making the change to natural gas. The cost of a basic Class 8 truck - which includes regional tractors, drayage trucks, and refuse and recycling trucks - built to run on diesel is approximately \$125,000. A similar truck manufactured to run on natural gas will cost between \$35,000 and \$40,000 more.

To demonstrate that the economies of scale I am suggesting will, in fact, work, we should note that just three years ago the incremental cost of a natural gas truck over a diesel was between \$60,000 and \$100,000. I believe that, by providing this modest tax credit for truckers to purchase NGVs that differential will quickly disappear as the benefits of natural gas as a transportation fuel become obvious to users.

In this era of debt limits and spending reductions we should keep in mind that the relatively low cost of H.R. 1380 and its strict time limit of not more than five years will yield many times the amount of the tax credits involved.

There are 360,000 trucking companies in the United States. 82 percent of these operate six trucks or less. One in ten over-the-road truck drivers are independent and most own their own rigs.

I recite these statistics, Mr. Chairman, to show that H.R. 1380 is not a hand-out to major corporations, grocery chains, and retailers. It is a way to give a hand-UP to small businesses from Maine to California by providing meaningful incentives to our transportation infrastructure.

These small businesses will retain a larger share of their earnings in the form of a tax credit to purchase natural gas trucks. That, plus the saving of \$1.50 per gallon by running on natural gas instead of diesel, provide a significant life-cycle reduction in costs and will go a long way in helping to create additional demand for trucks and engines built in America.

As these companies ramp up to meet the expected demand, the per-unit cost will drop to the point where a tax credit is no longer necessary.

Yet the manufacturing facilities and the workers who build these new vehicles within them, designers, engineers, tool-and-dye makers, mechanics and after-market entities, will remain and will grow in a market sector which is crucial to the economic health of states throughout America. Studies have shown that moving America's heavy-duty truck fleet from diesel to natural gas will have the effect of providing over 400,000 direct and indirect new jobs over the next five years, further demonstrating the long-term benefits of this legislation.

The elements of the President's Jobs Bill – both the job creation and the pay-for sides of the equation – are on everyone's lips here this week. Proposals like the NAT GAS Act are not in competition WITH, but are complementary TO, whatever form of the jobs bill comes out of the Congress.

Every person we hire – every position we create – has to make sense for us, so it can help us make dollars. Yet, we believe that 400,000 number of new, permanent and good-paying jobs to be very conservative. These jobs will be created through an anticipated investment of up to \$50 billion over that five year period.

As a national security issue all we need to do is to look at the scale of oil imports and the list of our major oil trading partners. Natural gas vehicles can play a significant role in displacing foreign oil.

In June, 2011 we imported 343 million barrels of oil at a cost of \$39 billion. *That's one million dollars per minute, every minute of every day.* For the first half of this year we have imported 2.1 billion barrels of oil costing \$227 billion; over a quarter of a trillion dollars. Not only is the scale of the amount of money we are shipping offshore sobering, but a look at the list of countries to which we are sending it is chilling: After Canada and Mexico, the next largest suppliers of oil to the United States are:

- a. Saudi Arabia
- b. Venezuela
- c. Nigeria
- d. Iraq
- e. Columbia
- f. Russia
- g. Angola

This is a list of countries we should beware of supplying our national requirements for bubble gum, much less oil.

In April of this year, oil imports accounted for about 60 percent of our three-year high trade deficit of \$50.2 billion.

Converting America's heavy truck fleet of about 8 million vehicles to Liquefied Natural Gas would save 2.5 million barrels of oil per day, meaning we could reduce our reliance on OPEC oil by half. At \$100 per barrel that means \$250 million per day stays in the United States to circulate through OUR economy, rather than being shipped off the governments of Venezuela, Saudi Arabia, or Nigeria.

Mr. Chairman I am in the business of promoting natural gas as a major component of America's transportation fuel future. It is not the perfect fuel, and every fuel has benefits and drawbacks, but natural gas is the cleanest fuel on the American roads today.

**Natural gas is abundant** – As I noted eminent researchers from the Colorado School of Mines, Cambridge Energy Research Associates, IEA and MIT on down – have shown we have between a 100- and 150-year supply just in the United States.

**Natural gas is available** – it is the most widely distributed natural resource in the nation.

**Natural gas is safe** – it is used for cooking, heating, and hot water in over 70 million homes.

**Natural gas is cleaner** than gasoline or diesel. According to the California Air Resources Board NGVs produce between 20 and 30 percent fewer greenhouse gases than vehicles burning diesel or gasoline. Converting just one trash truck from diesel to natural gas is the equivalent of taking as many as 325 cars off the road in terms of pollution.

**Natural gas is cheaper** – it costs about 40% less than diesel on a gallon-equivalent basis. For an over-the-road truck burning about 20,000 gallons of fuel per year – that is a savings of up to \$40,000 per year per truck. In an era where commodity prices are on the rise – and a substantial

portion of that rise is shipping costs – lowering those shipping costs should be reason enough to jump-start the NGV industry in the United States.

**Natural gas is working.** This is an historic opportunity to pass and implement an achievable tax credit that will immediately have a positive and dramatic impact on our energy and national security and greatly reduce our reliance on OPEC. This can happen and can happen NOW.

Thank you for your time and attention. I would be happy to answer any questions.

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