

Testimony of

Mr. Harrison Clay  
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A Subsidiary of Clean Energy Fuels Corporation

Before the

United States Senate Committee on Finance  
Subcommittee on Energy, Natural Resources, and Infrastructure

Natural Gas Vehicles: Fueling American Jobs, Enhancing Energy Security,  
and Achieving Emissions Benefits  
Wednesday, December 3, 2014

Mr. Chairman, Members of the Committee:

Thank you for inviting me to testify before you today — it's a pleasure to see so many energy champions in the same room. My name is Harrison Clay. I am the President of Clean Energy Renewable Fuels, a subsidiary of the Clean Energy Fuels Corporation, based in Newport Beach, California. In this role, I am responsible for leading Clean Energy's efforts to produce and sell renewable natural gas — or biomethane — that is derived from the anaerobic decomposition of organic waste, such as that found in landfills or wastewater treatment plants.

I am here today because we believe that natural gas, and renewable natural gas, hold tremendous promise, and if further developed and made more widely available, can be even greater components of America's energy portfolio than they already are. By tapping into and fully utilizing the enormous natural gas resources that are just below our feet, and developing the inexhaustible potential of renewable natural gas, this nation has the building blocks for a cleaner, greener future with more jobs and opportunities, less reliance on foreign oil imports and a

healthier environment than we have seen in generations. Natural gas offers the potential for the United States to set the energy standard for other countries to follow.

Obviously, this nation's laws and regulations play a vital role in the continued development and expansion of these technologies, as they do with all industries. To that end, my testimony will focus on four areas where we believe Congress can play a critical role:

- 1. Ensuring the long-term viability of the Renewable Fuel Standard (RFS);**
- 2. Adopting a performance-based, technology-neutral renewable energy tax incentive;**
- 3. Correcting the tax and regulatory treatment of Liquefied Natural Gas (LNG); and**
- 4. Reinstating and expanding important tax credits.**

What's encouraging is that these issues enjoy bipartisan and industry-wide support. In addressing these areas, you will remove the barriers, and the fear of business uncertainty, that could potentially slow or even altogether halt a growing American success story.

It has been long recognized that there is no single solution to solving the energy needs of a nation as large and diverse as the United States. Today, natural gas is an increasingly important vehicle fuel for heavy-duty trucks, taxis, transit vehicles, airport shuttles and fleet vehicles. Many of you have likely seen Clean Energy fueling stations in some of your communities. You can find us refueling fleet vehicles at major airports, including Los Angeles, Denver International, Dallas Fort-Worth, Newark and New Orleans, and in major cities like Charlotte, Atlanta and Orlando. You'll see Waste Management and Republic Services refuse trucks across the country being

fueled by natural gas from Clean Energy-built stations. Recognizing the importance of fleets and heavy-duty trucks to every state, Clean Energy built and is continually expanding America's Natural Gas Highway, a nationwide network of natural gas fueling stations in 43 states coast-to-coast. This means that for the first time heavy-duty trucks can travel coast to coast in North American fueled entirely by natural gas!

While use of natural gas in fleets is in our company's DNA, Clean Energy has invested and innovated in other areas, most notably renewable natural gas.

I'm particularly bullish and proud of the work we've done to pioneer the use of this amazing, and 100-percent renewable, energy source. Renewable natural gas is the only alternative fuel available in commercial quantities today that can meet 100 percent of the fuel requirements of an 18-wheeler, achieve a 90 percent greenhouse gas reduction compared to diesel, leverage existing infrastructure and be cost-effectively sold at a substantial discount to current diesel prices.

Its potential can be seen in the success of Redeem, the first commercially available, renewable natural gas vehicle fuel, which is offered at Clean Energy stations. It is derived entirely from organic waste streams and is available in either Compressed Natural Gas (CNG) or LNG form. Redeem makes us the largest producer, marketer, and distributor of renewable natural gas, or biomethane, as a vehicle fuel in North America. And this is not about the promise of the future — we sold 14 million gallons of Redeem last year, over 20 million this year and expect to double our sales of Redeem next year, to over 40 million gasoline gallons.

Once, waste from farms and landfills decomposed and emitted large amounts of methane — a potent greenhouse gas — into the atmosphere. But with the development of Redeem, there is a way to capture the gas emitted from this waste and turn it into usable energy. The beauty of renewable natural gas is that it can be produced economically anywhere there are large organic waste streams — typically near major population centers or agricultural operations. So as long as we produce organic waste, we will be able to produce Redeem. And since we source renewable natural gas from facilities located in eight different states — including Washington, Michigan, Ohio, Texas, Tennessee, Arkansas, New York and Oklahoma — we can say that Redeem is truly a national effort.

Put simply, Redeem is harnessing the energy trapped in America’s landfills, wastewater treatment plants and on farms. It’s creating jobs and reducing oil imports in the process. It’s renewable. It’s immeasurably cleaner than traditional fuels. You can only call Redeem a “win by a factor of four.”

I’m not the only one who’s bullish — just look at how the market has responded. Earlier this year, the EPA classified renewable natural gas as a cellulosic biofuel under the RFS. In just two months — between August and September of this year — biomethane vehicle fuel generated 11 million cellulosic biofuel Renewable Identification Numbers (RINS) under the RFS. Compare that to the 423,000 cellulosic biofuel RINS generated by non-biogas cellulosic fuels in 2013. Biomethane vehicle fuel has arrived and validates the vision of the RFS and justifies the effort of preserving it and enforcing it.

By some estimates, the potential for renewable natural gas could be as much as 30 billion gallons of fuel annually. Just reaching a fraction of that potential, 10 percent, would be enough to run approximately 190,000 garbage trucks and 50,000 heavy-duty vehicles annually. That's more than the entire garbage truck fleet in America today.

**Ensuring the long-term viability of the RFS is critical for the next chapter of this success story to be written.** Efforts to gut the RFS will only derail the promising, and just now emerging, viable fuel solutions like Redeem. Rather, bringing stability to the RFS and RIN market will spur further development of this tremendous, 100-percent renewable resource with a commitment to long-term investment and innovation. I urge every member of the committee to consider standing up for what's becoming an amazing opportunity for our nation's energy future.

We're not alone in this assertion. Clean Energy and Clean Energy Renewable Fuels are proud members of the Coalition for Renewable Natural Gas, joined by many other organizations that share our enthusiasm, including BP America, Constellation Energy, Waste Management and many others.

**Adopting a performance-based, technology-neutral renewable energy tax incentive could also be a game-changer.** As you know, major business decisions are driven in part by certainty and commitment. In taking a long view at the potential marketplace, I was buoyed by discussions in the last year to enact a performance-based, technology-neutral renewable energy tax incentive to replace the current patchwork of tax incentives. Please don't misinterpret this statement as not recognizing the importance of current and expired tax incentives to our business

— and the fact that we have, and will continue to, ask for their reinstatement as important to our future (and I will do so shortly). But optimally, we believe that a permanent incentive that is performance-based and technology-neutral can supercharge the industry with the kind of business certainty that long-term investments to transform our energy infrastructure require.

We are grateful for the leadership shown by this committee and many of your colleagues to create a foundation of tax incentives that have enabled so many businesses and municipalities to turn to American natural gas, and now renewable natural gas, as their vehicle fuel of choice. Making these kinds of incentives permanent can take these success stories to the next level.

But the progress that we've made, the new energies we've harnessed and the jobs we have created in the process could all be slowed, or even jeopardized, if Congress fails to preserve the RFS, extend expiring tax credits and correct some technical, but important, inequities. To that end, and in hopes of securing a domestic, renewable portfolio of energy for the America's next 100 years, I'd like to discuss two final issues before the subcommittee today.

**Congress should correct the highway excise and fuel tax treatment of LNG and address other barriers currently hindering LNG adoption.** LNG competes directly with dirty, and often imported, diesel as a transportation fuel for use in heavy-duty vehicles. While the federal highway excise tax on both diesel and LNG is set at 24.3 cents per gallon, LNG effectively pays 170 percent of the diesel rate since it has less energy per gallon because of the way the tax is calculated. This applies to every gallon of Redeem LNG we sell, as well.

The proposal that we support (S. 1103 and HR 2202) is promoted by Senators Bennet (D-CO) and Burr (R-NC) of this Committee and Congressmen Thornberry (R-TX) and Larson (D-CT) in the House of Representatives. Senators Bennet and Burr propose that the excise tax on LNG be changed so that it is imposed on the energy content of a gallon of diesel fuel, known as the diesel gallon equivalent. This gallon equivalency fix should address both the LNG-diesel excise tax and the Alternative Fuel Excise Tax Credit. Doing so would create policy consistency and restore a competitive balance between LNG, CNG and diesel as transportation fuel choices. According to a Joint Committee on Taxation review, simply making these two technical changes simultaneous would raise \$9 million in new revenue. These technical changes were included in the Senate version of the MAP-21 Reauthorization Act (S. 2322), which passed the Senate in July of this year. Unfortunately the changes did not make it into the final version of the legislation that was signed by President Obama.

There also exists a Federal Highway Excise Tax (FET) of 12 percent on heavy-duty trucks and tractors. Because of the greater up-front costs of LNG-powered heavy-duty trucks compared to diesel ones, the tax puts LNG-powered heavy-duty trucks at a competitive disadvantage to their diesel counterparts. We hope that Congress will consider eliminating this tax or at a minimum amending the code to exempt the incremental cost of natural gas trucks and other advanced technology trucks from the tax. We need more of the trucks on the road fueled by domestic, renewable, low carbon fuels like Redem.

Lastly, we also ask Congress to consider exempting heavy-duty natural gas trucks from the interstate weight limits, which can reduce their total load abilities and have an impact of as much

as 3 percent on their revenue. This issue is caused by the extra weight of the natural gas fuel tanks.

As you can see, there are several regulatory and tax barriers in place that put vehicles running on American natural gas or renewable natural gas — LNG in particular — at a competitive disadvantage. All we're asking for is the proverbial "level playing field" and appreciate the leadership that so many of you have shown to address it.

**Enacting a retroactive reinstatement and expansion of the expired Alternative Fuel Tax Credit, as well as the Alternative Fuel Vehicle Refueling Property Credit, would contribute to the industry's continued success.** These important infrastructure and alternative fuel tax credits provide critical incentives for individuals and businesses to increase their use of natural gas as an alternative transportation fuel. Both of these provisions are currently proposed for retroactive reinstatement as well as extension in Chairman Wyden's EXPIRE Act of 2014 (S. 2260) and the Bridge to a Clean Energy Future Act of 2014 (H.R. 5559) in the House of Representatives.

I believe it is important to highlight that many of the above actions were outlined in a recent letter sent to this Committee and the House Ways and Means Committee. Clean Energy joined more than 30 associations, coalitions, companies and organizations — ranging from the American Trucking Association and Cummins Westport to UPS and Waste Management — asking for consideration of these actions during this session. I ask that a copy of this letter, dated November 7, 2014, be submitted for the record.



Members of the Committee, I would like to stress once again that Congress has a key role to play in ensuring that the journey that we've started that leads to a cleaner future using domestic, renewable energy doesn't get derailed. Clean Energy currently fuels over 30,000 vehicles a day at over 500 fueling stations throughout the U.S. and Canada. With a broad and expanding customer base in a variety of markets, we truly believe that now is our time. I hope you will consider taking action on these important regulatory matters and tax incentives and extensions, as well as addressing the technical corrections I've outlined.

In closing, natural gas and renewable natural gas are working for America and we are at a pivotal moment in history. You have an historic opportunity to amend and extend critical tax credits that will immediately have a positive and dramatic impact on our energy, jobs, national security, and environment.

Thank you for your leadership in the area and the time and attention you have dedicated to it. I would be more than happy to answer any questions or provide any further information you might need.

###



# THE WORLD'S CLEANEST FUEL FOR TRANSPORTATION

THE FIRST RENEWABLE NATURAL GAS MADE FROM ORGANIC WASTE  
AND AVAILABLE AS A COMMERCIAL VEHICLE FUEL.



# WHY REDEEM



## CLEANER

The cleanest fuel available – up to 90% cleaner than diesel and gasoline



## COST EFFICIENT

Substantially less expensive than diesel and gasoline



## RENEWABLE

Made from organic waste from sources like landfills and farms

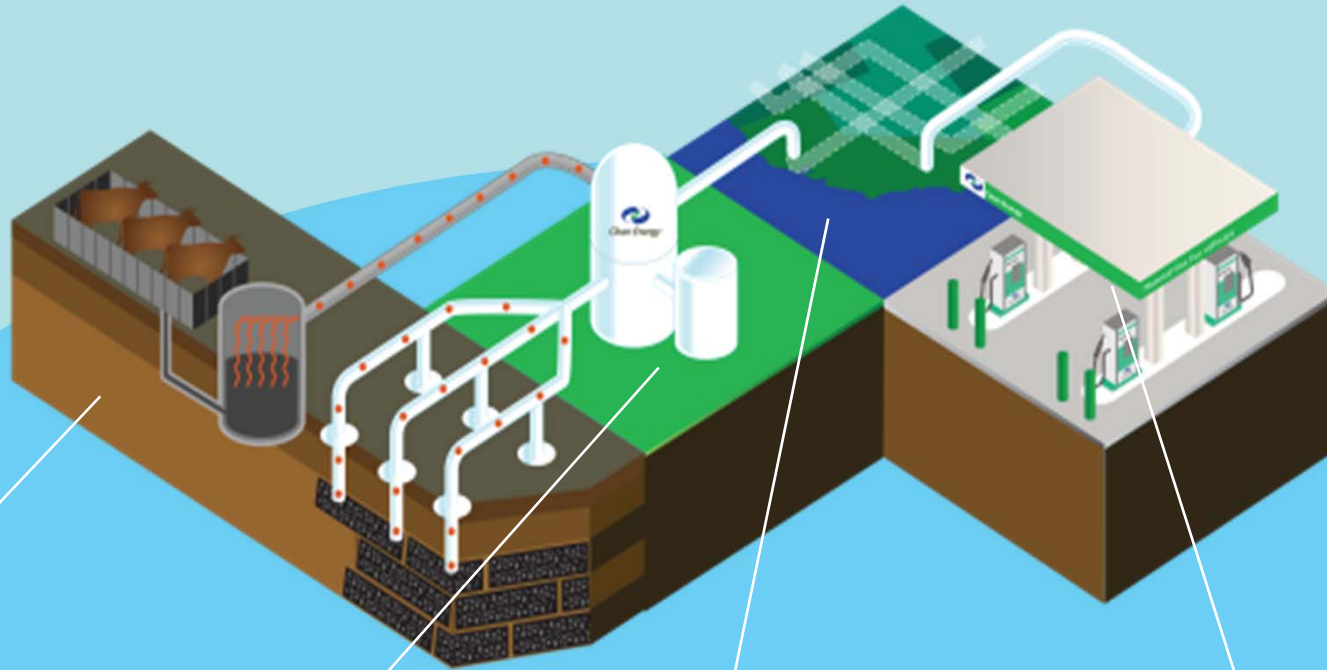


## DOMESTIC

Moving the country towards energy independence



# HOW REDEEM IS MADE



1

## CAPTURE & EXTRACT

Methane is derived from various organic waste sources such as landfills and farms.

2

## PROCESS & PURIFY

After it is processed to Required standards of Purity, methane becomes a Renewable substitute for Natural gas.

3

## ENTERS INTERSTATE FUEL PIPELINE

Once compressed or liquefied, methane gas is sent into the interstate fuel pipeline system.

4

## MADE AVAILABLE AT FUELING STATIONS

The methane gas is routed to designated Clean Energy stations which fuel an array of commercial vehicles.



November 7, 2014



The Honorable Ron Wyden  
Chairman, Committee on Finance  
United States Senate  
Washington, DC 20510

The Honorable Orrin Hatch  
Ranking Member, Committee on Finance  
United States Senate  
Washington, DC 20510



The Honorable Dave Camp  
Chairman, Committee on Ways and Means  
United States House of Representatives  
Washington, DC 20515

The Honorable Sander M. Levin  
Ranking Member, Committee on Ways and Means  
United States House of Representatives  
Washington, DC 20515



(formerly known as EIA, NSWMA, WASTE)



Dear Chairmen Wyden and Camp and Ranking Members Hatch and Levin,

We, the undersigned, understand that the United States Senate Finance Committee and the United States House of Representatives' Ways and Means Committee may soon initiate efforts to extend expired and expiring tax incentives. The Congress has long recognized the importance of fuel diversity in the American economy, and we thank you for your past support for natural gas as a transportation fuel. Increased use of natural gas vehicles helps address several public policy goals simultaneously – including increasing U.S. jobs and reducing greenhouse gases, urban pollution, and dependence on imported oil. We would like to bring our interests and concerns to your attention as you begin your deliberations.

#### Alternative Fuel Tax Credit Extensions

We support the retroactive reinstatement and extension of the expired Alternative Fuel Excise Tax Credit (26 USC §§ 6426 and 6427) and the Alternative Fuel Vehicle Refueling property credit (26 USC § 30C). These alternative fuel and infrastructure credits incentivize individuals and businesses to increase use of natural gas as an alternative transportation fuel. These provisions are currently proposed for retroactive reinstatement and extension in the S. 2260 and H.R. 5559.

#### LNG-Diesel Excise Tax Fix

We also support efforts that correct the highway excise tax treatment of LNG. LNG competes with diesel fuel as a transportation fuel for use in heavy duty vehicles. The federal highway excise tax on both diesel and LNG is set at 24.3 cents *per gallon*. However, because LNG has less energy *per gallon* than diesel fuel, on an energy equivalent basis LNG effectively pays 170 percent of the diesel rate. The current highway excise tax treatment of LNG is a disincentive to investment in new LNG trucks and fueling stations, and should be corrected to encourage capital investments.

We request that the highway excise tax on LNG be changed so that it is imposed on the *energy content* of a diesel gallon (known as a diesel gallon equivalent), as proposed in S. 1103, bipartisan legislation introduced by Senators Michael Bennet (D-CO) and Richard Burr (R-NC), a version of which was included in the Senate-passed Highway bill, H.R. 5021, The Preserving America's Transit and Highways Act, and H.R. 2202, bipartisan legislation introduced by Congressmen Mac Thornberry (R-TX) and John Larson (D-CT).



### Alternative Fuel Tax Credit Fix<sup>1</sup>

Finally, similar to the LNG excise tax, we encourage you to alter the value of the Alternative Fuel Excise Tax Credit (26 USC §§ 6426 and 6427) for LNG so that the credit is based on the *energy content* of a diesel gallon and not on a per gallon basis. Correcting both the LNG excise tax treatment and the excise tax credit treatment at the same time creates policy consistency and would restore the competitive balance between LNG, CNG and diesel as transportation fuels. Furthermore, according to a Joint Committee on Taxation review, making these two changes simultaneously would raise \$9 million in new revenue.

We appreciate your consideration of our request.

cc: Members of the Senate Finance Committee  
Members of the House Ways and Means Committee

Sincerely,

#### Trade Associations:

- American Gas Association
- American Public Gas Association
- American Trucking Associations
- National Association of Truck Stop Operators
- National Waste and Recycling Association
- NGVAmerica
- Truck Renting and Leasing Association

#### Coalitions, Companies and Organizations:

- |                                     |                      |
|-------------------------------------|----------------------|
| Agility Fuel Systems                | Mack Trucks          |
| AGL Resources                       | Noble Energy         |
| ANGI Energy Systems, LLC            | Ryder                |
| Blu. LNG                            | Sempra Energy        |
| Center Point Energy                 | Shell Oil Co.        |
| Chart Industries                    | Tenaska              |
| Clean Energy Fuels                  | Titeflex             |
| Coalition for Renewable Natural Gas | Trillium             |
| Cummins Westport                    | UPS                  |
| Encana                              | Volvo Trucks         |
| Gladstein, Neandross & Associates   | Waste Management     |
| Linde                               | Westport Innovations |
| Luxfer Gas Cylinders                |                      |

<sup>1</sup> Attachment (Joint Committee on Taxation Memorandum dated April 2, 2014)