## Testimony of David Crane President and CEO, NRG Energy, Inc. Before the U.S. Senate Committee on Energy and Natural Resources May 19, 2011

Thank you, Chairman Bingaman. Mr. Chairman, Ranking Member Murkowski, and distinguished Members of the Committee, I appreciate the opportunity to testify before you today on the topic of one of the most exciting technological innovations of our era – the electric vehicle.

## Introduction

Today America is experiencing "déjà vu, all over again". As the U.S. summer driving season approaches, gasoline prices have risen above \$4/gallon in large parts of the country and the cost of one fill up of a full size SUV is trending towards \$100. And not only is there absolutely no assurance that the gasoline price increases will moderate, every American knows that their hard won income going into their gas tank is headed from there straight overseas to help less than friendly foreign regimes.

With the continued instability in the oil producing regions, we all face the prospect that soon may come a day when the long lines and short tempers of the 1979 oil crisis again visit our shores and make us wish we could procure gasoline at any price. Back then, the U.S. Government responded by enacting higher CAFE standards and lower speed limits and by encouraging car pooling through the creation of "HOV" lanes, none of which have worked over the ensuing thirty plus years to curb our country's addiction to foreign oil.

But now, for the first time, technological innovation has produced a solution that has the potential to break our dependence on foreign oil. Mass produced plug in electric vehicles, powered by batteries with a range double that of the distance driven by the average American vehicle on any given day, are coming to various markets around the country as we speak produced by multiple American and global car manufacturers and start ups and more are on the way.

The electric vehicle revolution is happening and it will be driven, as it should be in the United States, by the private sector and by the American consumer. What the U.S. Government needs to decide is whether it wants to be a catalyst or a hindrance to the accelerated deployment of electric

vehicles. Given the enormous geopolitical and balance of trade benefits to that will inure to the United States as a result of substantially reduced dependence on foreign oil, we feel strongly that the Government should support and supplement, but not supersede, the private sector's initiatives in this critical area.

## eVgo

Our view is that vehicle ownership in the United States is primarily about the car, the cost (sticker price and operating cost) and the convenience of ownership and use. The car and the sticker price depend upon the automakers. Our company, NRG Energy, aims to address comprehensively the cost of use and the convenience questions. We have established a new enterprise, called eVgo, which has announced and begun implementation of a plan to turn the "range anxiety" normally associated with electric vehicle ownership into "range confidence". In order to do this, we already have begun a \$25 million program to install a network of convenience fast chargers around both the Houston and Dallas Fort Worth metropolitan areas.

We bundle free and unlimited access to this "freedom station" charger network with the purchase and installation of a 220 volt "home charger" in the EV owner's garage and all the off-peak electricity the EV owner can 'pump' into \$89/month charged through the car owner's home electricity bill. Not only is our eVgo package exceptionally convenient, both from an ease of use perspective and from a billing perspective, it provides the opportunity for breathtaking cost savings to the American driver who otherwise will be averaging \$150-200/month in gasoline bills at \$4/gallon.

Our subscription model is a very different approach from the way Americans are used to paying for fuel, but I can assure you that they get it. While it is still early days, we are pleased to report that an overwhelming majority of electric vehicle buyers who have received our eVgo sales presentation have signed up for one of our plans.

What we have done is just the beginning. Our freedom charger network in Houston and DFW will be fully built out by next year. We also are working on plans to expand these comprehensive charging networks to other cities around the United States. And we are not alone. Other companies, some in similar lines of business as NRG, have announced plans and begun efforts to deploy public charging infrastructure.

## **Role of Government**

Like most new technologies, the cost of electric vehicles must come down in order to bring about mass adoption. But we have also learned through talking with our own customers and many others around the country, that auto buyers are becoming more and more excited about the value proposition of electric vehicles. Drivers have started to become enamored of the idea of conveniently charging their electric vehicles in their home overnight while sleeping, filling up their cars with fuel at a fraction of the cost per mile of gasoline, and the reduced maintenance on a car that requires no oil changes or tune-ups.

The growth in demand and supply of electric vehicles can be accelerated with smart government policies designed both to enhance the convenience of electric vehicle ownership and to provide direct and indirect financial support aimed at helping consumers and businesses get over the initial high costs of new technologies like EVs, advanced batteries, and charging networks.

Regarding convenience, there is much the Government can do at low to no cost. It can train. It can promote electrical standards and processes to expedite the installation of home and community chargers. It can require preferential parking allocations for EVs at Government facilities and can encourage the same at privately owned parking facilities. Most importantly, the Government can acknowledge that its decades-long attempt to promote car pooling has failed and it can declare that all HOV lanes in the interstate highway system henceforth are instead zero emission lanes. All of this, as I said above, the Government can achieve for little to no money.

At today's hearing, we are discussing the Promoting Electric Vehicles Act of 2011 (S. 948). This act would authorize the funding of deployment communities to encourage the more rapid deployment at scale of electric vehicles. We think there is a very real role for deployment communities as envisioned in the current Senate bill provided that the bill is modified to reflect that the leading deployment communities, to a certain extent, are already being identified by private sector decisions, such as charger networks sufficient to provide full range confidence, as well as the current EV makers selection of the markets to which they wish to allocate their EV product.

To our way of thinking, such communities are best thought of as "early deployment communities" – places that the private sector has identified as having most of what it takes to make it attractive to invest in EV infrastructure. Of course, residents of these communities still need the key policy drivers for EV deployment – a break on the initial cost of the first wave of electric vehicles.

However, not all communities are such attractive targets – for example, they may be too small or have too weak a distribution grid to attract early private infrastructure investment. Despite this, we believe EV infrastructure deployment should occur across the country, in a variety of communities, and for that reason the deployment community concept as laid out in the bill is a great way to jump start early EV adoption in such communities.

But we think the bill should also be clarified to ensure that any community in which a private entity commits to deploy a critical mass of charging infrastructure should also qualify for additional cost sharing for cars and chargers – and additional incentives for the community itself to deploy convenience benefits. In fact, by leveraging private investment, we believe this approach, in combination with the existing deployment community concept, can spread existing federal dollars over more communities in more states, and help deploy more electric vehicles – leading to an earlier end to our dependence on foreign oil.

In closing, let me say that this is an exciting time to be in the electric vehicle infrastructure business. I believe electric vehicles represent the next great consumer revolution, much like we have seen with the personal computer and cell phones. Buyers around the country have had the chance to see these cars and test drive them. A lucky few now already own a Chevy Volt or a Nissan Leaf. Their response, and the EV ownership experience more generally, have been overwhelmingly positive. Government policy obviously affects the auto industry but, for all Americans, the car purchase decision fundamentally is consumer-driven. At NRG, we believe electric vehicle policies like those I have described today actually represent something we have needed as a country at least since 1979 – a consumer-driven energy policy for the United States.

Thank you Mr. Chairman, this concludes my remarks.