Senator Lamar Alexander's Speech at the Banquet Dinner of the Brookings Institution's Plug-In Electric Car Conference, June 11, 2008:

Some of you may remember how Ross Perot first made his money. It was the 1960s in Dallas, and Mr. Perot noticed that the banks were locking their doors at night and they were locking their big new computers at the same time. So he went to the bank and asked, "Could I buy your unused computer time at night?" Then he came to states like Tennessee before I was governor and said, "I'd like to make a contract to manage your Medicaid data at a cheaper cost." So the banks made a little money, the states saved a little money, and Perot made a billion dollars.

So, now the analogy today is the unused electric capacity that we have in the United States at night. The Tennessee Valley Authority is the largest public utility in the country: it produces about 3 percent of all the electricity in the United States. Its managers tell me that TVA has the equivalent of about seven or eight nuclear power plants' worth of unused electric capacity on most nights. Now if you stop and think about that, what that suggests to me is that in the TVA region, probably the most important unused asset that we have is that huge amount of electric capacity. So on Monday, Congressman Bud Cramer and I – he's a Democrat and I'm a Republican, and we're co-chairmen of the TVA Congressional Caucus – are hosting in Nashville a hearing focusing on the question "Are plug-in electric vehicles one of the answers to high gas prices?" We'll have eleven vehicles there. Many of your companies will be represented there, and it will be a way to make the public more aware of these things.

I went to the Oak Ridge National Laboratory about four weeks ago, and I suggested to about 200 scientists there that we need a new Manhattan Project for clean energy independence. That would make more sense than dueling poster boards on the floor of the United States Senate about who did what to whom. And I said we should start by doing the things we know how to do, which would be exploration offshore and new nuclear power plants. But then we ought to pick seven grand challenges of things we don't quite yet know how to do and give them the same kind of focus that we gave in World War II to splitting the atom and building a bomb. That was a tremendous effort at that time. It drafted some of the most important companies, it spent 16 billion dollars in today's dollars, it had the best scientists in the world, it had an Army Corps of Engineers general in charge, and it had a focus.

One of the grand challenges I picked was to help make electric vehicles commonplace within five years. In my brief comments tonight, I want to try and answer the question "What should the federal role be?" If I were to suggest a criteria or two, these are the things that I think we have to watch out for when the federal government begins to get involved in the marketplace. One is to watch out for unintended consequences. For example, the effect of support for corn ethanol on food prices. Maybe it's exaggerated, but we didn't think about that as clearly. I think our focus should be on advanced biofuels made from crops that we don't eat.

In quick order, here are some of the things I think the federal government could appropriately do, and I've listed them in the order that I think is probably most appropriate in terms of federal interference with the free market. First, I think that one thing that we could do we've already done, and that is the fuel efficiency standards enacted last year. Oak Ridge National Laboratory scientists told us that was the most important thing we could do in the transportation sector to address climate change and reduce our dependence on foreign oil. We enacted a 40 percent increase in fuel efficiency standards – you know all about it – but the advantage to that is that it doesn't pick winners. It just says this is the standard. If you want to engineer your internal combustion engine so that it gets 50 or 60 or 70 miles per gallon, or you want to add some form of ethanol and take it up a little bit further, or if you want a pure electric car that gets 100 miles per gallon – that's up to you, but we'll set the standard, we won't pick the technology. So fuel efficiency is done, and we will be considering further efforts at fuel efficiency standards as time goes on.

Second, a low-carbon fuel standard I think makes a lot of sense for our country in dealing with carbon. I support cap and trade for power plants, but I'm not ready to support it for the whole economy. I would rather put caps on power plants and a low-carbon fuel standard on fuel. Again, that is the kind of government action that doesn't pick and choose winners.

A third way that is beginning to pick and choose a winner, but I think is very appropriate for us to do, would be for the federal government to purchase and put out a bid and say that of the 65,000 new cars that the government buys each year, a certain percentage of them will be electric, and see what kinds of bids come in and at what cost, and give that a way to get started. Next would be battery research. Lithium batteries are very important. And the question will be how the government should get involved in it without interfering with what private businesses are doing. One way to do it of course is through the new energy DARPA that was enacted last year or through our national laboratories, some of which are already deeply involved in that.

A fifth thing that would be important would be accelerated depreciation for smart meters. If you're going to put together an electric car that is charged with nighttime electricity, it helps if the consumer understands the smart meter. I drove one of the A123 cars today. The driver told me that he gave it a charge that costs a dollar a night, and by doing that with his basic plug-in Prius, he took his car from 40 to 50 miles per gallon to over 100 miles a gallon. But if we can say to Americans, "plug in at night, fill up your car for a dollar or two instead of 70 or 80 or 90 dollars, and we'll charge you a little more between 4:00 and 10:00," we might be able to electrify a big part of our fleet without building new power plants.

Next is carbon capture. Carbon capture is essential if we're going to continue to burn coal, which in order to electrify the fleet we must do in the

near term. We all have a vision of an energy future that doesn't burn so much fossil fuel, but that is some way off, and we need a bridge to that future. If we can find a way to deal with carbon the way we already know how to deal with sulfur, nitrogen, and mercury, then we can use our coal, and we can still be more independent in terms of our energy sources. Finding ways to deal with carbon capture – not just putting it into the ground, but algae fuel solutions or other chemical solutions that might develop – is essential it seems to me if we are serious about electrifying the fleet to any great extent.

Finally, I know many of you support the idea of tax credits. Senator Hatch has a tax credit bill that has good support in the Senate. That tax credit approach is a little more intrusive, I would say. What we ought to try to do is make sure tax credits or direct government support for technology is something we do for a limited time and not as a permanent subsidy.

There are a number of suggestions for plug-in electric vehicles, but my main message tonight is that this is a time when we ought to be working together. I'm working with members of both parties – Bart Gordon, the House Science Committee chairman, he's a Democrat, I'm a Republican; Jeff Bingaman, the Senate Energy Committee chairman; Pete Domenici, the ranking Republican on that panel – and what we're trying to do is see if we can put a consensus together, whether you call it a moon shot or a Manhattan Project. Seeking the advice of scientists, we want to ask, "What grand challenges should we undertake in order to put ourselves within the next five years firmly on a path to clean energy independence?" And if we can do that by this fall, then perhaps we can say to the new president and the new Congress: let's do that. And if we do that, electric plug-in vehicles will continue to be at the top of my list.

Lamar Alexander, Tennessee's senior U.S. senator, is chairman of the Senate Republican Conference and a member of the Environment and Public Works Committee.