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INNOVATION, JOBS, AND ENERGY INDEPENDENCE: REINVIGORATING THE DOMESTIC AUTO INDUSTRY

HEARING

BEFORE THE

SELECT COMMITTEE ON
ENERGY INDEPENDENCE
AND GLOBAL WARMING
HOUSE OF REPRESENTATIVES

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INNOVATION, JOBS, AND ENERGY INDEPENDENCE: REINVIGORATING THE DOMESTIC AUTO INDUSTRY

TUESDAY, DECEMBER 9, 2008

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON ENERGY INDEPENDENCE
AND GLOBAL WARMING,
Washington, DC.

The committee met, pursuant to call, at 10:04 a.m., in room 2175, Rayburn House Office Building, Hon. Edward J. Markey (chairman of the committee) presiding.

Present: Representatives Markey, Solis, Cleaver, McNerney and Miller.

Staff present: Jonathan Phillips.

The CHAIRMAN. Welcome to the Select Committee on Energy Independence and Global Warming.

This week Congress will vote on whether to extend a lifeline to a broken domestic industry teetering on the brink of bankruptcy. The same companies that fought seat belt requirements in the 1960s, air bags in the 1980s, and fuel economy for more than three decades have returned, hat in hand, unable to survive the month without a taxpayer intervention. Once untouchable symbols of American industrial might and ingenuity, it has become clear the Detroit Three have ceded leadership to the innovators and are now running in fear.

Consumers and businesses around the world are tightening their belts to survive the current economic crisis, and some are being driven to bankruptcy. But make no mistake, the fundamental reason the Big Three need life support today is their inability to move from Car 1.0 to Car 2.0 over the past half century. A business model premised on bigger cars, wider highways, and more oil is a failed equation. Any recovery of these companies will require more than just fresh cash. It will require a change of culture, a culture that answers challenges with innovation rather than lobbying and litigation, a culture that tries new ideas rather than crushing them.

I believe Detroit can be reborn. The brainpower and technical brilliance are still there. The hardworking men and women in the factories are willing to sacrifice and do their part to ensure the companies' survival. The domestic industry needs to pick itself up and use this moment as an opportunity to transform, not incremental change, but a total conversion that reorients these companies towards raising the standards of automotive excellence and re-

versing decades of decay and complacency. But the deal must be a fair one for the taxpayers, and it must be a policy supportive of innovation and technological change over the long term. And it must destroy forever the industry's fear of change.

I have reviewed the pending draft legislation that would make available $15 billion in emergency loans and require the Big Three to withdraw pending lawsuits against the States that support adopting California's greenhouse gas emission standards. I commend that provision and strongly believe that Congress must go one step further and grant the waiver to California, which would allow California, along with 13 other States that want more efficient, less polluting vehicles, to require them. Recent analysis by the National Resources Defense Council of the plans submitted to Congress by Ford and General Motors shows that these companies are likely to achieve the California targets by 2015. It only makes sense to put into law what companies have said in their plans they are going to do anyway. That is accountability.

Last year, as part of a landmark energy bill, Congress enacted a $25 billion program to help the auto industry transition to building the efficient, high-tech cars of the future. It is the Green Car Factory Fund. That is really what we should call what we are doing. However, due to President Bush's intransigence on using a piece of the $700 billion financial bailout to pay for the auto industry package, we are now forced to raid the Green Car Factory Fund. This is like borrowing from a kid's college fund. The program represents the technological future of our Nation's transportation sector. This fund must be replenished, and it needs to happen soon. Failure to repay it in a timely manner will mean more of the same, Car 1.0, and the vehicles of the future will remain distant dreams, and our foreign oil dependence will only intensify.

We are very fortunate to have a panel of experts that understands the problems the industry is facing and has a vision for its future. I thank them for being here, and I look forward to hearing their views.

[The statement of Mr. Markey follows:]

Opening Statement of Representative Edward J. Markey

"Innovation, Jobs, and Energy Independence:
Reinvigorating the Domestic Auto Industry."
December 9, 2008

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Consumers and businesses around the world are tightening their belts to survive the current economic crisis. And some are being driven to bankruptcy. But—make no mistake—the fundamental reason the Big Three need life support today is their inability to move from Car 1.0 to Car 2.0 over the past half century. A business model premised on bigger cars, wider highways, and more oil is a failed equation. Any recovery of these companies will require more than just fresh cash. It will require a change of culture. A culture that answers challenges with innovation rather than lobbying and litigation. A culture that tries new ideas rather than crushing them.

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opportunity to transform. Not incremental change, but a total conversion that reorients these companies towards raising the standards of automotive excellence and reversing decades of decay and complacency. But the deal must be a fair one for the taxpayers and it must be a policy supportive of innovation and technological change over the long-term. And it must destroy forever the industry's fear of change.

I have reviewed the pending draft legislation that would make available $15 billion in emergency loans and require the Big Three to withdraw pending lawsuits against the states that support adopting California's greenhouse gas emission standards. I commend that provision and strongly believe that Congress must go one step further and require that these companies meet the California targets on a nationwide basis. Recent analysis by the Natural Resources Defense Council of the plans submitted to Congress by Ford and GM shows that these companies are likely to achieve the California targets by 2015. It only makes sense to put into law what companies have said in their plans they are going to do anyway. That's accountability.

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The CHAIRMAN. I would now like to recognize the gentlelady from Michigan Mrs. Miller for an opening statement.

Mrs. MILLER. Thank you very much, Mr. Chairman. I certainly want to thank you for holding this very important hearing on the energy independence implications for the proposal to extend emergency bridge loans to the domestic auto industry and really what it will mean to the industry as well. I look forward to hearing from our distinguished panel very much.

I appreciate the comments that you made, Mr. Chairman, in your opening statement, and I would say that the domestic auto industry will take the challenge that you have laid before us and other Members of Congress have laid before our industry as well. And I think, to put this in perspective, I would like to just point out and ask that we would consider for a moment the entire history of this very cornerstone industry and really what it has meant for the United States of America.

Actually, during World War II—and I mean I come from southeast Michigan, and everybody there—everything ratchets off the auto industry very much for our State, in full transparency. But during World War II, Michigan was known as the arsenal of democracy. People have heard us say that, but it is because when our Nation and our freedom were in dire jeopardy, our domestic auto industry literally had the manufacturing capability to build the armaments that led the entire world to peace. You had Henry Ford churning out B–24 bombers one an hour at Willow Run, which is still a functioning airport there in southeast Michigan. We actually didn't even build vehicles for 2 years during the war effort because we were so totally engaged in the war effort, whether it was planes or tanks or jeeps or everything that our Nation needed really to be able to protect and expand freedom and liberty and democracy. I think that should be pointed out.

As well, when you think about the middle class of America, I think it would be a very difficult argument to be made that AIG or CitiGroup or whatever have created the middle class of America. They may have created the upper class, or assisted with the upper class, but the middle class was really created by the domestic auto industry. When you had millions of Americans who joined the middle class, they got quality health care, earned secure retirements, and were able to send their children to college and build a better life.

I think that much of what has happened to the auto industry, they have not—obviously, mistakes have been made, but everything that has happened, the problems have not been created by them. Many of the problems that they are facing have been in large measure because what has happened on Wall Street.

I would also point out again in this historical look back in history, really, to remember after the absolutely horrific attacks on our Nation of 9/11, at a time when the terrorists really wanted to bring our economy to collapse. That was a big part of why they attacked our Nation in the way that they did. It was the domestic auto industry, led by General Motors, I would point out, who came out with the Keep America Rolling Program. They offered zero-interest financing and rebates, et cetera, to keep people working and

economic activity going so that we would deny the terrorists one of their primary goals, again, crippling our national economy.

Now, the domestic auto industry is leading the way to new technology and innovations that will build the auto industry of the future; innovations that will provide dramatic leaps in fuel economy and which will help reduce greenhouse gas emissions and make America much more energy independent.

General Motors, Ford, and Chrysler have already invested billions of dollars in these technologies. In fact, Ford is estimating by 2011, 50 percent of all of their vehicles will either be hybrid or flex-fuel, which is a wonderful statistic to be able to talk about. Additionally, General Motors is making great progress toward the introduction of the Chevy Volt, which will be the first extended-range, electric-powered vehicle that is expected to be in showrooms in 2010, and the domestic auto industry has already created many other revolutionary technologies that will lead us to the auto industry of the future and the energy independence that all Americans desire.

If any one of these companies were allowed to fail, it would not only have catastrophic effects on our economy in the loss of American jobs, but those very same technologies that these American companies are on the verge of producing that will make America the technological leader of the new green automotive technology and that will help foster our goal of energy independence will not reach the American consumer. We will lose the progress made on innovative projects such as the lithium ion battery and other fantastic opportunities; and we will abnegate American leadership positions to foreign competitors. If we truly want energy independence in America, led by American innovation that creates good American green-collar jobs, we do need to act on this bridge loan, and act now.

Could I have another minute, Mr. Chairman?

The CHAIRMAN. Without objection, yes.

Mrs. MILLER. Thank you.

We certainly heard from the CEOs of the Big Three auto companies again late last week, and they have submitted quality plans to Congress on how they would use these loans and how they are progressing toward the technologies that all of us are desirous of. There certainly seems to be a consensus building now about the bridge loan, and I look at that obviously as a very, very important thing.

I believe that the bridge loans will allow some breathing room until the new Congress and the new administration can take office next year to work on longer-term solutions that will establish a much more vital industrial policy in this Nation that can help our entire manufacturing industry to thrive. We all know that doing nothing is not an option. We do not want the demise of the Big Three automakers, but also many of the suppliers which are leading as well toward the technological innovation that I have just talked about.

We have a great panel here today. I certainly want to in particular welcome Mr. Richard Curless, who joins us. He is the chief technical officer of MAG Industrial Automotive Systems, which is an international machine tool manufacturer, and has substantial

operations in my district as well. They are actually the only remaining U.S. power train supplier to the auto industry, and they are the third largest machine supplier in the world as well.

Again, I look forward to Congress voting affirmatively on the bridge loan. Hopefully, that will happen in the next couple of days. And I look forward to hearing the testimony of the witnesses. Thank you.

The CHAIRMAN. Great. The gentlelady's time has expired.

The Chair recognizes the gentleman from Washington State, Mr. Inslee.

Mr. INSLEE. Thank you. Thanks to the Chair for having this hearing.

We cannot rescue companies today if they are going to die tomorrow. I believe that unless we adopt whole new propulsion systems, whole new drive trains, whole new systems of energy and fuel, that is what is going to happen to our domestic auto industry.

I am hopeful that in the next several months, not just this week, but several months, the Congress will respond to this magic moment where we will either see the ultimate demise of our domestic auto industry if it does not adopt these whole new generations of propulsion systems and fuels, or the U.S. assuming again its rightful place as the most innovative industrial engine in the country, or in the world.

I want to point out what it is at stake right here. I am looking at a Wall Street Journal article of October announcing that the Chinese BYD Company would begin sales in November of their all-electric car with a range of 110 kilometers when fully charged. We look at the Renault Company that is signing contracts with the Better Place Company, that is now totally electrifying the transportation fleets of Israel, Australia, Denmark, and now San Francisco. We have to get in this game nationally or we will be left at the starting post with bridges to nowhere.

So I want to point out that I am hopeful that this Congress will adopt the measures that will assure that the United States gets in this international game at the last possible moment.

Let me give you an example why I think it is the last possible moment. We have a company that makes lithium ion batteries in the Midwest, and right now it is the only potential manufacturer domestically of lithium ion batteries. They got an offer for about $300 million from China to essentially move their company to China. We are in the cusp of trading addiction to Middle Eastern oil for addiction to Chinese lithium ion batteries. So we need to make sure that this industry responds to this opportunity by going to the future, not being tied with the past.

I sent a letter November 17th, and I will submit it to Chairman Frank, suggesting six measures: an open fuel standard; investments in alternative fueling infrastructures; energy efficiency requirements; a Cash for Clunkers program; full funding for plug-in hybrid electric vehicles; and the Federal procurement programs. Those measures will assure the United States doesn't get left at the post in this international competition. I hope we will get this job done. The future of this industry depends on it.

Thank you.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Thank you, Mr. Chairman. We appreciate your appearance here before this committee. Hopefully, you will provide us with information, ideas, and proposals that will help us as we move into some very difficult times.

I am on the Financial Services Committee as well, and we struggled before we approved and set on this $700 billion package. Most of the people around the country believe that Congress voted on AIG and we voted on Bear Stearns. While that troubles me because most people are not really looking at the process, I am more troubled because we, as we often do, have begun to major in minors.

The big talk is not about what is important, which is, I think, coming up with alternative forms of energy as it relates to automobiles, but we are talking about how people arrived in Washington. I think it is dumb to fly in, if you are going to ask for money, in a private jet, but that is irrelevant. The issues that we need to deal with I think we are going to deal with. I mean, after all, those of us on this committee usually don't fly our planes in to meetings. We will just take commercial airlines like regular people. But I am concerned about what we need to do to make the automobile industry viable.

I am from Kansas City, Missouri. We have two plants in my district. Seventy-two hundred people work there, not to mention all of the people who are connected to the manufacturing arm of General Motors and Ford. I am not interested at all in seeing them lose their jobs, which I think will impact all kinds of other industry there.

The package should not be limited to only loan emergency credit to the Big Three auto manufacturers to get out of this short-term crisis. It should also encourage our American companies to further retool their plants and produce much more energy-efficient, higher-mileage cars that are less prone to the volatilities of the oil market.

Everyone is for progress; it is the change they don't like. The proposals that we are going to have to embrace will require change. Things cannot continue as they have gone. I do think that there have been some efforts made, but I think we have clearly not moved as quickly as we could have to put on the highways the kinds of cars that Americans are buying, with titles like Toyota and Datsun.

And so as we go through this hearing, you will, of course, be asked in any number of ways what you would recommend. Closing down the automobile industry in this country is not an option. No one would burn down their house to get rid of a rat. No one would cut off their nose because they are having a bad hair day.

I think that if we cannot see through this, then this Nation is not as great as we all believe it to be. And so we look forward to your testimony. Thank you.

[The information follows:]

U.S. Representative Emanuel Cleaver, II
5th District, Missouri
Statement for the Record
House Select Committee on Energy Independence and Global Warming Hearing
"The Energy Independence Implications of the Auto Bailout Proposal"
Tuesday, December 9, 2008

Chairman Markey, Ranking Member Sensenbrenner, other Members of the Select Committee, good morning. I would like to welcome our distinguished panel of witnesses to the hearing today.

Nationally, more than one million Americans are employed in the manufacturing of motor vehicles, equipment and parts. Out of those, over seven thousand live in the Fifth District of Missouri, and work for either the Ford plant in Claycomo, Missouri or the General Motors (GM) plant in Fairfax, Kansas. I am proud to represent these hard working Americans who build American-made cars. In addition, I also represent many of the nearly 60,000 workers who are in related supply businesses for those plants, and the thousands more who work in businesses that support these workers.

We need to consider how the potential loan assistance package can be best used to invest in the future of America's auto industry, including its workers. The fact that Ford and GM have recently completed retooling their Claycomo and Fairfax plants for the production of hybrid vehicles is encouraging. These investments demonstrate that domestic automakers are committed to utilizing emerging technologies and to gaining competitiveness on the world stage among foreign auto manufacturers.

This package should not be limited to only loan emergency credit to the big three auto manufacturers to get out of this short term crisis. It should also encourage our American companies to further retool their plants and produce much more energy efficient, higher mileage cars that are less prone to the volatilities of the oil market. Additionally, the proposal should aid and encourage new companies to grow and develop green technology innovations. The introduction and mass production of plug-in vehicles like the Chevy Volt and the Dodge Ram Hybrid will aid in reaching America's goal of energy independence and environmental sensitivity. Additionally, the proliferation of such models will also encourage green job training of American workers, which will make them more competitive in the world economy.

I firmly believe that failure of our domestic auto industry is simply not an option our community can afford. We must agree to a solution that will benefit our industry, our workers, and our energy future. I thank all of our witnesses for their insight and suggestions, and I appreciate them taking the time to visit with our committee today.

Thank you.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from California, Mr. McNerney.

Mr. MCNERNEY. Thank you, Mr. Chairman.

The situation today is very frustrating because the Big Three have fought us tooth and nail against producing the kind of cars that we need to make to meet America's needs. As mentioned by the Chairman, they filed lawsuits, they have flooded the Congress with lobbyists, and all this is to fight change and innovation, including California's clean air laws. They filed lawsuits, and they prevented us from moving forward on that score. So now, today, they are sitting here demanding billions of dollars or else they are going to lay off 5 million workers. This is a significant threat.

Part of my district was the epicenter of the financial crisis we are facing. We have had 10 percent unemployment for decades, so we know economic pain, and we know that we don't need any more of it.

Now, before we make decisions we are going to be making this week, I want to hear from what the panel has to say, what the alternatives look like, what we can decide to do besides giving billions of dollars to the Big Three, what alternatives are there out there that make sense for us. So I am looking to you to answer that question.

And also we heard this morning that the auto industry got some credit for keeping the Nation rolling after 9/11, but I can tell you what they did was perpetuated our dependence on imported oil. So we need to look at this as an opportunity to transform our transportation system in a way that meets the needs of the 21st century.

So a lot is sitting on your shoulders to inform us what we can do. Thank you very much.

[The prepared statement of Ms. Blackburn follows:]

Mr. Chairman,

Thank you for holding this hearing and I want to thank the witnesses coming before this committee to testify regarding energy independence and an auto bailout proposal.

Many people agree that U.S. automakers need to make drastic changes to their industry.

But what is government's role in these changes?

Surely, if the auto industry must meet new federal car mandates, government has a minor role to bridge the transition. This was provided with Section 136 of last year's energy bill.

But Detroit also must deal with its fundamental problems of legacy costs and quality and diversity of vehicle fleets.

Why not apply the lessons from the past instead of wasting taxpayer dollars on speculative actions that are likely not to work?

A recent U.S. News and World Report article details how the steel industry faced similar problems. It followed this painful path, but it is now more successful and competitive than ever. Also, some of the domestic airlines went through this process to emerge stronger and more efficient.

Mr. Chairman,

The automobile industry faces significant challenges in the present and the future. It must scrap its failed business model and reorganize into companies that are flexible, meet consumer demand, and managed by competent leaders.

Taxpayers are reluctant to give their money to an industry that refuses to deal with its high labor costs and imprudent business practices.

Without real change, a handout only postpones the inevitable.

I yield the balance of my time.

The CHAIRMAN. We will now turn to our very distinguished panel. Our first witness this morning is Joan Claybrook. She is the president of Public Citizen, where she has a been a consumer advocate and overseer of good government for more than 25 years. Before that, she was the Administrator of the National Highway Traffic Safety Administration in the Carter administration, the period during which fuel efficiency and auto industry bailouts were also hot issues of the day.

We are honored to have you here with us, Ms. Claybrook. Whenever you are ready, please begin.

STATEMENTS OF JOAN CLAYBROOK, PRESIDENT, MASSACHUSETTS PUBLIC CITIZEN; REUBEN MUNGER, CHAIRMAN AND CO-FOUNDER, BRIGHT AUTOMOTIVE, ANDERSON, INDIANA; PETER MORICI, ROBERT H. SMITH SCHOOL OF BUSINESS LOGISTICS, BUSINESS AND PUBLIC POLICY, UNIVERSITY OF MARYLAND; GEOFF WARDLE, DIRECTOR, ADVANCED MOBILITY RESEARCH, ART CENTER COLLEGE OF DESIGN, PASADENA, CALIFORNIA; AND RICHARD CURLESS, CHIEF TECHNICAL OFFICER, MAG INDUSTRIAL AUTOMATION SYSTEMS, STERLING HEIGHTS, MICHIGAN

STATEMENT OF JOAN CLAYBROOK

Ms. CLAYBROOK. Mr. Chairman, I would like my testimony submitted for the record.

The CHAIRMAN. Without objection.

Ms. CLAYBROOK. I am going to adjust it a little bit because the legislation that is now on the table to be enacted by the Congress this week has just come out. I didn't have a chance to deal with that in writing my testimony.

I would like to say that I have worked on auto industry issues since 1966 when I first came to Washington, D.C., and I worked for a member of this committee on the legislation creating the National Highway Traffic Safety Administration, and within 3 months of getting here, I was nicknamed the Dragon Lady by the auto industry because I was pushing for Federal legislation of safety by this industry.

I was interested to note that just this week General Motors published an ad in Automotive News apologizing to the public for its failure to carry out its obligations really to the public for fuel economy and other improvements in their vehicles.

I think that what I would like to just mention particularly is that we do favor having a bailout of this industry, but a bailout with lots of conditions, and those conditions are listed in my testimony. Most important in those conditions should be that there is strong and tough oversight to make sure that this industry uses the money well and comes to the conclusions that the American public wants.

We did not favor taking the money out of the 2007 law, section 136, which is the innovative fund, because we believe that that is an extremely important fund to help not only the manufacturers, but the suppliers, who are the real innovators in this industry. And we talked to Speaker Pelosi's office, and she said the money would be refunded through the stimulus program that is coming forward.

So the three areas that we are concerned about are accountability and with a car czar of stature who will oversee this and also to make sure that there is a return on the investment to the public by the improvements in vehicles, and then, particularly important, safety and environmental considerations.

Now, I looked at the bill, and I would just like to highlight the things that are not in the bill that we think should be in the bill. And I am sorry they are not in my testimony because we didn't have a chance to read it then.

The first is there is nothing about safety in here. The auto manufacturers for years have complained that the reason they couldn't make more fuel-efficient vehicles is because it would cause unsafe vehicles, and that is malarkey because most of the improvements in fuel efficiency come from technology. It is not all smaller vehicles. Plus, the fact that with the safety improvements such as air bags and so on and the structure of the vehicles that absorb the energy of the crash, safety is about the same for most vehicles today that are manufactured today, including the smaller-size vehicles. So safety is a technology issue as well. We think it ought to be a piece of this. It ought to be mentioned.

Secondly, on page 7 of the legislation, subsection 6(a)(1)(b), there is a definition of "interested parties." It has employees and retirees and trade unions and creditors and suppliers and auto dealers and shareholders, but doesn't have anything about experts on emissions and fuel economy and safety. We think that ought to be in the definition of an interested party because that is what this bill is all about is the failure of the manufacturers to really listen to the people who have advocated this for so many years.

Third, we think that the so-called dual-fuel credit, which is a 1.2 MPG credit that the manufacturers got stuck in the law many years ago for a very discreet, short period of time and then was extended by the Energy Act, should be eliminated because in calculating the fuel economy, if they have a dual-fuel vehicle, they don't have to meet 1.2 MPG of the required standard. In the NRDC calculation, Mr. Chairman, that you used, they presume that they didn't have that 1.2 MPG.

We believe, as you do, that the waiver should be granted in California. I think in the new administration that they are going to grant that waiver at EPA. Why not take care of it now?

One of the most important things is the auto industry has made promises, promises. Promises to have all air bags in all cars by 1975, the President of General Motors Ed Cole said. Promises to have greater fuel efficiency, all the auto manufacturers said in 2000. By 2005, they would have a 25 percent increase. Then they didn't do it. Then they said they were going to have side head air bags. Then they didn't do it. They did it in some vehicles. Again and again promises that have not been carried out.

Anything we want these manufactures to do should be in the law. It has to be in the law, because if it is not done, then organizations like Public Citizen and NRDC and others can sue and force this to happen, and there won't be the delay that there traditionally has been when there have been promises and everyone has relaxed and said, Great, and they don't do it.

Another thing that I think would be really important to put in here is a requirement that Federal procurement and encouragement for fleet procurement by private companies purchase the best vehicles that these manufacturers make, because I did that when I was head of the National Highway Traffic Safety Administration to get air bags on the highway. Ford Motor Company agreed to make 5,000 air-bag cars before they were generally available to the public. It is a good help to the manufacturers to have Federal procurement of their better vehicles.

I believe that there ought to be a person from the Federal Government on the board of directors of each of these manufacturers that gets a bailout loan, because it is on the board of directors that you really see as much of the inside of a company as you are ever going to see. That was something that the UAW had worked out with the Chrysler bailout, and I think it ought to be in this legislation.

Those are the major things that I think are missing.

Finally, the last thing is that the requirement for meeting fuel economy here is only to meet the 2007 law, which is a meager provision, as the Chairman and I have debated on a prior occasion. It is 35 MPG by 2020. That is not enough. We have been talking about having 25 percent above that. That is not—at least the way I read this bill, it is not in this bill. And it should be in this bill that if they are going to get these loans, they have got to go beyond the 2007 law and do at least a 25 percent increase.

Now, that is what they say in their plans they are going to do. Right? But that is in their plans. Remember, promises, promises. They do promises, promises. We don't know that that is ever going to happen.

So the other point and the other reason for doing it is that the manufacturers—when I first went to see Ford Motor Company, one of the vice presidents pulled out a long drawer and had a long list of requirements they had to meet, and he said, This is how we make our vehicles. We meet these requirements. Well, if it is not in the law, it is only a promise, it is not going to be on the list. So let us make sure it is on the list and make it a requirement in the law.

Thank you very much, Mr. Chairman, for the opportunity to testify.

The CHAIRMAN. Thank you, Ms. Claybrook, very much.

[The statement of Ms. Claybrook follows:]

Auto Safety Group • Congress Watch • Energy Program • Global Trade Watch • Health Research Group • Litigation Group
Joan Claybrook, President

Testimony of Joan Claybrook, President, Public Citizen
before the
House Select Committee on Energy Independence and Global Warming
December 9, 2008

Chairman Markey and members of the Select Committee, I appreciate the opportunity to testify today. I am Joan Claybrook, president of Public Citizen, and I have worked on auto safety and fuel economy issues for more than 40 years. As the administrator of the National Highway Traffic Safety Administration (NHTSA) from 1977-1981, I issued the first fuel economy standards, which forced recalcitrant Detroit manufacturers to double average car fuel economy to 27.5 miles per gallon by 1985. Since that time I have consistently advocated for tough increases in fuel economy standards to support a national energy policy that promotes conservation and efficiency as a means of insulating the nation from volatile oil prices and to push Detroit to compete with foreign-based manufacturers. I also issued the 1977 passive restraint rule, resulting in airbags that save about 3,000 lives each year and successfully pressed for enactment of five laws since 1991 to force manufacturers to improve vehicle safety.

The industry has tried to make the case that the problems it faces today are a result only of the credit crisis. However, the domestic industry has been in trouble for several years as oil price spikes in 2005 and the summer of 2008 have raised consumer demand for fuel efficient vehicles and shifted the market away from the SUVs and light trucks that have been Detroit's cash cows – the core of their product lines since the mid-1990s. The domestic industry has fought against increased fuel economy for three decades. The broken promises of the Partnership for a New Generation of Vehicles (PNGV), which was a voluntary arrangement in 1993 between the Department of Energy and the domestic auto manufacturers to build an 80 mpg car by 2004 that never materialized, demand skepticism about automakers' promises.

While it is immutable that the domestic industry is in distress and the consequences of its failure would cause a devastating ripple through the economy, public investment in the Detroit Three provides an opportunity for the industry to make philosophical changes in how it approaches the business of building cars. The public statements made by the industry, and the plans the companies submitted to Congress on December 2, 2008, show some evidence that this perspective is changing, but we ask that Congress make these promises binding. I attach to my testimony a litany of Detroit's prior broken promises.

Public Citizen acknowledges the impact of the larger economic crisis, and we note for the record that the Japanese auto manufacturers saw sales figures drop at almost the same rate as the domestic manufacturers in September and October 2008. We do not take the position that the credit crunch and widespread financial anxiety have not contributed to the severity of the

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domestic industry's problems. However, foreign manufacturers have not come seeking a bailout, in large measure because long-standing investment in efficient vehicles have put them in a better position before the credit crunch, and will leave them in a better position once economic recovery begins.

Public Citizen disagrees with the choice to provide $15 billion in emergency loans to the auto companies from money that was appropriated to fund the advanced technology vehicle retooling incentives established in Section 136 of the Energy Independence and Security Act (EISA) in 2007. If this is the source of the funds, they must be replenished, and there must be a clear plan for how this will be achieved in the legislation now being negotiated. We do, however, agree that negotiating the bailout in two steps is prudent, as it allows for careful consideration of further terms and conditions that might be required of the industry.

Conditions

Public Citizen supports taking action to help the Detroit Three companies but we must emphasize that if Congress approves a bailout, the money must be conditioned with clear requirements and accountability for the industry. The financial problems facing domestic manufacturers are largely a result of their failure to adapt to a changing market, their risky reliance on gas guzzling vehicles, and failure to invest in innovative safety, fuel economy, and emissions technologies until literally forced to do so by regulation or lack of sales. Before the American taxpayers come again to the rescue, the industry must agree under statutory mandate to deliver fuel economy and safety that consumers want and need, to help regain a prominent position in the global automobile market.

Funds allocated to the Detroit Three are an investment by the American taxpayer, not a simple cash infusion to an industry with a failed business model. It must be well managed to assure a return on the investment in the form of a more viable domestic automobile industry with safer, more fuel efficient and cars that consumers are demanding. Specifically three areas need to be the focus of strict government oversight of a bailout: accountability, a return on the investment, and environmental safety and considerations.

Accountability

The companies participating in the bailout must provide full transparency of their actions in relation to the funds they receive. Regular contact with government overseers must be maintained and other guarantees must be met including the following:

1. An oversight board with the "car czar" as the chair and with authority to secure and review all industry documentation and sufficient funding and staff to keep close track of the Detroit companies' progress. The board can also demand concessions from affected parties.
2. The auto industry should provide equity stakes, membership by government representatives on their Boards of Directors, limit executive pay and bonuses, ban golden parachutes, and prohibit dividend payments until the loans are repaid.

3. Automakers should also be restricted from using government funds or guarantee of funds for lobbying and campaign contributions.
4. A bar on equity investments in foreign firms and domestic mergers and acquisitions in the text of this bailout, unless approved by the oversight board.
5. Bailout funds should be granted senior debt status, to ensure taxpayers are paid back first.

Return on Investment

Public funding must provide a tangible public benefit. If the Big Three used these monies to invest in more fuel efficient technologies it would provide a great benefit to the entire country. Such an investment would reduce oil consumption and foreign oil imports, reduce time and money spent at the pump, and it would reduce harmful greenhouse gas emissions that contribute to global warming. These investments are essential for companies to return to profitability. Specifically:

1. The legislation should require automakers receiving bailout money to implement promised increases in fuel economy, by instructing the oversight board to include the particular plans in each of the loan documents.
2. Automakers who achieve fuel economy above and beyond these promises should get a quarter-point reduction in the interest rate on these loans. Regulation does not quash innovation as some would have you believe, rather, it nurtures it by creating incentives to improve.
3. Automakers must provide energy savings plans to supplement operating plans.

Environmental and Safety Considerations

The auto industry has fought adamantly against the stricter greenhouse gas emissions standards set by California and other states, even though meeting these requirements would benefit them greatly by making their vehicles more competitive against foreign manufacturers.[1] They have falsely argued that higher fuel economy requirements undercut safety. However, increases in fuel economy have been mainly made using technology, discrediting this argument. The technology exists to meet these standards, as well as improved safety. If the domestic auto industry had the foresight to meet these standards instead of paying lobbyists to avoid them, they might be more like their foreign counterparts, who are not before Congress begging for government handouts. Additional steps for the manufacturers include:

1. Automakers must suspend litigation blocking California and other states from setting greenhouse gas emissions standards.
2. NHTSA must also be required to adopt the more realistic calculation for fuel economy promulgated by the Environmental Protection Agency in 2006.[2]
3. Automakers must support afety improvements including a strong rollover roof crush and ejection standard, a compatibility and aggressivity reduction standard, and new child protection standards.

Consumer and environmental groups in conjunction with Pew Charitable Trusts, have taken out an ad supporting the retention of environmental safeguards and the protection of the California greenhouse gas emissions standards, which we submit for the record.

A Bailout with Conditions is Preferable to Bankruptcy

Public Citizen acknowledges that the auto companies are in significant financial distress and that if Congress does not approve a bailout, it is likely that at least one of the domestic manufacturers will be forced to file for bankruptcy. It is our position that a bailout with strong taxpayer protections is preferable to bankruptcy, in terms of impact on the economy, job losses, and long-term viability of our industrial base.

Conditions that ensure equity, accountability and a commitment to building the safer and more fuel efficient vehicles the market demands are necessary to protect taxpayers from the risk assumed by investing in the troubled domestic auto industry. To promote compliance with these conditions and assure that taxpayers' interests are paramount in this process, it is essential to establish an oversight board similar to what was described in the testimony of Gene Dodaro of the Government Accountability Office before the Senate Banking Committee.[3] Public Citizen supports the recommendation of House Speaker Nancy Pelosi that such an oversight board be chaired by the "car czar" and include representatives from the Departments of Transportation, Energy, Treasury, Commerce, Labor, and the Environmental Protection Agency. We additionally recommend that a member of the Board of Governors of the Federal Reserve, and a representative from the Government Accountability Office be added to the board. An advisory group consisting of members representing consumer, safety, and environmental interests, as well as labor unions, auto supplier companies and financial experts should support the board.

We do not believe that a single overseer would be able to effectively address all of the complex and cross-cutting issues related to restoring the domestic auto industry to profitability. The potential usefulness of a board was admitted even by General Motors Chairman Richard Wagoner in response to questions in a hearing in the Senate Banking Committee December 4, 2008.

The board named to supervise the process in the 1979 Chrysler bailout is described in the act itself:

> There is established a Chrysler Corporation Loan Guarantee Board which shall consist of the Secretary of the Treasury who shall be the Chairperson of the Board, the Chairman of the Board of Governors of the Federal Reserve System, and the Comptroller General of the United States. The Secretary of Labor and the Secretary of Transportation shall be ex officio nonvoting members of the board.[4]

A strong oversight board is clearly needed for the auto industry bailout package. While there is less time for decisions compared to the 1979 bailout, sacrificing quality for expedition will only result in the loss of taxpayer dollars. An advisory group to the board for the bailout should include industry financial specialists to ensure proper business practices are followed so the industry won't return for more money in the future, environmentalists to ensure that fuel

economy measures are met that will allow Detroit's vehicles to be more efficient, and safety advocates to make sure safety is not surrendered in the name of a balanced checkbook.

The oversight board would be particularly helpful in guiding the companies in their ongoing plans for restructuring. The domestic manufacturers have already been engaged in or promised substantial restructuring activities including job cuts, labor renegotiations, brand contractions, and plant closures and stoppages. The oversight board, led by the "car czar," would provide assurance that restructuring activities are completed in the long-term interest of the taxpayers.

Fuel efficiency and safety

Good energy policy is good economic policy, and it is also good business for the automakers. High and volatile gas prices since 2005, as well as increased public concern about global warming have driven consumers away from the gas guzzling vehicles that had been popular since the mid-1990s. While gas prices today are comparatively low, they will jump up again with worldwide economic recovery. The plans released by General Motors and Ford promise increases in fuel economy for the 2012 model year that exceed their obligations in 2015 under the proposed fuel economy standards for model years 2011-2015 released by NHTSA in May 2008.[5] They would also be close to meeting the state greenhouse gas emissions requirements initiated by California and other states.

Congress must be careful when considering how to set higher fuel economy targets for automakers accepting loans. The Energy Policy and Conservation Act (EPCA), which established the fuel economy program in 1975, is a technology-forcing standard with a mandate to set the "maximum feasible" fuel economy standards with the "need of the nation to conserve energy" as a central feature. However, the amendments to EPCA made by EISA substantially weakened the technology-forcing thrust of the law at the urging of the Detroit companies, by permitting the agency to set attribute-based standards "in the form of a mathematical function." This clause is an implicit espousal of NHTSA's restructured fuel economy scheme in which standards are now set for each manufacturer using industry-biased cost-benefit analysis.

The restructured fuel economy scheme was developed as a result of intense, back-room meetings between representatives from NHTSA, the Office of Management and Budget and the Office of the Vice President.[6] This scheme is fundamentally designed in such a way that it is impossible to meet the requirement of EPCA to set maximum feasible standards. Each manufacturer is assigned a target for its passenger car and light truck fleets, respectively, based on the characteristics of vehicles in each manufacturer's fleets. This results in different compliance requirements for each manufacturer, and undermines the government's ability to enforce the law.

DOMESTIC AND JAPANESE FUEL ECONOMY PERFORMANCE

Manufacturer	*Domestic Car Fleet (mpg)*			*Light Truck Fleet (mpg)*		
	2008	2012	2015	2008	2012	2015
General Motors	29.4	31.7	34.7	22.5	25.4	27.4
Ford	29.5	32.7	35.5	23.2	26.1	28.8
Chrysler	29.3	29.3	33.6	23.6	26.6	29.1
Toyota	34.7	31.5	34.6	24.0	26.0	28.0
Honda	35.2	33.8	36.4	25.4	27.7	29.6
Nissan	33.5	33.2	35.9	23.2	26.2	28.2

Values for 2008 reflect manufacturer averages as reported by NHTSA's March 2008 "Summary of Fuel Economy Performance." Values for 2012 and 2015 are the targets published in NHTSA's Notice of Proposed Rulemaking for the model year 2011-2015 fuel economy standards.

Promises, promises

We have heard fuel economy and safety promises from the domestic auto industry again and again, but too often the gains were never realized. In July 2000, Ford, General Motors and (then) DaimlerChrysler announced a commitment to increase the fuel economy of its SUV fleet by 25 percent in five years. However, in 2002, as NHTSA revised fuel economy standards for light trucks, these companies "clarified" those pledges, urging the agency to disregard the promised increases. Instead of making big, public announcements reneging on their promises, the automakers sent emails to relevant staff at NHTSA.[7] In 2003, when NHTSA released its light truck fuel economy standards for the 2005-2007 model years, Ford admitted publically that it would not honor its prior promise.

The auto industry has shirked other promises related to making safety improvements as well. General Motors promised in 1970 that it would install airbags in all its vehicles by 1975. But the fight to make airbags mandatory stretched to 1991, when Congress mandated them. And in 2003, as part of a supposed effort to improve vehicle compatibility, automakers announced a voluntary plan to develop a standard, but nothing came of it. The manufacturers also promised to test and voluntarily install side air bags in most new vehicles, but this promise has only been partially met. The plan, however, did not make any specific commitment or deadline for redesigning vehicles to improve side impact safety. These improvements will follow the upgraded side-impact standard promulgated by NHTSA in 2007, which the agency recently delayed, so it will not be completely phased in until 2015.[8]

In response to the fuel economy proposal for model years 2011-2015, General Motors said "We intend to do our best to meet these challenging CAFE standards, but *additionally* complying with stringent state standards would present us with huge additional costs. . . .We do not believe it is realistically possible to comply with California's CO_2 standards given . . .the extent of technical improvements we believe would be required in the time frame provided."[9]

However, in the plans submitted to Congress last week, General Motors says it would achieve a fleet fuel economy of 37.3 mpg for its passenger car fleet and 27.5 mpg for light trucks by 2012.[10] Ford echoes similar promises, saying it intends to increase its passenger car and light truck fleets fuel economy by 26 percent by 2012, and 36 percent in 2015. Although Ford and General Motors are still complaining about the cost of meeting the California greenhouse gas

emissions standards, an analysis by the Natural Resources Defense Council and verified by the California Air Resources Board and submitted to the Committee suggests that if Ford and General Motors followed through with these promises, they would comply with California standards if they were applied nationally. This deception by the manufacturers is not an auspicious beginning for this bailout.

PASSENGER CAR FUEL ECONOMY PROMISES AND STANDARDS

Manufacturer	*2008 passenger car fuel economy*[11]	*2012 NHTSA standard*[12]	*2012 company promise*[13]	*2012 State CO_2 standard (mpg-equiv)*	*2015 NHTSA standard*[14]	*2015 State CO_2 standard (mpg-equiv)*[15]
General Motors	29.4	31.7	37.3	37.6*	34.7	40.6
Ford	29.5	32.7	35.5†		35.5	
Chrysler	29.3	29.3	N/A‡		33.6	

Congress must make sure that the automakers are bound to their promises to increase fuel economy either by mandating more stringent regulations in the bailout legislation, or instructing the oversight board to include manufacturers' plans in the loan documents. Making good on these promises will help the industry become competitive again. And agreeing to binding agreements will signal that the industry is really serious about changing its tune and abandoning the gas guzzling vehicles that the domestic industry and the American consumer need to leave behind.

Industry's continued fight against fuel economy and safety regulation

When the auto industry cannot block mandates from Congress, it fights to weaken and delay regulations as they are promulgated through NHTSA. The industry submitted competing cost estimates for the model year 2011-2015 fuel economy standards proposed by NHTSA this spring. Under the restructured fuel economy program, fuel economy targets are very sensitive to cost estimates, so the industry submitted higher cost estimates to game the system and receive lower targets.

The auto industry should suspend all litigation over the California greenhouse gas standards. Public Citizen supports the position of several States' attorneys general that Congress should include in the bailout legislation language that makes clear the position of the courts that the greenhouse gas emissions standards for vehicles set by California and 13 other states are not preempted by EPCA or any other law.[16]

* Greenhouse gas emissions standards set by the California Air Resources Board are the same for every manufacturer.

† Based on 2005 model year fuel economy of Ford as reported by NHTSA, using Ford's promise to get 26 percent increase from 2005 in 2012.

‡ Chrysler did not make specific promises regarding fuel economy performance, instead: "Chrysler accepts all currently applicable CAFE standards as a condition to the funding."

Just as the industry has resisted making improvements in fuel economy, it has also resisted improving the safety of its vehicles. These companies should support new safety standards including strong rollover roof crush and ejection standards to help save the 10,800 people who die each year in rollover crashes. They should also support the introduction of a compatibility and aggressivity reduction safety standard, which was included as part of fuel economy bills introduced by Sen. Feinstein in 2006 and 2007. Such standards are beneficial for safety and fuel economy because they encourage closing the weight and size gap between SUVs/light trucks and cars. A compatibility standard would also address other vehicle characteristics related to crash compatibility such as bumper height and front-end geometry. Manufacturers should also support child protection standards to ensure that all occupants in and around vehicles are protected. Hundreds of small children are killed needlessly each year.

Advanced vehicle loan guarantees versus bailout

Public Citizen unequivocally opposes to reallocating for industry cash flow purposes the money allocated in EISA Section 136 for retooling loan guarantees to be overseen by the Department of Energy. These funds are not meant to help companies merely comply with fuel economy standards. They are meant to help manufacturers retool facilities and make capital-intensive investments for the future. Vehicles that Section 136 funds are meant to fund will benefit vehicles and components that are still marketable beyond 2020. On December 7, 2008, the *Washington Post* reported that House Speaker Nancy Pelosi would consider the Bush administration demand that the Section 136 money provide $15 billion in temporary assistance to the auto industry, while a more robust long-term plan could be negotiated.[17] Although the money would have to be paid back into the advanced vehicle incentive program, we urge that this be specified in any legislation adopted this week.

We support allocating the bailout money from the $700 billion financial services bailout. But if that is not the source of funding, then it should be from completely separate appropriations. The Section 136 money was intended to be used to build advanced vehicles and to provide funding for retooling of plants to build vehicles and components to get significant improvements in fuel economy. This money should not be used for day-to-day operating funding, or to pay legacy and health care costs.

The domestic manufacturers did not publically lobby for Congress to fund the advanced vehicles loan guarantee program until the fall, when car sales dropped off precipitously. We wonder why the automakers were not more aggressive about getting Congress to appropriate funding for this program, which was enacted in late 2007. In late November 2008, General Motors submitted an application for $3.6 billion in loan guarantees to finance the Chevrolet Volt project, which has been ongoing for several years.[18]

Supplier companies drive innovation

Under Section 136, auto industry supplier companies that build "qualifying components," are defined as components that are: "(A) designed for advanced technology vehicles; and (B) installed for the purpose of meeting the performance requirements of advanced technology vehicles."[19] For many years, it has been the supplier companies that have driven the development of innovative new technologies. Naturally, it is beneficial for supplier companies to push technology forward. By providing better, more advanced components, supplier companies can stand out and compete for contracts from the manufacturers. Thus, Section 136 funds should not be depleted so that suppliers cannot participate as they should.

Also, suppliers have too often been met with resistance from the domestic auto industry to voluntarily install technologically advanced components. In the case of electronic stability control and laminated glazing, supplier companies have worked with public interest groups to advocate for new regulations to force automakers to install these components. A regulation requiring electronic stability control in all vehicles was required by the 2005 surface transportation bill (the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). And although NHTSA has not yet released a proposal, it is likely that the ejection mitigation rule required under the same law will mandate laminated window glazing. The same resistance by manufacturers applies to failure to adopt fuel economy innovation, including turbocharged engines and 6-speed automatic transmissions.

Lessons from Chrysler

Almost 30 years ago Chrysler found itself in a similar financial situation. President and CEO John Riccardo came before Congress to ask for $1 billion to keep the company alive after rising oil prices left the company's inefficient cars stagnant on dealers' lots. The company had just posted its worst quarterly loss ever up until that time.

Congress initially turned down Chrysler's request, but after months of negotiating and the resignation of Mr. Riccardo in favor of Lee Iacocca, a different approach was settled upon. Congress passed the Chrysler Corporation Loan Guarantee Act of 1979. Instead of granting the request of funds with no strings attached, a $1.5 billion loan guarantee was issued that was coupled with strict oversight and concessions that had to be made. Management, labor, and other stakeholders made $2 billion concessions including Mr. Iacocca's pledge to work for $1 a year until the company turned a profit. A ten year loan was issued and Chrysler was able to pay them back seven years early netting the government a gain of $350 million in interest.

This action was successful in returning Chrysler to profitability. We need to closely examine the lessons from this act when crafting the best response to the Big Three's current financial dilemma. The greatest lesson from this experience is that including strictures on the bailout did not cause the company to fail, but rather helped it to succeed as it advanced important goals including compliance with safety and fuel economy rules. The statutory language from the Chrysler bailout provides a strong basis upon which to craft the new bailout bill.

The program included strong oversight protections through a strong board that was given enough authority to intervene in the corporation's decisions, required compliance with fuel economy and safety standards, limits on executive pay, and encouraged a new CEO determined to turn the company around. The board was successful in protecting taxpayer and consumer interests by forcing Chrysler to drop a plan to build gas-guzzling rear wheel drive vehicles.

Conclusions

This bailout process is painful because the auto industry has been an engine of domestic manufacturing for more than 60 years, and a large number of Americans are employed directly or indirectly or identify with the industry. The restructuring required to save the companies will also be painful and will require fundamental changes in the corporate and union operating philosophies of what has been one of the most powerful industrial lobbies.

If the industry is willing to step back and seriously contemplate how they will operate in the future, then it might just be salvageable. A strong, committed oversight board that is willing to frankly assess the situation of the industry is vital to any bailout program being successful in turning the industry around. The outcome of this program is far from predictable, so the interest of the taxpayer needs to be considered every step of the way, and frequent and regular reporting to Congress from the board on the progress of the industry will be needed to assure the industry is on the right track.

A revitalization of the domestic auto industry including building fuel efficient vehicles is central to the companies' recovery. On a longer-term horizon, these companies should consider expanding manufacturing capacity into other mass transportation such as for transit and rail vehicles. Expanding markets for clean, efficient buses, mass transit rail, and intercity heavy rail vehicles will provide new customers for the industry. Successfully diversifying into these areas would make the U.S. auto industry competitive in the world market, while at the same time making vehicles that can provide cleaner, safer transportation for the future.

Endnotes

[1] States that have adopted the California greenhouse gas emissions standards for light duty vehicles are: Arizona, California, Connecticut, District of Columbia, Maine, Maryland, Massachusetts, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington.
[2] *See* 71 *Fed. Reg.* 77872, 77969. (December 27, 2006).
[3] *See* Testimony of Gene Dodaro, Acting Comptroller General of the United States, Government Accountability Office before the Senate Committee on Banking, Housing and Urban Development. (December 4, 2008).
[4] Chrysler Corporation Loan Guarantee Act of 1979. PL 96-185. Jan 7, 1980. 93 Stat 1324.
[5] *See* 73 *Fed. Reg.* 24352, 24487 (May 2, 2008) at 24444. General Motors said in its report submitted to Congress that it would raise its car fleet fuel economy to 37.3 mpg in 2012. NHTSA's proposed fuel economy target for General Motors' passenger car fleet is 31.7 mpg, so General Motors' promise would exceed the target by 18 percent. Ford's report to Congress promised at 26 percent increase in fuel economy from its 2005 baseline. We estimated this baseline from NHTSA's Summary of Fuel Economy Performance for October 2006 as 28.2 mpg for its car fleet. From this estimate, Ford is promising a 2012 fuel economy goal of 35.5 mpg, which exceeds the target set by NHTSA for 2012 by 8.5 percent. NHTSA has not yet released a final rule for the model year 2011-2015 fuel economy standards, so these numbers are subject to change.
[6] *See* "Slip Sliding Away: the Cheney Sliding Scale for Fuel Economy." Public Citizen. August 2008. Available at: http://www.citizen.org/documents/cheneyscale.pdf
[7] Public Citizen obtained copies of these emails in a Freedom of Information Act request.
[8] *See* 73 *Fed. Reg.* 32473, 32485 (June 9, 2008) at 32477. It is worth noting that NHTSA this rule authorizes and extension of lead time from the final rule published in 2007, giving manufacturers an additional year of lead time, and an additional year to phase-in the requirements.
[9] Comments of General Motors to NHTSA Docket No. NHTSA-2008-0089 at 0162. (July 1, 2008).
[10] *See* "Restructuring Plan for Long-Term Viability." General Motors. Submitted to the Senate Banking Committee. (December 2, 2008).
[11] "Summary of Fuel Economy Performance." National Highway Traffic Safety Administration (March 2008)
[12] *See* 73 *Fed. Reg.* 24352, 24487 (May 2, 2008) at 24444.
[13] *See* "Restructuring Plan for Long-Term Viability." General Motors. Submitted to the Senate Banking Committee. (December 2, 2008). & "Ford Motor Company Business Plan." Ford Motor Company. Submitted to the Senate Banking Committee. (December 2, 2008).
[14] 73 *Fed. Reg.* 24444.
[15] "Comparison of Greenhouse Gas Reductions for the United States and Canada under U.S. CAFE Standards and California Air Resources Board Greenhouse Gas Regulations." California Air Resources Board. (February 25, 2008).
[16] The Attorneys General of Vermont, California, Connecticut, Maryland, Massachusetts, Oregon and Rhode Island sent a letter to Speaker Pelosi and Majority Leader Reid on November 17, 2008.
[17] Lori Montgomery and Kendra Marr. "Talks Turn to Terms for Auto Aid." *The Washington Post.* (December 7, 2008).
[18] David Shephardson. "Energy Department seeks more info on $16 billion in auto retooling requests." *The Detroit News.* (December 4, 2008).
[19] *See* Energy Independence and Security Act. P.L. 110-140. (December 19, 2007).

The CHAIRMAN. Our next witness is Mr. Reuben Munger, co-founder and chairman of Bright Automotive. His Indiana-based startup company is developing a high-volume, purpose-built, highly efficient plug-in hybrid electric vehicle. We look forward to your testimony, Mr. Munger.

STATEMENT OF REUBEN MUNGER

Mr. MUNGER. Thank you, Mr. Chairman and members of the committee. Bright Automotive appreciates the opportunity to testify before you this morning.

Chairman Markey, I am Reuben Munger. I am chairman of Bright Automotive. We are, as you mentioned, a startup automotive company based in Anderson, Indiana.

I have a written statement and ask that it be submitted for the record, and I will summarize that statement here.

The CHAIRMAN. Without objection.

Mr. MUNGER. My statement also provides written answers to some of the committee's questions.

I am joined today by John Waters, chief executive officer of Bright, and Lyle Shuey, vice president of marketing and sales. Both gentlemen have over 20 years of automotive experience. This is a typical situation among our team. It includes experienced members with time at Chrysler, General Motors, Delphi, and Johnson Controls. The key aspect of this industry is they are experts who understand and know how to deliver on what this country needs in the way of advanced vehicles.

We are at a unique moment of time where there is an alignment between the national and industrial interest. The goal here is for me to discuss a little bit about what Bright has found to be possible. We are responding to a congressional mandate and to a public challenge to make better vehicles that are more efficient, that are cost-effective, and that are greener, and, by building those vehicles, to provide new sustainable jobs in the automobile industry.

Bright is a startup company whose mission is to bring to market advanced vehicles. We were launched as a stand-alone company out of the Colorado-based Rocky Mountain Institute, the outcome of a longstanding nonprofit-based consortium that included partners like Johnson Controls, Alcoa, Google.org, and the Turner Foundation. Our flagship product, the first of several from a common platform, is a plug-in hybrid electric vehicle which will go for up to 100 miles per gallon. That is a five times improvement over the best-in-class competitor in our class.

Bright is on track to be in production at an annual rate of 50,000 vehicles per year by 2012, and to grow from there. As a new startup, Bright will ramp to scale, and do it immediately. Our focus is on optimizing platform physics. Beyond just an advanced power train, it is a combination of lightweighting, best-in-class aerodynamics, low-rolling resistance tires, sustainable materials, and that advanced electric power train that combine to provide truly breakthrough opportunities.

To make the vehicle of the future, you can't begin with an existing or normal platform. Retrofitting and adaptation is only part of the solution. You need to begin from scratch and build from the ground up. This solves some of the economic and efficiency challenges that are presented by advanced batteries and technologies.

Bright adopted a longstanding "listen to the customer" approach. We spoke to numerous vendors, drivers, program managers, users, and other customers of our vehicle across more than 20 States so that the customer, the user of our vehicle, helped us design our first program. We see the future of the auto industry as a smart electrified fleet that intelligently communicates with the grid, incorporates heavy renewable sources, and accelerates the decarbonization of two of the largest U.S. energy consumers, transportation and electrification/buildings.

In order to increase efficiency of the U.S. vehicle fleet, industry needs to focus on new platforms and materials; develop and bring to scale batteries, motors, and power electronics; and prepare for the ecosystem of innovation. Bright's new vehicle platform does each of these things. The technologies available and necessary for this transformation are here. The path forward is merely one of implementation and execution.

On December 19, 2007, 10 days short of a year ago, the President signed into law the Energy Independence and Security Act of 2007. This law recognized it was in the national interest to have a more efficient vehicle fleet. Congress, realizing that this presented enormous challenges to the industry, created section 136 of that law, which you, Mr. Chairman, refer to as the Green Car Factory Fund. This advanced technology program——

The CHAIRMAN. I get tired of people calling it 136. It is what it is, the Green Car Factory Fund. If people would call it that, then the public would understand what the fight is over.

Mr. MUNGER. This loan program is being administered by the Department of Energy. The Green Car Factory Fund is cited in all the plans of the Detroit Three as a key component of funding their compliance with new efficiency regulations.

Section 136 is a critical component of the transformation of the industry. It has the potential to be the catalyst for achieving positive change. As an example of that, Bright Automotive last week submitted our proposal for a loan under this fund. It is a critical component of the path forward for companies like us, as well as the Big Three. You have seen numerous applications under the program.

Our Nation's small business has a longstanding and proud tradition. It is the financial and economic backbone of this Nation. It is also the incubator of new ideas, new challenges, and new industries.

Bright Automotive is a small business, a startup company that accepts the challenges of the day. It is dedicated to the design and production of a new cost-efficient, effective, next-generation vehicle that has the potential to revitalize the automobile industry, to serve our customers, and to put people to work, and in the process make our Nation and our world a better and greener place.

I appreciate your attention and thank you for the opportunity to speak to you.

The CHAIRMAN. Thank you, Mr. Munger. By actually using that phrase, it shows your company gets this. They know what this is all about.

[The statement of Mr. Munger follows:]

Testimony of

Reuben Munger

before

House Select Committee on

Energy Independent Global Warming

regarding

Energy Independence Implications

of the Auto Bailout

December 9, 2008

Mr. Chairman and Members of the Committee, I appreciate the opportunity to testify before you today. I am co-founder and Chairman of Bright Automotive, an Indiana based company developing a 100 mile per gallon plug-in hybrid electric vehicle (PHEV) for mass production. Bright Automotive is led by former executives and technologists from the automotive industry – highly experienced in developing and producing advanced technology vehicles and components. I am accompanied today by the CEO, Mr. John E. Waters, and the VP of Marketing & Sales, Mr. Lyle Shuey. These gentlemen have over 20 years of automotive background each, which is typical of our team.

As part of a small, innovative automotive company, I hope to share an important perspective with this Committee. I would like to start by sharing this view and then advance to comments on the broader scope of this hearing.

Bright Automotive has focused its business on efficiently and effectively responding to the nation's call for advanced technology vehicles. We have developed a large format vehicle that is currently classified as a "light truck", a designation that includes minivans and SUVs. Our vehicle has a specific focus on meeting customer needs and will achieve efficiencies greater than 100 MPG. The vehicle will be priced competitively and, because it uses 20 percent of the fuel used by the current competition, consumers will quickly recoup the incremental cost of the vehicle.

We are on track, provided the availability of funds, to be in production at an annual rate of 50,000 vehicles per year in 2012. Contrary to both existing and new entrants in the automotive industry, we have chosen to immediately ramp to scale and are addressing a larger sized vehicle class. We have chosen this path for both greater impact and greater economics. We are focused, experienced, and have a solid business model to rapidly introduce innovative and sustainable products.

At the core of our vehicle offering is the collaboration of engineering experts with years of experience at General Motors, Chrysler, Delphi, Johnson Controls, Mitsubishi, Peterbuilt, Takata and Toyota. Starting from scratch, we have created a revolutionary platform, where a "platform" is the industry term for the underpinning vehicle architecture that is modified into multiple specific models. Our process focused on optimizing platform physics, including: lightweighting, best-in-class aerodynamics, low rolling resistance tires and sustainable materials, integrating these key differentiators with an advanced electric powertrain. This combination is the key to efficient, breakthrough vehicles of the future. As our design shows, even a large vehicle can surpass traditional efficiency barriers, and achieve 5x more miles per gallon of gasoline.

Congress recognized the need for increased vehicle efficiency in the Energy Independence and Security Act of 2007, which materially raised the national fuel economy standards for the first time since 1975. In order to support the required capital needs of improving the efficiency of our nation's vehicle fleet, the Act

included a funding mechanism to assist automakers in producing Advanced Technology Vehicles. This mechanism Section 136. It is a $25 billion direct loan program currently being administered by the Department of Energy.

Section 136 is a critical component of the transformation of the American Automotive Industry. In order to dramatically increase the efficiency of the US vehicle fleet, the industry needs to focus on 1) new platforms and materials, 2) developing and bringing to scale batteries, motors, power electronics and other strategic components and importantly 3) ensuring funds are available for the 'ecosystem' of innovation that is emerging.

This innovation transition is being led by a mix of large and small companies. Tremendous innovation resides within small companies in both vehicle development and specific components such as batteries. These companies are poised for growth and are a platform for a dynamic increase in jobs and US leadership. Funds from Section 136 are a critical component to many of these companies and many have or will apply to the Department of Energy prior to the initial December 31, 2008 deadline.

Comments at last week's hearings on the automotive industry suggested that using Section 136 funds to provide immediate liquidity to the Big 3 is an easy solution. On the contrary, it critically harms the industry's ability to achieve its mandated transformation. Others commented that Section 136 is for the Big Three. This false statement is neither the way the legislation nor the interim final rule reads, nor is it fundamentally fair in pursuit of the objectives of the legislation. Taxpayer-supported incentives meant to achieve a specific intent must be open to all US companies and should be allocated to programs and companies that provide the greatest return relative to funds invested. Given the history of small businesses as a source of innovation in our country, a set aside for competitive smaller firms of not less than 20 percent of the loan authority would ensure that innovation is sufficiently funded. Section 136 is the foundation for America's future leadership in the automotive industry. It is critical to the Big 3's business plans but also is absolutely critical to the future of the smaller, highly innovative companies across the country.

At Bright Automotive we have expended tremendous resources to provide dramatic and scaled impact on the fuel efficiency of the nation's vehicle fleet. It is our perspective that Section 136 funds would be available to companies, old and new, to provide breakthrough solutions for the transportation sector. Without Section 136, Bright Automotive will be challenged, in the current capital market environment, to fund its engineering development and manufacturing plan. This same challenge holds true for a number of other manufacturers and critical component suppliers. New companies are not constrained by many of the issues recently discussed regarding the Big 3. However, the current capital environment is no more forgiving, and building cars is an expensive proposition – but building the right, fuel efficient cars is in our national interest.

In announcing this hearing, the Select Committee on Energy Independence and Global Warming has asked three questions.

1. Will the auto industry meet the fuel economy rules passed by Congress and signed into law nearly a year ago, which could revitalize the industry?

   In short, they can. The Energy Independence and Security Act of 2007 mandates a national fuel economy standard of 35 miles per gallon in 2020. It is possible to not only meet these standards but to significantly exceed them in an economic manner. Bright Automotive's first vehicle is an example of the opportunity, as we take one of the least efficient categories of vehicle and deliver a highly efficient product. Achieving and exceeding these standards is critical to the revitalization of the transportation industry. Bright Automotive has found overwhelming interest in highly efficient products from our potential customers.

2. Should American taxpayers expect even higher fuel economy performance in return for their investment of additional billions in loans?

   Yes. This is a moment of alignment of national interest and industrial interest. Higher performance is achievable. The technology is available today and significant penetration can be achieved by 2012 to 2015. Achieving higher fuel efficiency on an industry-wide scale will require immense effort, focus and discipline. However, we have the engineers who led the world in developing these technologies 15 years ago. We have the infrastructure and workforce to bring them to market. Bright Automotive and others are designing and building vehicles to achieve these very objectives

3. Do the auto companies' plans impair their ability to meet the current fuel economy regime?

   In their proposals, each of the companies lays out their plan to meet federal requirements. They also outline varying degrees of financial restructuring. In my opinion, it is important the final path forward for each of these companies includes vehicles that are far more efficient than those in the current vehicle fleet.

I have also been asked to address certain specific questions.

1. What is Bright Automotive's approach to the vehicle market compared with that of established industry players and other new or aspiring entrants into this space? What do you view as most important to designing and building vehicles that will be successful and profitable in the future?

Bright Automotive is intensely focused on providing solutions to the nation's transportation (and energy) crisis. Drawing on the deep automotive experience of our team, we have created a breakthrough blend of lower mass, improved aerodynamics and an advanced hybrid electric powertrain. We have designed our vehicle for large-scale production to maximize its impact. Bright Automotive believes the key to successful and profitable vehicles is a relentless focus on customer needs coupled with an engineering discipline that maximizes vehicle efficiency.

2. Should tax payer-financed loans be used to help General Motors, Chrysler, and Ford survive the present financial crisis?

   Yes. As an industry participant, it is clear that an unmanaged failure by one of these three companies would be highly disruptive to the industry at a time where every link in the chain is under stress. Our business and that of our supplier partners would be impacted by such a failure.

3. What impact does the government's decision have in terms of the U.S. auto industry remaining viable over the long term, creating the transportation solutions of the future, employing significant numbers of Americans over the coming decades, and helping to solve the nation's energy security problem?

   A decision by the government to provide secured loans to the Big 3 is critical to the viability of the industry for the long term. First, it goes without saying that this intervention must lead to companies that have competitive financial structures and can operate independently. Secondly, and the reason that we are testifying here today, is that this government investment creates the opportunity to encourage and support the Big 3 in addressing the nation's energy interests.

   Specifically, it is in the nation's best interest to have a vehicle fleet that leads to cleaner air, reduced carbon emissions, freedom from imported oil and automotive companies leading in innovation. The challenge to date has not been one of engineering but of leadership and financing. It is a difficult risk for a company under financial stress to take on breakthrough programs that would achieve these national goals. Vehicle platforms at the big companies are billion dollar initiatives, and history has proven it is easier to make incremental changes than dramatic ones. Correctly structured government support is the way to accomplish these goals.

4. Where should any financial assistance come from? Should it come from the $700 billion Troubled Assets Relief Program (TARP) fund?

Should the $25 billion in Department of Energy Section 136 loans already appropriated by Congress for purposes of retooling auto manufacturing facilities to build efficient, high-tech cars be opened up for general cash flow purposes to General Motors, Chrysler, and Ford? What impact will this have on the ability of these companies to meet fuel efficiency standards already in law? What impact would this have on industry innovation more generally?

As I am not an expert on all of the available sources of funds for a federal loan to an automaker, I will refrain from comment where might funds come from. Rather, as Chairman of an innovative company working very hard to deliver the type of product that is critical to the nation's economic, strategic and environmental future, I am compelled to express that Section 136 is vital to the automotive industry broadly. Section 136 is critical to funding the programs and projects that are required to achieve the targets set forth in the Energy Independence and Security Act of 2007. Without the current extreme crisis in financial markets, it is still very difficult to fund the major investments required for advanced automotive programs. Each of the Big 3 cited Section 136 as a critical component of their plans. In addition, Bright Automotive is one of a group of newer companies that are leading the industry with innovations that are the key to an efficient automotive future. Section 136 is the critical path for these major steps to be brought to market rapidly. Every year, the country buys millions of new vehicles which will remain in operation for the next 16 years. We *cannot delay the transition* to more efficient vehicles, and Section 136 is the necessary tool to assist innovative companies answer the nation's need.

5. Should tax payer assistance be tied to additional requirements from the industry? If so, what kind? Do you believe it is appropriate to include language in a legislated assistance package that authorizes California and other states to implement California's greenhouse gas emissions standards?

   A viable industry/company is directly linked with a more efficient product offering. Further, it seems inconsistent and counter-productive for a company to be suing the taxpayers that are both its lender and customer.

6. What is your long-term vision for transportation in the United States and elsewhere? To what extent do you believe General Motors, Chrysler, and Ford can be a part of that system? Is there a present role for additional federal policy to help U.S. industry drive that transition?

While I think there are paths for alternate technologies, the most promising pathway that is emerging favors lightweighting, electrification and synergistic electric infrastructure. The future is a smart, electrified fleet (with a mixture of hybrids, plug-in hybrids and full electric vehicles) that intelligently communicates with the electrical grid, heavily incorporates renewable energy, and accelerates the decarbonization of the two largest US energy consumers: electricity (i.e., buildings) and transport.

The future of the automobile is that it becomes the solution. Our current problem is that China, Europe, and Japan seem to understand the efficiency thesis and are aggressively pursuing solutions. Our three large domestic automakers have the engineering capability and market presence to help America accelerate into this area. Federal policy can stimulate this transition in the near-term using funding mechanisms like Section 136. However, Section 136 will be most effective if it remains a viable instrument for smaller innovative companies as well. Further policy efforts could assist the consumer in making a net present value positive purchase even if it is more expensive in the first transaction. The concept of "feebates." could be a positive stimulus where an assessed fee on the least efficient vehicles is used to fund a rebate on the most efficient vehicles in the category. Feebates could provide dramatic incentive for the customer to make the most efficient choice. It would also spur intense competition to remain more efficient than other products on the market.

Thank you for your attention. On behalf of Bright Automotive, I appreciate your interest in this matter and will be pleased to respond to any questions.

Bright Automotive is not a federal contractor or grantee. Bright Automotive has submitted a proposal for loan funding to the Department of Energy under Section 136 of EISA.

The CHAIRMAN. Our next witness, Dr. Peter Morici, a professor of international business at the University of Maryland. Prior to joining the university, he served as Director of Economics at the U.S. International Trade Commission. He has years of experience overseeing the Trade Commission investigations, and has provided useful guidance to Congress along the way.

We thank you, Dr. Morici, for being here. Whenever you are ready, please begin.

STATEMENT OF PETER MORICI

Mr. MORICI. Thank you, Mr. Chairman. My university and I are deeply honored that you have invited me here to testify before a committee with such an important mission and with such a distinguished panel. Three weeks ago, I testified with the CEOs of the three largest automakers. It is somewhat refreshing to be among people who talk about what can be done, not what can't be done.

The automobile industry, despite its various warts, is central to the health of the U.S. economy and essential to any effort that we might have to accomplish reductions in greenhouse gases; to reduce our dependence on foreign oil, which is a very choking dependence; and to recover from the recession that now plagues the Nation. The tailpipe offers among the greatest opportunities to reduce emissions and to also create a vital export industry because of all of the components that will go into the next generation of cars, which you called it the 2.0 platform.

Seemingly exotic forms of propulsion are about to become commonplace on the American highway. Within the next 10 years, we will see vehicles that people thought are were very far away very close at hand. I have driven the hydrogen vehicle at Ford. It is very practical. Its basic problem is it costs too much to make. Hybrid vehicles are much closer, and they will prove to be plug-in hybrids that transition to all-electrics, and then hydrogens and so forth. And this is very good.

The United States needs personal transportation. Our patterns of settlement and urbanization make mass transportation impractical for most commuters, and even more impractical for noncommuting travel, which is a much larger component of day-to-day car use than we realize. We are going to have these new vehicles one way or the other. The question is whether the United States makes them, whether they are made here, and whether they are made by U.S. car companies or foreign companies either here or abroad.

The U.S. automobile has two components: the Detroit Three, which make almost one-half of the vehicles we use, and the transplants. Both are vital to the regions where they are domiciled. However, the Detroit Three, frankly, use many more components and embody more technology made in America and more high-quality jobs than when we buy vehicles from the transplants, so their future is important to us.

I would say this to you, that right now as they stand they are not competitive. They claim they will be in 3 or 4 years. I do not believe that on the basis of what they have shown me. I don't believe that giving them a bailout will make them competitive no matter how many conditions we attach. The Congress is very good at writing laws. I don't know that it is very good at the proceedings

of a bankruptcy court. What these companies need to do is go through Chapter 11, or at least have the threat of Chapter 11 with regard to the stakeholders to bring them into line to get the results that they need. They just have too much debt, and a labor agreement that doesn't work, and, frankly, management that doesn't see the future clearly enough, although there is considerable variability among the Detroit Three in that regard.

My feeling is if you bail them out, they will politicize the process, find some way around the restrictions. They will find a way to lobby the system. If they don't do it, the union will do it for them, and we will end up over time with an industry that is still less cost-competitive; and when we finally, after hundreds of billions of dollars, decide to cut them loose and go through Chapter 11, it will be a smaller industry than it is now, and we will save fewer jobs by reorganizing them. The sooner we give them the cure, the more jobs we will save.

That said, there are a lot of things that the Congress could do to improve the competitiveness of making cars in North America and in the United States. For one thing, we could do something about currency manipulation, not just in Japan and Korea, but China and other places where components are being made.

We can have the clunker subsidy that one of the Members has mentioned; that is, when you trade in your clunker, you get a tax rebate of some kind. I would make it larger depending on the size of the vehicle and the age of the vehicle. If you bring me a brand-new Tahoe, you get a bigger subsidy. If you bring us a 30-year-old Chevette, you get the smaller subsidy, as long as it goes through the crusher so we never see it on the road again.

Congress could provide substantial development assistance to U.S.-based automakers to make more fuel-efficient cars. I would provide this to all the automakers, Toyota, Nissan, Honda, the whole bunch; the battery makers, anybody who wants to be involved, under the condition that they share their patents with one another for reasonable fees; the Japanese model of the 1970s and 1980s. You get to participate in the development and research, but if you get a new patent, you have to share it with your competitors for a reasonable fee so we accelerate the development of these vehicles. The conditions for participating would be that you undertake your R&D here, and you do your first round of production here, your full-scale mass production, in the United States.

These kinds of smart industrial policies, along with smart additions to the power grid, which are going to be absolutely necessary to plug in this gentleman's vehicles, I think could give us a fuel-efficient export industry for the future. I would suggest to you it would probably be run by very different people than are running it right now.

Thank you.

The CHAIRMAN. Thank you, Dr. Morici, very much.

Mr. MORICI. Mr. Chairman, could you have my full statement put in the record?

The CHAIRMAN. Your full statement and the full statement of all of our witnesses will be included in the record.

[The statement of Mr. Morici follows:]

Testimony
House Select Committee on Energy Independence and Global Warming
"Innovation, Jobs and Energy Independence
Reinvigorating the Domestic Automobile Industry"
Submitted by

Peter Morici
Professor, Robert H. Smith School of Business
University of Maryland, College Park MD 20742

My name is Peter Morici, economist and professor of business at the University of Maryland Business School. Thank you for inviting me to provide testimony today.

Automobile manufacturing is a central component of the U.S. economy. Its health and vitality is critical to the prosperity of vast regions of the U.S. economy, and through its purchases, the industry is central to U.S. industrial leadership in activities ranging from microelectronics to metallurgy.

More germane to the work of this Committee, the automobile industry is central to any effort to reduce U.S. reliance on imported oil, curtail global warming, and recover from the recession that now plagues the nation.

The tailpipe offers among the greatest opportunities to both reduce C02 emissions and curtail reliance on imported oil. The domestic industry offers equally significant opportunities for creating vibrant export industries that would support hundreds of thousands of high paying jobs in research labs and high-technology manufacturing and services.

The domestic industry has in the pipeline significant new products that will dramatically reduce energy consumption—advanced fuel-efficient internal combustion engines, hybrids, plug-in hybrids, all electric vehicles, and hydrogen-electric vehicles. As we move down the commercialization curve, learning by producing, costs will come down for the more innovative technologies.

Seemingly exotic forms of propulsion will become commonplace. Americans will have more alternatives to internal combustion engines, and the opportunities to remove oil from the personal transportation equation will multiply.

The country needs viable personal transportation—U.S. patterns of settlement and urbanization make mass transit impractical for most commuters and impractical for even more of non-commuting travel. Plug-in hybrids, and ultimately electric and hydrogen vehicles, offer the opportunity to greatly reduce CO2 emissions if paired with smart additions to the national power grid.

U.S. leadership in these forms of personal transportation can ultimately create vital export industries—vehicles, components and intellectual property. Failure to lead, ultimately, will require Americans to import what they need and result in a lower standard of living.

The U.S. automobile industry has two components—the Detroit Three and the transplants. Both components are vital to American prosperity but it must be recognized

that vehicles made by the Detroit Three have more U.S. content, as measured in technology, components and jobs.

In the global transformation of the basic design of the automobile, the survival and leadership of the Detroit Three will be central to Americans reaping the full benefits of the coming technological transformation in personal transportation. Without them, Americans will miss out on key opportunities in global manufacturing, and be less prosperous in the bargain.

Sadly, the Detroit Three have less capital to develop more fuel-efficient internal combustion systems and alternative vehicles than their competitors. Cash strapped, they have smaller vehicle development budgets than foreign competitors that produce comparable numbers of vehicles. As we have heard in recent weeks, Chrysler and General Motors may be forced to file Chapter 11 reorganization within the next few months. Disruption in the production and payments to suppliers of either of these companies could disrupt the production of the remaining two (including Ford) Detroit Three.

The gradual erosion of market shares of the Detroit Three over the last several decades, and now their hemorrhaging losses stem from higher labor costs—having origins in wages, benefits and work rules--poor management decisions, and less than fully supportive government policies. These conditions have been exacerbated, though not fundamentally caused by, the recent financial crisis and recession.

Although the U.S. government has been sympathetic to the needs of the automobile industry, the industry has fallen victim to currency manipulation and other forms of protectionism in Japan, Korea, India, and China. In addition, the reluctance to raise CAFE standards until recently and less expensive gasoline in the United States have encouraged reliance on less fuel efficient technologies here than in Europe and Japan.

Proposals to save from Chapter 11 one or all of the Detroit Three with a federal bailout would be a poor policy choice if such assistance is not accompanied by specific requirements for systemic reforms that would ensure their long-term profitability and financial capacity to develop more fuel-efficient internal combustion systems and alternative vehicle platforms. Strong profits are essential to their participation in the global transformation in personal transportation technology we are about to witness.

If the Detroit Three, with the cooperation of the UAW, cannot present plans to Congress that would fully and completely align their labor costs and work rule flexibility with Japanese transplants and demonstrate how their vehicle development and distribution costs can similarly aligned, it would be better to let them go through Chapter 11 and reemerge with new labor agreements, dramatically reduced debt and strengthened management.

That would permit these companies to produce cars at costs comparable to those enjoyed by their Japanese and other foreign competitors assembling vehicles in the United States, and to devote adequate resources to environmentally essential new technologies. Even with that, these companies would be challenged by the unlevel playing field in competition vis-à-vis Japanese and Korean competitors, who enjoy great advantages owing to currency and trade policies pursued by their governments.

Circumstances are dramatically different today than in 1979 when Chrysler received assistance from the federal government. In those days, the challenge at Chrysler was to become competitive with Ford and GM, and Lee Iacocca had a clear plan to achieve that objective and succeeded. Today, the Detroit Three, though improved in productivity and with lower labor costs thanks to concessions from the United Auto Workers, are still not as competitive as the Japanese transplants.

Margins in automobile manufacturing are thin and there is no such thing as being competitive enough. Either an auto company is competitive or it is not competitive—either it accomplishes the cost structure enjoyed by Toyota and Honda, operating in the United States, or it will continually cede market share and run into financial difficulties. That will mean it cannot compete in the development of advanced technologies and adequately contribute to the future prosperity of the nation.

By assisting the Detroit Three, Congress can delay one or all of them going through Chapter 11 reorganization but sooner or later one or all will face reorganization. The communities and suppliers dependent on these companies would be better off going through that process now than by delaying it with assistance from the federal government.

Without a new labor agreement that brings wages, benefits and work rules in line with those at the most competitive transplant factories, without reduced debt and other liabilities and without other management reforms, the Detroit Three will continue to lag in product innovation and field too few attractive new vehicles, because their higher costs, debt and other liabilities will require them to spend less on new productive development than they should.

They will continue to be inclined to field products with less desirable content to compensate for higher costs. As consumers find vehicles made by Japanese and other transplants more attractive, like those imported from Korea and eventually from China, the Detroit Three will cede market share of one or a few percentage points each year, and their smaller profit margins will give them fewer resources for vehicle development and new technologies.

If Chapter 11 is put off several years through federal assistance, the successors to GM, Ford and Chrysler that emerge from a bankruptcy reorganization process will be smaller and support fewer jobs and less innovation than if these companies endure this difficult transition in 2009.

If Chapter 11 reorganization is endured now, rather than several years into the future, more jobs can be saved among GM, Ford and Chrysler and their suppliers, and better prospects for U.S. leadership in new technologies can be cultivated.

The Congress could take steps to improve the attractiveness of making cars and parts in the United States by improving the public policy environment. This would include finally addressing, directly and forthrightly, undervalued currencies in Asia—currencies kept cheap by intervention by foreign monetary authorities in China and elsewhere. In addition, assertive efforts to develop fuel efficient vehicles could strengthen the industry and create export strength.

For example, Congress could offer an incentive for car buyers to trade in their gas guzzlers—the newer and the bigger the clunker, the more the car buyer would receive under the condition the vehicle is destroyed. This would raise the price carmakers receive from selling smaller vehicles.

Congress could provide substantial product development assistance to U.S.-based automakers and suppliers. The latter includes Toyota, Nissan and Honda, as well as the Detroit Three, battery makers and other suppliers to accelerate the production of innovative, high-mileage cars.

The condition for assistance would be that beneficiaries do their R&D and first large production runs in the United States, and share their patents at reasonable costs with other companies manufacturing in the United States. The huge U.S. market would help attract producers from around the world and rejuvenate the U.S. auto supply chain.

These kinds of smart industrial policies would contribute to national efforts to reduce CO2 emissions, reduce oil imports, create high paying jobs and contribute to lasting prosperity.

The CHAIRMAN. Our next witness is Mr. Geoff Wardle, the director of advanced mobility research at the Art Center College of Design in Pasadena, California. The school is one of the world's leading automotive design schools and has produced the heads of design at BMW, Nissan, Ford, and other companies. Mr. Wardle has spent more than 25 years as a professional designer in the industry and as a design educator.

Thank you for joining us, sir. Whenever you are ready, please begin.

STATEMENT OF GEOFF WARDLE

Mr. WARDLE. Good morning, Mr. Chairman and members of the committee. I appreciate this opportunity to talk about these issues right at a time when perhaps we are entering a new era of thinking about transportation and energy policy. I think that future transportation and energy policy are inextricably entwined.

I would also like to point out today I am joined by my colleague Dave Muyres, who coauthored the written testimony that was circulated to you. Mr. Muyres is the vice president of educational initiatives at Art Center College of Design.

We have similar but separate backgrounds as professional car designers, and now educators, where we are focusing our passion, design passion, on research and advocating future sustainable advanced mobility and transportation solutions. And so we would like to bring design and its creative processes and big-picture systems thinking to these discussions on Detroit.

In our written testimony we make four major recommendations on how to deal with the rescue plan for General Motors, Chrysler, and Ford, but we are here to confirm that the business model of the traditional American automobile industry is broken. The future of personal mobility is no longer just about cars. So insisting that the auto industry develops energy-efficient vehicles is, by itself, not an adequate prerequisite for financial assistance, in our opinion.

I think it is fair to say, though, that the legacy auto industry does an exceptionally good job of designing, developing, and making vehicles that, unfortunately, people no longer really want. Meanwhile, there are startup companies like Tesler; Aptera; Bright Automotive, represented here; and Fisker that are financially challenged to get products that Americans do need into manufacture and into market. So we would recommend using some of the bailout funds to deploy idle manufacturing capabilities of the legacy companies to enable the startups to get their already developed products to market sooner rather than later, and on a meaningful scale.

America's current transportation network is based on the Futurama Vision that was showcased at the 1939 New York World Fair. We are now well overdue for a brand-new Futurama Vision, but a vision that does not rely on cheap energy, vast quantities of raw materials, destruction of natural habitats, and disregard for climate change, human safety, and quality of life.

So we also recommend that some of the funding should go towards a far-reaching, nationwide, smart and sustainable network of transportation systems. This will also provide much of the new business for an overhauled and revitalized Detroit, simultaneously

providing a guaranteed customer for these new products that they would make.

Finally, some of the money should go toward setting up a powerful independent commission that will define and develop policy for these sustainable transportation systems that America badly needs to replace its current outmoded model. We have referred to this independent commission in our written testimony as a think tank, but, in retrospect, we realize probably that is not the most appropriate term for what we have in mind. What we do have in mind is a multidisciplinary group of forward-thinking transportation-minded specialists that should include engineers, transportation designers, sociologists, urban planners, scientists, architects, environmental designers, manufacturers, and economists, who can bring a really broad insight into what our future transportation needs really are.

This multidisciplinary group of forward-thinking transportation-minded specialists would enable, as I say, great oversight into what our true transportation requirements are. Thus, we would have a much clearer picture of the role the automobile industry would play in that. The future role of designers in industry will also move just beyond designing new vehicles. Designers already understand that new transportation solutions are more about complete systems. We have to think about complete systems.

Finally, I would like to conclude by saying that we think that the debate nationally currently seems to revolve around a rescue plan for the next 100-days. We strongly feel that this discussion needs to be centered on the next 100-years. Thank you.

The CHAIRMAN. Thank you, Mr. Wardle, very much.

[The statement of Mr. Wardle follows:]

House of Representatives:

Select Committee on Energy Independence and Global Warming

December 9, 2008

Written Statement Prepared by David Muyres and Geoff Wardle On Recommendations for a Strategy for the Long-term Future of the American Auto Industry ©

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A. Introduction:

This document articulates four, over-arching recommendations to the House Select Committee on Energy Independence and Global Warming as it considers what to do about the future of General Motors, Chrysler and Ford.

These four main recommendations are followed by a more detailed discussion that supports them.

B. About the Authors:

David Muyres and Geoff Wardle specialize in future studies for the automotive and transportation industries. Both have many years of significant professional experience within the global automobile industry in design and product development. They are now directing their focus and energies into transportation design education as well as researching and advocating innovative design based processes to create future, sustainable transportation solutions. Between them they represent a nucleus of opinion, based on focused and broad research into the future of sustainable transportation in an increasingly challenged global economy and global ecology.

Their work is done at Art Center College of Design in Pasadena, California, one of the world's leading design schools that offered the very first degree program in transportation design, 60 years ago. A significant proportion of the car designers around the world have graduated from Art Center, including many of the current worldwide heads of design, including BMW, Nissan, Ford, McLaren, Peterbilt Trucks and Kenworth. Art Center graduates are also leading the design of alternative vehicle and start up companies, including Polaris, Tesla, Aptera, Bright Automotive and Fisker Automotive.

Muyres and Wardle advocate that design creativity and innovation should be at the core of all conversations and activities that concern the future of transportation, whether it is the future of the automobile industry or the larger, more complex issues of personal and freight transportation at large. They have been at the center of creating a series of five annual summits at their school on the subject of future, sustainable mobility. These summits bring together leading experts from around the world in sustainability, transportation and the auto industry to discuss the significant challenges that the developed and developing economies of the world face in providing ecologically and economically sustainable transportation.

C. Brief Biography for David Muyres:

David Muyres is Vice President, Educational Initiatives, for Art Center College of Design in Pasadena, California. In his current position, Muyres is responsible for developing new strategic educational offerings for the College. These have ranged from educational programs targeting business executives about the value of design to a new offering, ArtCenterPRO, that allows companies to sponsor real world design projects in a secure IP controlled environment.

Muyres is also responsible for directing the Art Center Summits, a series of annual events focused on Sustainable Mobility. The Summits bring together global business, design and governmental leaders to discuss the future of sustainable transportation. The Summits are raising awareness of the significant role designers can play in creating sustainable solutions to global problems. Outcomes of this program will help define the future role of those involved in transportation design, as well as shape Art Center's future curriculum and educational initiatives. The Sustainable Mobility Summits have a global audience and have included numerous high profile speakers, such as Robert F. Kennedy Jr., Paul Hawken, Dean Kamen, and Chris Bangle. The Summits have been sponsored by significant companies and organizations, including Honda, JCI, Ford, Milliken, BMW, Canadian National Railway and the Swedish Consulate. Representatives from the DOE, Boeing, Google. Many automotive manufacturers, consultancies and governmental organizations have also attended.

Prior to joining Art Center in 2005, Muyres worked at Johnson Controls Inc. (JCI), where he held various functional and management positions in the United States, Europe and Asia. As Vice President of Design and Consumer Research in Germany, he helped create JCI's European Design Center. In Japan, he served as Vice President and General Manager for all Product and Business Development. During his tenure at JCI, he received six design-related patents.

In addition to his role at Art Center, Muyres donates his time to many professional and non-profit organizations. He helped start and is on the board of directors of the Operation Wheels of Freedom Foundation (OWOFF). OWOFF is modeled after the USO, in seeking to honor, educate and entertain the men and woman of our Armed Forces through the use of cars, rather than celebrity entertainment. He is an advisor to many sustainability related organizations, including Opportunity Green, and the Pasadena Sustainable Transportation Action Committee (PASTAC). PASTAC seeks to coordinate new mobility efforts between CALTECH, JPL, CALSTART and the City of Pasadena to make the city a model for sustainable mobility.

Muyres was born in Minneapolis, Minnesota. He studied Mechanical Engineering and Philosophy at Rensselaer Polytechnic Institute in Troy, New York, and

graduated from Art Center College of Design in Pasadena, CA with a Bachelor of Science in Transportation Design.

D. Brief Biography for Geoff Wardle:

Geoff Wardle is Director of Advanced Mobility Research at Art Center College of Design in Pasadena, California. Wardle is also part of the core team that has been planning and delivering Art Center's "Designing Sustainable Mobility" series of Summits, the first of which was held in February 2007.

Educated first as a vehicle engineer and then as an automotive designer at the Royal College of Art in London, Geoff has had extensive experience as a professional vehicle designer across four continents and remains a passionate car enthusiast. However, because of his career in the automotive industry, Geoff became increasingly concerned about the future sustainability of this industry, personal mobility and transportation in general.

With more than a decade of full-time involvement with Art Center's Transportation Design department, in California and in Europe, Wardle has been a continual advocate for transportation designers becoming far more concerned and involved with the many other disciplines that make up mobility in its entirety, particularly in the urban environment.

His deep held interests dwell on the role that designers can play in helping our developed and developing economies transition gracefully from an unsustainable level of consumerism to compelling, ecologically and economically sustainable economies that focus on a high quality of individual experience, comfort and reward. Within this broad horizon, he has a commitment to leading opinion and expertise on the future of mobility and transportation and to be a valuable resource for industry.

Aside from his role as a researcher and educator, Geoff Wardle works with one or two selected vehicle companies as an external advisor on futurist and design strategies. He is also on the board of advisors for the Progressive Insurance Automotive X-Prize.

E. Four Main Recommendations

The business model of the traditional car industry is broken. The United States now needs a strong and innovative mobility industry more than it needs a powerful car industry, particularly when the market for automobiles is saturated. If General Motors, Chrysler and Ford are to survive, they will need to adapt to this reality.

Insisting that the auto industry develops energy efficient vehicles is, by itself, not an adequate prerequisite for financial assistance.

Below are four main recommendations that should be considered as part of any use of taxpayer money to help General Motors, Chrysler or Ford recover:

1. **The appointment of an immediate, Mobility Innovation and Strategy Think-Tank to brainstorm, create and recommend to the US Government an over-arching US transportation policy that includes the participation of a restructured American auto industry. Design representation should be a core part of this think-tank.**

2. **A portion of any taxpayer-financed fund should be used to assist the car industry through a prescribed transition period, based on any government mandates resulting from the think-tank recommendations. The financial aid should be conditional upon 100% cooperation through this transition period.**

3. **A portion of the taxpayer-financed fund should go towards a national investment program in public and private sector transportation systems and infrastructure redevelopment to create a guaranteed demand for a retooled auto industry manufacturing output.**

4. **The balance of the taxpayer-financed fund should be used for helping innovative, automotive start-up companies get their products into production, perhaps utilizing some of the legacy industry's manufacturing capability.**

F. Supporting Discussion:

The business model of the traditional car industry is broken.

It is our opinion that the 20th Century auto industry business model is broken. Designing, mass-producing and selling cars yields an unacceptable, or at best, sporadic return on investment. Arguably, only Honda, Toyota and BMW have consistently achieved an acceptable return, annually, over decades.

At the same time, however, the human need for personal mobility and transportation continues to rise. If there is a market demand for mobility but the auto industry cannot make good business out of it, this suggests that there is something fundamentally wrong with its business model.

The auto industry needs to see its future business as providing mobility. Building automobiles or hardware might still be a significant part of the industry's economic activity but it would be a means to an end, not the end in itself. As well as contributing to a new, national program for innovative transportation and infrastructure investment, the auto industry might do well to consider how it could provide consumers with a total mobility package. Such a mobility package could provide their current consumers with much more than just a car in their driveway. Depending on a pre-determined monthly premium, car companies could provide their customers with access to special purpose vehicles, travel arrangements and transportation services for business trips and vacations, for example. In today's tired automotive economy, selling the cars does not make enough money. It is all the services and products that are downstream of the vehicle purchase that yield the revenue stream for insurance companies, repair shops, replacement parts vendors, etc.

Proposal 1
The appointment of an immediate, Mobility Innovation and Strategy Think-Tank to brainstorm, create and recommend to the US Government an over-arching US transportation policy that includes the participation of a restructured American auto industry. Design representation should be a core part of this think-tank.

Before the optimal future for the domestic American auto industry can be imagined or decided, it would be smart for there to be an all-encompassing national strategy on mobility and transportation.

The United States pioneered a transportation vision in the first half of the 20th Century. At the 1939 New York World Fair, the "Futurama" concept (see Glossary) was unveiled as a far reaching and extraordinary vision of an American continent, connected by a national freeway system and cities based around an

automobile dominant infrastructure. For better or for worse, that amazing vision was brought to reality in the immediate post WWII years and was perhaps the most significant contribution to American economic development. The Futurama model was based on a number of assumptions that are no longer viable or acceptable: cheap energy, vast quantities of raw materials, little consideration for natural habitat, suburban proliferation, global climate change, population growth and no accounting for social and health costs.

The United States is now ready for a "New Futurama". However, the New Futurama should not be dependent upon the automobile, even though a much smarter and more ecologically sustainable form of the automobile might well be an important component. The New Futurama needs to be a visionary and thoroughly integrated mixture of existing and future transportation and mobility solutions.

These solutions might encompass modern, high-speed rail systems, PRT or personal rapid transit systems (see Glossary), intelligent highway systems (see Glossary), smart, automated driving technologies incorporated into autonomous cars (see Glossary), upgraded subways and BRT or bus rapid transit systems (see Glossary). These systems will be driven by new economic conditions where renewable and distributed electricity generation, local food production and rapid manufacturing technology will place less demand on the long-haul transportation of commodities and goods. Ecological and quality-of-life issues will bring different emphases to personal, urban mobility.

There are many experts around the country researching all of the above and more. Bringing this all together for the national good is a complicated, multi-disciplinary task that requires a vision that stretches over several decades. This is why we believe that it is an imperative for there to be the formation of a **Mobility Innovation and Strategy Think Tank.**

It is conceivable that this think-tank could be a precursor to the formation of a permanent government agency, perhaps linked to energy, as there is inter-dependency between mobility and energy i.e. "The National Energy and Mobility Administration" (NEMA)

Once this over-arching national mobility and transportation strategy has been established, a clear view of the long-term landscape for the current domestic auto industry can be fully understood and what kind of transition it will need to undergo.

Design representation should be a core part of this think-tank.

Too often designers in the auto industry are used only to restyle last year's cars rather than think freely about new ways of moving people and goods around. They are not given the opportunity to be the visionary and strategic thinkers that they have the predilection to be.

The future role of designers in industry will move beyond just designing new vehicles. They will understand that new transportation solutions are more about complete systems – systems that demand not only profit for enterprises but compelling, accessible and satisfying solutions to the end user as well as being ecologically sustainable. The generation of designers that we are currently educating is being equipped to appreciate and work with the many different disciplines that are required to develop integrated mobility solutions.

The creative processes that designers intuitively use in their normal work, also equip them to problem solve beyond the actual products or services that they design. Bringing in designers at the very beginning of any project that is about innovation and progress ensures that the widest number of possibilities are imagined and explored before premature or narrow-sighted decisions are made. Designers can also be good facilitators of the different disciplines, whose expertise contributes to the overall solution. Designers see it as their natural role to create balance to solutions – a balance between the end-user's needs, the commercial interests of the enterprise, the attributes of the end product and ecological responsibility.

Finally, designers are highly skilled at visualizing complex solutions in a format that all stakeholders can understand to help in the making of critical or far-reaching decisions.

Proposal 2:
A portion of any taxpayer-financed fund should be used to assist the car industry through a prescribed transition period, based on any government mandates resulting from the think-tank recommendations. The financial aid should be conditional upon 100% cooperation through this transition period.

We believe that if Congress decides to use Federal Funds to ensure a future for some or all of the American car industry it should be highly conditional. Insisting that the auto industry develops energy efficient vehicles is by itself **not** an adequate prerequisite for financial assistance.

It is our opinion that it is primarily the industry's design, product development, manufacturing capabilities and integrated supply chain that are of potential value to the United States' economy, not particularly the cars that they make.

Although new top leadership and strategic middle management would be required, the above assets can be utilized for the design, development and manufacture of other transportation and mobility related hardware such as subway cars, trains and advanced, rider friendly shuttle buses or personal rapid transit vehicles – not just highly fuel efficient conventional cars. In fact, there are conceivably other much needed machines and hardware that renewed economic activity in public infrastructure might demand, that are equivalent in scale and complexity to automobiles; for example, renewable energy generation turbines, innovative, affordable, pre-engineered housing systems and transportation infrastructure hardware.

To retool the current car industry to become an integral part of the "New Futurama" would take some years. Therefore it would be reasonable to give financial assistance to the Big Three to make this transition, conditional upon the companies constructively developing its management and manufacturing capabilities for these additional products. In return, however, the United States Government has to have a clear agenda and also a commitment to investing in the "New Futurama" that would create the demand for these new products.

Indeed, the United States has a huge opportunity here, if it seeks a new national transportation agenda. Harnessing General Motors', Ford's, Chrysler's and their formidable supply chain's product development and manufacturing abilities at a time when radical new approaches are needed for transportation at large, would seem to be a more sustainable business model than just building cars in a globally saturated market.

Hence the third recommendation:

Proposal 3:
A portion of the taxpayer-financed fund should go towards a national investment program in public and private sector transportation systems and infrastructure redevelopment to create a guaranteed demand for a retooled auto industry manufacturing output.

If the current, domestic automobile industry is to be retooled to contribute to a "New Futurama" then it is a prerequisite that there must be a strong demand for the new products described above, coming on stream as the car companies complete their transition.

None of the traditional American transportation industries, including the car industry are doing a very good job of developing new thinking for future transportation solutions – they are stuck in yesterday's thinking, which also argues that they are only responding to what the market demands.

So Congress has an unparalleled opportunity right now to drive mobility innovation by using some of its bail-out money as an incentive to some or all of the auto industry through a transition phase while using some of it to create demand – demand for manufactured hardware that is needed to modernize America's public transportation systems at large. This is why there is merit in linking Federal investment in new public infrastructure projects on a national scale with demands on the auto industry to become developers and suppliers of the hardware that these new public transportation and infrastructure projects would demand.

Proposal 4:
The balance of the taxpayer-financed fund should be used for helping innovative, automotive start-up companies get their products into production, perhaps utilizing some of the legacy industry's manufacturing capability.

The current car industry does an exceptionally good job of designing, developing and making vehicles that people no longer want.

Meanwhile, there are start up companies developing new, innovative, highly energy efficient vehicles that they are severely challenged to get into production.

At a time when America urgently needs vehicles that are substantially more energy efficient than the current CAFE standards require, it again seems to be an obvious opportunity to accelerate the start-up companies' product development process, where appropriate. In addition, at a time when there are redundant, experienced automotive development and manufacturing engineers, as well as spare manufacturing capacity, it ought to be possible to make these available to the start-ups. Of course, this arrangement would have to be managed so that legacy thinking and attitudes do not compromise the fresh, innovative attributes of the start-up companies' design solutions.

Using a portion of funds set aside to retool the legacy car industry would be more effectively deployed to help the game changers that already exist in the United States, such as Aptera, Fisker, Bright Automotive and Tesla.

G. Conclusion:

The debate currently seems to revolve around a rescue plan for the next 100 days. We strongly feel that the discussion needs to be centered on the next 100 years.

We see the Mobility Innovation think-tank playing a central role in defining a robust and sustainable long-term plan. It should be made up of an empowered, multi-disciplinary group of forward thinking transportation-minded specialists. This group would go far beyond traditional transportation experts to include engineers, transportation designers, sociologists, urban planners, scientists, architects, industrial designers, environmental designers, manufacturers and economists.

H. Glossary:

Art Center College of Design: Art Center College of Design (www.artcenter.edu) is a global leader in art and design education. Since its founding in 1930, Art Center's alumni continue to have a profound impact on popular culture, the way we live and important issues in our society today. Located in Pasadena, California, Art Center offers undergraduate and graduate degrees in a wide variety of art and design disciplines, as well as public programs for all ages and levels of experience.

Autonomous cars: The other side of the equation to intelligent highways, autonomous cars that never crash into each other allow the prospect of much lighter and fuel-efficient vehicles. Cars that never crash do not need to be engineered with very heavy crash structures. Traffic flow can be managed electronically rather than based on human rationale. Cars can also be streamed more densely along the infrastructure, dramatically increasing it effective capacity capacity.

BRT – Bus Rapid Transit: BRT can effectively offer the same service as light-rail or subway systems in urban environments but at a fraction of the cost per mile to build. Typically, BRT systems provide exclusive driving lanes to semi-express buses along strategic corridors. The buses often turn smart traffic signals green on their approach and stop only every two or three blocks to speed up progress.

Futurama: At the 1939 New York World Fair, a remarkable exhibition was shown that showed models and renderings of a vision for America's future transportation. The exhibition was called Futurama and was, ironically, largely created by General Motors. Generally regarded as a significant inspiration to the eventual national highways program that brought America its continent-wide and

urban freeway systems, Futurama was remarkably predictive. The exhibition went on to tour the United States as a traveling road-show

PRT – Personal Rapid Transit: A transportation system that is a hybrid between the personal automobile and a guided transit system. PRT provides, automated, on demand personal cars or "pods" that will transport typically up to four passengers using a mechanical guidance system, often elevated above ground level. Because the pods are lightweight, the guidance system can be relatively cheap and easy to install in urban environments. A well-known PRT system was introduced in Morgantown, West Virginia in 1975, to link the three campuses of West Virginia University. More recently, there has been renewed interest in PRT around the world, with several entrepreneurial companies building demonstration systems.

Intelligent Highways: Technology that will allow road vehicles to drive by themselves. By removing the human element, vehicles can be streamed far more efficiently along existing infrastructure and with potentially a very low accident rate. While early attempts at intelligent highways were not so successful, intelligent highways are still the Holy Grail for traffic engineers and there is promising technology on the horizon.

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The CHAIRMAN. Our final witness is Mr. Richard Curless, the chief technological officer at MAG Americas. His company is one of the largest component suppliers for the domestic auto industry, and he personally brings a lifetime of expertise in the machine tool industry to our hearing here today.

We welcome you, sir. Whenever you are ready, please begin.

STATEMENT OF RICHARD CURLESS

Mr. CURLESS. Chairman Markey, Congresswoman Miller, who asked me to testify here today, and members of the committee, good morning, and thank you for having me participate in this hearing.

My company, MAG Industrial Automation Systems, is the largest machine tool company here in the United States. We are the only U.S. machine tool company remaining that has the technological breadth and skill sets to meet the equipment and process needs of our U.S. automotive companies.

U.S. companies like MAG are critical to automotive, energy, aerospace, and other manufacturing industries. Automotive couldn't efficiently produce engines and transmissions without MAG processing technology and machinery.

Today's equipment is nearly 300-percent more efficient and flexible than just 10 years ago. In aerospace, MAG has served as a pioneer in the supply of composite machines that are producing the airplanes of the future for major companies such as Boeing and Airbus, as well as many of their suppliers.

MAG's machinery and process R&D is a critical enabler for supplying new technologies in manufacturing that will make companies more competitive, create jobs, and assure long-term success. Our high-end industries must implement lower-cost, efficient, long-term manufacturing solutions, and the solutions must be green. Our United States factories must be healthy and advanced in their performance.

With the continuing rise of the world population and its use of energy, fossil fuels will continue to grow in scarcity. In order to combat a shortage in fuel, vehicles will have to be designed and produced that use alternate fuels and consume less energy.

MAG wants to take our know-how and develop solutions that will help the automotive industry manufacture these new, fuel-efficient automobiles at a much lower cost than they are able to do today. As best we can, our company tries to offer our manufacturing solutions to the automotive companies. However, it is difficult to work with them because they buy cheap parts from the Far East and often will source their equipment needs strictly on global price and not necessarily to get the best technology for the future. They must be cost-competitive, but, with shortsighted goals, will spend money for the moment and not for the long run.

Providing bailout money to the automotive industry is absolutely the right thing to do, but it must be done with strong conditions. The entire supply chain must be considered. R&D, parts, assemblies, and so on need to be part of a long-term solution involving American labor and know-how. Providing the funds and watching the funds go overseas is not an effective solution. Today, as an example, if you were to consider the flow of funds, for every $100

taken in by the automotive companies, $30 go overseas for purchase of materials. Equipment, R&D, other purchases add additional dollars going overseas.

The automotive transplants coming to the United States are a great benefit to our economy, offering new assembly jobs. However, what about the supply of equipment and parts for these transplants? For Japanese transplants, these opportunities go straight back to Japan. For example, MAG receives no orders from these Japanese companies. On the other hand, MAG does very well working with some of the best automobile companies in the world, including companies out of Germany, France, and Korea, to name a few. Every country in the world is offering incentives to their technology provider companies and doing all possible to encourage collaboration. Grants and tax forgiveness are part of those countries' strategy to be sure their manufacturing base will be sustained and grow. The U.S. needs the same type government support programs to survive. The automobile industry is the place to start.

Taxpayer funding must require, by means of incentives or guidelines, that the funds be used to buy U.S. technology. U.S. manufacturers and suppliers need to have access to low-interest project funding. Funding programs need to be available to these companies serving as a catalyst to develop new manufacturing technologies and processes, and taxpayer funding to foreign transplants should require buying U.S. technology.

The government's decision has a serious impact on the creation of transportation solutions for the future. Not investing in these technologies will cause the U.S. to jeopardize their superpower status and soon become dependent on foreign nations for the technology that defines one of our many freedoms, the automobile.

The $25 billion in the Department of Energy Green Car Factory Fund is required for retooling. GM, Ford, and Chrysler and their suppliers will not be able to retool their factories without these funds. If the money is used for general cash flow issues, it must be replaced, or the alternate energy will be severely compromised.

The countries that can manage their energy needs will be superpowers of tomorrow. Companies with forward-thinking technologies such as lightweight CGI engines, carbon fiber body panels and power train components, carbon fiber hydrogen storage tanks, advanced high throughput machining, and so on, will be the automobile companies of the future. Those that do not adapt fast enough will fail.

Mr. Chairman, members of the committee, thank you for having me speak here today and to share openly and honestly our company's views for addressing the proposed automotive bailout and what it could mean for more energy-efficient automobiles and other transportation vehicles. It is critical that whatever decisions are made will be to assure a long-term, sustainable and growing economy for the United States of America.

Thank you.

The CHAIRMAN. Thank you, Mr. Curless, very much.

[The statement of Mr. Curless follows:]

Select Committee on Energy Independence and Global Warming

"Innovation, Jobs, and Energy Independence:
Reinvigorating the Domestic Auto Industry."

December 9, 2008

Prepared Remarks of Richard Curless, Chief Technical Officer, MAG Industrial Automation Systems, Sterling Heights, Michigan

I. INTRODUCTION

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In Aerospace, MAG has served as a pioneer in the supply of composite machines that are producing the airplanes of the future for major companies such as Boeing and Airbus, as well as many of their suppliers.

MAG's machinery and process R&D is a Critical Enabler for supplying new Technologies in manufacturing that will make companies more competitive, create jobs, and assure long term success.

The opportunities for our high end industries are immense, but they must implement lower cost, efficient long term manufacturing solutions, and the solutions must be 'Green". Our United States factories must be healthy and advanced in their performance.

II. AUTOMOTIVE INDUSTRY

With the continuing rise of the world population and its use of energy, fossil fuels will continue to grow in scarcity. In order to combat the shortage in fuel, vehicles will have to be designed and produced that use alternative fuels and consume less energy.

MAG wants to take our know-how and develop advanced solutions that will help the automotive industry manufacture these new fuel efficient automobiles at much lower cost than they are able to do today.

As best we can, our company tries to offer our manufacturing solutions to the automotive companies. However, it is difficult to work with them because they buy cheap parts from the Far East and often will source their equipment needs strictly on global price and not necessarily to get the best technology for their future. They must be cost competitive, and with short sighted goals, will spend money for the moment and not for the long run.

Providing bail out money to the automotive industry is absolutely the right thing to do, but it must be done with strong conditions. The entire supply chain must be considered.

R&D, parts, assemblies, and so on need to be part of a long term solution involving American labor and know-how. Providing the funds and watching the funds go overseas is not an effective solution. Today, as an example, if you were to consider the flow of funds, for every $100 taken in by the automotive companies, $30 goes overseas for purchase of material. Equipment, R&D, and other purchases add additional dollars going overseas.

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Every country in the world is offering incentives to their technology provider companies, and doing all possible to encourage collaboration. Grants and tax forgiveness are part of these countries strategy to be sure their manufacturing base will be sustained and grow.

The U. S. needs the same type government support programs to survive. The Automobile Industry is the place to start. Taxpayer funding must require, by means of incentives or guidelines that the funds be used to buy U. S. technology. U. S. manufacturers and suppliers need to have access to low interest Project funding. Funding programs need to be available to these companies serving as a catalyst to develop new manufacturing technologies and processes. And taxpayer funding to foreign transplants should require buying U. S. technology.

III. GOVERNMENT DECISIONS

The government's decision has a serious impact over the creation of transportation solutions for the future. Not investing in these technologies will cause the U. S. to jeopardize their superpower status and soon become dependent on foreign nations for the technology that defines one of our many freedoms – the automobile.

The $25 billion in the Department of Energy Section 136 is required for retooling. GM, Ford, and Chrysler and their suppliers will not be able to retool their factories without these funds. If this money is used for "general cash flow" issues, it must be replaced or the alternative energy vehicle development will be severely compromised.

IV. TRANSPORTATION INDUSTRY VISION OF THE FUTURE

The countries that can manage their energy needs will be superpowers of tomorrow. Companies with forward thinking technologies such as light weight CGI engines, carbon fiber body panels and powertrain components, carbon fiber hydrogen storage tanks, advanced high throughput machining, and so on, will be the automobile companies of the future. Those that do not adapt fast enough will fail.

V. CONCLUSION

Mr. Chairman and members of the committee, thank you for having me speak today and to share openly and honestly our company's views for addressing the proposed Automotive Bail out, and what it could mean for more energy efficient automobiles and other transportation vehicles. It is critical that whatever decisions are made will be to assure a long term sustainable and growing economy for the United States of America. I will be pleased to respond to your questions at this time. Thank you.

The CHAIRMAN. I will turn to questions from the committee. The Chair will recognize himself.

Ms. Claybrook, what do you think about an idea of tying these loans to an interest rate for each one of the companies depending upon how successful they are in moving to more efficient vehicles that are constructed? For example, if a company beats their efficiency requirement by 1 mile per gallon, they get a quarter of a point reduction in interest rate; or if they are making 200,000 all-electric vehicles by a certain date, that they get a half a point or a whole point taken off of their interest rate. What do you think about that as a positive incentive for companies to move in that direction?

Ms. CLAYBROOK. I think it is a great idea. I just think that the fuel economy number that they have to meet has to be higher than what is in the law for 2007 before you would do that. So I hope that the bill will be amended to require a 25 percent increase over 2007, and that be the starting point.

The CHAIRMAN. What do you think, Mr. Munger, of this idea of tying the interest rate to how successful they are so it is a positive incentive to exceed whatever the baseline is that we establish for them to meet?

Mr. MUNGER. Mr. Chairman, I think it is an interesting idea. An extension of that that I have been talking about with a few people is if you set a high enough baseline where there is actually a forgiveness of some of the loans if you achieve a very high level of efficiency, in effect you pay back the industry for some of the national savings in reducing oil consumption. The orders of magnitude, when you spread it across the size of some of these fleets, of doubling efficiency could cause 100 million barrels of oil of forgotten demand in a year, and that could pay back, you know, on the order of magnitude something similar.

The CHAIRMAN. Dr. Morici, what do you think?

Mr. MORICI. First of all, you have to set it high enough.

The CHAIRMAN. We agree with that. Assuming that is the case, if they exceed that goal.

Mr. MORICI. What I want to talk about, what's high enough.

The CHAIRMAN. Assuming they exceed that goal.

Mr. MORICI. I want to talk about what is high enough, and that is that they just can't accomplish it by tweaking the internal combustion engine, that they have to be using alternative platforms to get it done without specifically requiring it. There is so much that can be done just with the engines that we have. We don't want them to retune them a bit and get some money back. We want them to start to earnestly make a transformation to hybrids, and do it in a way that they get rewarded for it, and that is fine.

The CHAIRMAN. So that is what I said. If they make a quarter million all-electric vehicles.

Mr. MORICI. Figure out what the number should be.

The CHAIRMAN. You like that concept though.

Mr. Wardle.

Mr. WARDLE. I think we all respond positively to incentives. The trick will be to make sure the numbers are right. I would also like to point out in the long term it is not just fuel efficiency or energy efficiency that we have to address, we have to address other issues

of sustainable industrial activity. I think those same incentives should be applied to that as well.

The CHAIRMAN. Mr. Curless.

Mr. CURLESS. Yes, I agree milestones need to be established, and the amounts that we talk about need to be considered along with those milestones.

The CHAIRMAN. Mr. Munger, you have testified that your intention is to produce 50,000 of your electric vehicles by the year 2012. General Motors is touting the fact that they are going to build 10,000 Volts in 2010, and maybe 50,000 to 70,000 in 2011. How can Bright Motors be on the same exact track almost as General Motors and you don't even have a factory yet? How can you be so bold as to make such a statement?

Mr. MUNGER. Thank you, Mr. Chairman. I think that the key that—Bright has done a very thorough analysis of figuring two things: One, really understanding what our customer is interested in; and, two, by focusing on the total vehicle platform, we have achieved a cost level that is much more attractive than what news reports suggest around the Volt.

The CHAIRMAN. As you look at General Motors and the Volt, does that send a chill down your spine in terms of your vehicle's competitiveness?

Mr. MUNGER. We are not going to be directly competitive with the Volt.

The CHAIRMAN. What segment are you in?

Mr. MUNGER. We are a larger-format vehicle. Light trucks. SUVs and minivans instead of a passenger car. There is actually a lot of opportunity to gain efficiency in those larger vehicles.

The CHAIRMAN. Is there, Mr. Wardle, a company that is going to directly compete with the Volt, that you know of, that we should have some confidence will be there in the marketplace?

Mr. WARDLE. I suspect there is competition from overseas companies close to the Volt. Some of the companies have products that I think would be extremely competitive with the Volt, if they can get them into production soon enough.

Mr. MORICI. Both Toyota and Ford have plug-ins in the pipeline as well. It is the same concept.

The CHAIRMAN. You don't seem very optimistic about the Big Three in the long run. Do you really believe any amount of money that we can give to them is going to be sufficient to allow them to be competitive in the long run? Right now General Motors only has 85,000 hourly workers. How many hourly workers, using your analysis, do you think they will have in 3 years?

Mr. MORICI. I don't have that number, but I know that it will continually decline even if they are productive, even if they become competitive, because it requires fewer hourly workers to make an automobile each year.

It is an inexorable process. It is like your personal computer. My feeling is that the technology is there to be competitive, and the products are in the pipeline there to be competitive. If you look at Ford and you ask them, well, why didn't you have these products 2 years sooner if you look at their plan, and they have a very good answer. They have a very different management team than they had 3 or 4 years ago. And the management team they had 3 or 4

years ago very much looks like the management team that General Motors and Chrysler has right now, wedded to the SUV and the truck and all the rest of that.

But my feeling is the technology is there. If you could take them through the Chapter 11 process and shake them down and shake them out and restructure their debt and all the rest that they could get it done. And I don't think the Congress can simulate that. And I think Rick Wagoner's scare tactics are unfortunate, but I think it is possible to do.

The CHAIRMAN. Thank you.

Mr. Munger, if the Green Car Factory Fund is empty or closed to you and your company and companies like your company, how would that affect your timeline and overall viability?

Mr. MUNGER. It would certainly delay our process. We were pursuing a pretty aggressive and attractive private capital path. The credit disruptions that have hit everyone, we are having struggles around that just like all the other innovative companies that have been referenced here today. So the Green Car Factory Fund is an accelerator. You know, the amount of money required to push quickly certainly get enabled by that fund to get things done faster.

The CHAIRMAN. And, Mr. Curless, could you answer that question in terms of how you think it affects the competitors to the Big Three?

Mr. CURLESS. Well, I think it is definitely a requirement. Because capital is very difficult to come by, and these loans are going to be really critical for just not the Big Three but the others as well.

The CHAIRMAN. If the others can't have access to that money——

Mr. CURLESS. Then it is going to create a difficult situation for them. That is for sure.

The CHAIRMAN. And how many companies do you think that would affect?

Mr. CURLESS. Maybe four or five.

The CHAIRMAN. Four or five companies?

Mr. CURLESS. Yeah.

The CHAIRMAN. And in a lot of ways that could ultimately represent a hundred thousand new jobs in a relatively brief period of time, huh?

Mr. CURLESS. Right. Correct.

The CHAIRMAN. When you are making 150,000 of these vehicles, sir, how many employees do you anticipate that you will have?

Mr. MUNGER. We have a direct employee base of about a thousand employees between the factory and the headquarters and development staff. And then, because it is a largely outsourced model for a number of your supply partners, that is probably another 2,000 employees working on the body or the engine or various components of the vehicle.

The CHAIRMAN. Okay. Thank you.

My time has expired. The Chair recognizes the gentleman from Washington State, Mr. Inslee.

Mr. INSLEE. Thank you.

Mr. Munger, in this bailout plan, as far as you have seen it, is there any benefits to your organization at all? The one that is being proposed?

Mr. MUNGER. As far as I have seen on the draft legislation that came out last night there isn't anything. You know, I think particularly the money that is in the green factory fund needs to be returned to it. It would be really beneficial I think to the smaller companies to make it clear that, you know, the legislation already reads that there is an opportunity for them to apply, but if the Congress found it in their wisdom to actually create a set-aside for those small companies that would be very beneficial.

Mr. INSLEE. Right. By the way, I would love to yield to Mrs. Miller if she is prepared.

Mrs. MILLER. That is fine.

Mr. INSLEE. That is fine. Thank you.

So if we deplete the Green Car Factory Fund and send it to those who are in this dire financial strait and not assist you who have a—what many of us hope to be a very viable product, how would we defend that?

That is a rhetorical question, but——

Mr. MUNGER. I am interested in how you will, sir.

Mr. INSLEE. So is there a proposal and should we consider a proposal to accelerate some assistance to what we will say are the little guys in the race, yourself included with Tesla and some of the other companies that have been mentioned? Has that group, the little guys in the race, have they made any proposal that they be part of this tranche, if you will, that is going out the door in the next 30 days?

Mr. MUNGER. I don't believe a proposal around that has been made, but I think there have been proposals to create that allocation to small companies and to encourage the Department of Energy to act quickly. If there are funds in the program, they could allocate loans immediately.

Mr. INSLEE. Given the relatively small scale, it would seem to me that would be doable, would it not? I mean, you are talking about small percentages of the amounts that would go to the Big Three that would still have a large impact with your capital needs in the next 6 months, would it not?

Mr. MUNGER. Yes, it would. Ten or twenty percent would certainly fund five to ten Brights.

Mr. INSLEE. So is this group making any proposal in this regard?

Mr. MUNGER. We will pursue that.

Mr. INSLEE. Well, to me—I mean, you look at there is the Chevy Volt, there is the Bright product, there is Tesla, there is several others, there is a guy on Bainbridge Island making an all-electric car named Bob Fraik, who is a neighbor of mine who lives two miles from where I am. Okay? Why isn't he involved, have some option to get capital from the Federal Government? He is paying his taxes, too, frankly.

And I think your options for success may be as great as the Big Three's. So, to me, it is a little troublesome to take care of only the larger players here when we know that innovation can come from two bike makers in Dayton, Ohio, who built the first airplane. I have to tell you that troubles me, and I would encourage you to at least think in those terms.

I actually talked to Tesla last week about some ideas in this regard, because I think America wants to go forward here, and we

want to take care of the employees of these existing companies. But we want to see growth as well.

Anyway, I just encourage you. I think it is worth thinking about.

Ms. Claybrook, can I ask you about the idea of increased requirements for increased mileage for access of this? What do you do about the argument of the Big Three that if we had an increased mileage condition to get these receipts of these funds that that would put them at a competitive disadvantage, and they are already in a weakened position? And is a response to simply increase the mileage standards for everyone, whether you take the money or not?

Ms. CLAYBROOK. Well, of course, we would love to see that. We have urged increased fuel economy requirements for a long time. In this bill, though, I think that the plans that the manufacturers submitted, which do show an increased capacity for fuel economy, should be mandated. Their plans should not just be their plans, but they could change—they get the money today and they change their plans tomorrow.

So that is the first and foremost most important thing. And so we would certainly like to see the increase, you know, for everybody. But it is not going to put them at a competitive disadvantage. Because they are now at a competitive disadvantage because they have not invested in technology and innovation, and they have taken the cash cow SUV and used all the money, and they still have a debt at General Motors of $66 billion. So they need to have products that people want to buy. That is what we have been talking about today.

So I think that it only helps them to have these tough requirements, because they don't want to miss the bet here. And they are scared to death—and they should be—that they are not going to be a manufacturer 2 years from now.

So to say, okay, you are going to make this a priority, I would put safety in that number as well, because they have been fighting the same kinds of safety requirements for roof crush and rollover and children, protecting children and side head impact and other things.

Just the other day the Department of Transportation delayed the implementation of a standard that was issued a couple of years ago on side impact protection. So when they are redesigning these vehicles they should do the whole job as one piece.

When I was NHTSA Administrator, we designed an experimental safety vehicle. And it was in 1977. It met the 1985 fuel economy standards, and they were tough. And it also had improved safety.

When you redesign a vehicle you should do the whole thing at once. So I believe this will only help the manufacturers, not hurt them. And I would be happy to see those standards adopted for all cars, all vehicles.

Mr. INSLEE. Thank you.

The CHAIRMAN. The gentleman's time has expired.

The gentlelady from Michigan, Mrs. Miller, is recognized.

Mrs. MILLER. Thank you very much, Mr. Chairman.

You know, we feel a little defensive being from Michigan. I can't even get my microphone to work. I guess that is sort of indicative here.

But we feel a little defensive, obviously, in Michigan. And we look at what has happened with the bailouts, the $700 billion TARP bailout. And I will also say for the record that we feel that it would have been optimal to have any loans for the domestic auto industry coming out of that bailout fund, rather than coming out of the Green Car Factory Fund, which I also agree section 136 is not very descriptive of it.

Unfortunately, the optimal was not possible. And as we look at this now—and I also say we feel as though there has been a double standard. I recognize that there have been mistakes made. However, we on the Hill here, you have the domestic auto industry that is almost in a capacity of abject groveling, it seems like to us. And that is why I went through my litany of some of the historical significance of this industry to our Nation and why I think it is so important and why we want to be a critical component of our Nation going forward in every way.

But perhaps the Big Three shouldn't have—you know, it wasn't a very good PR move to be flying here on their corporate jets. The good thing for the guys from Wall Street that got all this money, they never had to come to Washington to ask the money. You know, those guys that helicopter in from the Hamptons every day, you know, they didn't even have to come here and ask for any money because it was hand-delivered to them.

And I hear people saying, you know, Wagoner has got to resign and so on and so forth. I don't hear anybody talking about the president of Citigroup that got in the neighborhood of $40 billion so far, I think, that maybe he ought to resign. There is no talk of any of that.

And I also think that in some ways because of what has happened here in our Nation and the response of Congress with the bailouts, et cetera, that the industry, the domestic auto industry has gotten caught up a bit in bailout fatigue. That is very apparent here on the Hill.

But, at any rate, hopefully there is a deal and a compromise that has been agreed to. We hope there is going to be enough votes. I think you are going to see a restructuring, and I think the country is going to have a high degree of confidence as we go forward that we have gotten the message, and things are going to change, and all the stakeholders are going to do what we need to do to make this a competitive industry.

I guess my first question would be for Mr. Munger, and you mentioned that your company had actually made a—submitted a proposal for some funds. Could you flesh that out a bit for me? I am just curious, if you could, how much did you apply for and how would you utilize those funds?

I believe the batteries that you are using right now are made in China. I only mention that because we see all of these other countries that have an auto industry are bailing out or loaning money to their industry. It was mentioned about the lithium ion batteries. I think last year the nation of Japan spent over a billion dollars on R&D for lithium ion batteries, not just for their vehicles but for their electronics, et cetera. And in our country we have expected the auto industry to do all of this themselves. But how would you actually spend some of the money out of that fund?

Mr. MUNGER. Certainly. Thank you for the question.

We applied for a $450 million loan under the Department of Energy loan program. Those funds are as purposed for OEMs to finalize vehicle engineering and fund, you know, sort of engineering validation work as well as pay for tooling and construction of our facility. And, you know, to your question regarding the battery, we actually are discussing options with multiple battery suppliers.

Mrs. MILLER. In America?

Mr. MUNGER. We have encouraged some of the people we are talking to to actually apply under that program to make sure they get a facility built here in America.

Unfortunately, section 135, which is a battery focused fund, wasn't funded. But the battery companies that have worked here in the United States are focused on section 136 as component suppliers to vehicles to try to get their facilities built here in America.

I think the Congressman from Washington made a good point that we don't want to transition our dependence on foreign oil to foreign batteries, and Bright Automotives is open to economically buying from domestic suppliers.

Mrs. MILLER. Okay. Dr. Morici, as an economist, let me just follow up a little bit on this, on the concept of whether or not any of the Big Three would go through bankruptcy, whether that be Chapter 11 or Chapter 7 or liquidation that may follow with some of those kinds of things and what the cost actually would be to the Nation for such a thing.

We feel as though bankruptcy is a bit different—I mean, I have no problem getting on an airline that has declared bankruptcy and is in the process of reorganization, et cetera. However, I might have a different concept of purchasing a $40,000 vehicle from a company that may be in bankruptcy or close to bankruptcy if I have consternation about warranty and service work and all these kinds of things. We think it is a bit of a different animal.

But we have had economists that have theorized that the costs to the country of bankruptcy could be as much as four times what we are talking about here for loans when you think about unemployment costs, when you think about the cost to the PBGC, some of these kinds of things. And I guess my question would be, as an economist, have you looked at any other previous situation? Is there any analogy that we could use with some historical benchmarks of an industry like this where there has been governmental intervention, now all of this oversight, everybody is an expert on the industry now? I mean, I know there has got to be changes made, but all of these various things, and how did it work out, and how do you think this is going to work out?

Mr. MORICI. Well, I wonder whether you have answered your own question to some degree.

When we talk about bankruptcy, it could be many different concepts. A prepackaged Chapter 11 would ensure that suppliers are paid, so there wouldn't be that breakdown, so the industry essentially wouldn't shut down.

The transplants by themselves cannot produce enough vehicles to satisfy U.S. demand even at 10 million vehicles a year. So these factories are not going to go out of existence. They are going to be used. The question is, who uses them and how?

In Chapter 7, the factories are worth much less to the existing creditors than if they continue in production. So the logical sources of credit for a Chapter 11 debtor-in-possession bankruptcy are the existing banks who have already received considerable largesse from the U.S. Government and could likely finance it. After all, we have given them $8 trillion in loan guarantees when the problem was caused by $2 trillion worth of collateralized debt obligations; and I am still trying to find the other $6 trillion.

In terms of governments becoming so heavily involved in the management of industries, we, to my knowledge, don't have peacetime analogs. However, I would ask you to look at the experience they had in Britain and France with nationalized industries of various kinds in the '50s, '60s and '70s and ended in tears. Essentially, if you try to manage an industry with all of those experts involved, you become involved in management by committee; and you don't get a good outcome.

I am not in favor of shuttering the industry. After I testified, I called up Ford and I said, no reasonable person wants you guys to shut down. However, the question is not whether we reorganize them but how do we reorganize them to ensure that we get the outcomes that we need?

I think there is a very grave danger, I think, of what was suggested here this morning. If we impose mileage requirements on the Detroit Three that are not imposed on the Japanese and the price of gasoline falls to $1.50 a gallon and stays there, we put them at a competitive disadvantage. So we have to apply it to everybody. That may or may not be politically possible. But it is one example of the kinds of complications that we could become engaged in.

And there is the other issue of the politicization. You asked a very rhetorical question. Why is no one calling for John Thain's ouster this morning? I would suggest you might ask serious questions about campaign contributions and things of that nature for the committees involved in overseeing them. I know that is—I don't want to cross the line and become impolite, but I find it remarkable that members of the United States Congress called for Rick Wagoner's resignation—and I have not been known to be a big fan of Rick Wagoner—but they have called for his resignation after he asks for $12 billion, and Merrill Lynch has gotten how many hundreds of—you know, and there is John Thain arguing yesterday in front of his board for $10 million subsidies. You know, I suggest the easiest way to solve this problem is for Ford to make themselves a bank, take some deposits, pay themselves too much money, and go over to the Senate Banking Committee and ask for help.

Mrs. MILLER. Thank you.

I know my time has expired, and I appreciate the Chair's indulgence.

The CHAIRMAN. The gentlelady's time has expired.

The Chair recognizes the gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Thank you, Mr. Chairman.

Dr. Morici—well, first of all, let me associate myself with the comments of the gentlelady from Michigan. I do think we have a double standard. I do think, you know, the people who go to work

with lunch buckets are not receiving the kind of respect as the people who drive to Broad Street in New York City.

But to go back to Chapter 11, the issues that I am concerned about, as I believe the gentlelady was, just the stigma of Chapter 11, no matter what other components are put in place, I think would do damage to the—whichever of the Big Three, whether it is Ford, GM and Chrysler or not, people are going to back away from those automobiles. Don't you think that? I mean, we are backing away from them already.

Mr. MORICI. If we repeat it over and over again, it becomes a self-fulfilling prophecy. If Rick Wagoner tells everybody they shouldn't buy his own cars and you tell them they shouldn't buy his own cars because there is a stigma, then they won't.

Please hear what I am saying. The country cannot get along with those factories closed. We cannot produce enough vehicles. So if they are in Chapter 11 reorganization with debtor-in-possession financing and the suppliers are being paid, there is reasonable expectation established that they will continue in operation. Not only that, we can provide third-party warranties.

When you go down to Circuit City this Christmas season and buy a stereo or whatever it is that you want for your kids and you buy a store warranty, it is not being guaranteed by Circuit City. It is being guaranteed by a third party. These warranties can be insured. And if we explain that to people, then that will change the psychology.

But Rick Wagoner saying that Chapter 11 is not possible, even though his board says he should consider it; and running around the country saying my warranties will be no good if I am chapter 11 creates that environment.

So, you know, I guess what I am getting back to, the real question is, how do we do this? Because they are going to have to be reorganized. So the question is, how do we do this? And I would suggest that the bankruptcy courts have a comparative advantage in imposing the conditions that are necessary to get us from here to there, that the Congress is very good at many things, but running a car company it is not. And the lessons of Europe when they tried to run car companies and steel companies and coal companies is it didn't work out very well there either.

Mr. CLEAVER. So would you support the car czar, which is apparently the direction——

Mr. MORICI. If you are going to give them the money, how could I not support the oversight? What I am suggesting is it is not prudent to give them the money based on what they have said to you so far. You give them this first $15 billion and you better draw two lines on the budget right above HUD for Ford and General Motors, because they are going to be back year after year looking for money. They are not competitive now, and they will not become competitive if you give them that cash. You cannot spend $1.25—spend $1.25 on lemons, sugar, and water and sell lemonade for a dollar a glass and make money. And that is what they are trying to do right now. Their costs are simply too high.

Mr. CLEAVER. Now do all of you agree that the Big Three will attempt to avoid complying with the letter of the law that is in the language that will be considered later this week, hopefully? I mean,

do all of you believe that they will do everything in their power, in spite of agreeing now, but at a later date will begin to try to backtrack?

Ms. CLAYBROOK. I use the term "promises, promises" in terms of fuel economy and other things. I have seen auto industry plans come before the Congress and before the regulatory agency with promises; and when it wasn't locked into either law or regulation, they changed their mind.

I think that the situation today is somewhat different because their life is on the line now, and they know that, and it is not just this year, it is this year and next year and the next 5 to 10 years. And also they know there is going to be extreme oversight of how they spend that money and what products they produce. So I think it is more likely that they are going to do everything that they can and to comply, but I still think that they ought to have the clarity about what it is that they are supposed to do in terms of meeting fuel economy. And that is why I think it ought to be in the law.

But I don't think they are going to set about to undermine this. And I wouldn't be at all surprised if, after the money is granted, which I believe it will be now, that Rick Wagoner will step down and there will be somebody else there so that this issue about the leadership will change.

And the other two companies—well, particularly Ford—does have younger and more innovative management now than they have had in the past. So whether or not we tell them to change, the government tells them to change, I don't think that that is a good idea. And I think that if there is a concern about a particular manager there ought to be negotiations and expressions of concern.

Mr. CLEAVER. I think all three of them are troglodytic in their management style.

Ms. CLAYBROOK. Right.

Mr. CLEAVER. But my question I guess is, if this is a unique moment, which I think all of us would agree, then why not go all the way? Why not—would all of you agree to raise the CAFE standards in the legislation?

Mr. MORICI. If it applies to everyone, sir.

Mr. CLEAVER. I am sorry?

Mr. MORICI. If it applies to everyone, not just them.

Ms. CLAYBROOK. Yes.

Mr. MORICI. I would also say to you we have had other unique moments in history. For example, when we had the Asian currency bailout, we imposed all kinds of conditions on Thailand and Korea and all those. But after they got their money and got healthy again, they went on their merry way and manipulated their currencies.

I would suggest to you that you can get all the promises you want out of General Motors, but you are dealing with an enormous entity with an enormous cultural resistance to change and that you are going to have a lot of trouble writing it all down. I know you have the best of intentions. I really do. But I just don't think you can change General Motors from here. And if you give them the cash, they will do what they have to to get it from you, and you will find they will be back over and over again. This is going to cost you hundreds of billions of dollars. Get ready for it.

Ms. CLAYBROOK. I would just like to disagree and say, when the fuel economy standards were issued in 1977, that these companies made major changes; and they knew they had to or they were going to pay huge penalties. So another issue is that there are very significant penalties in the law if they don't meet these higher fuel economy standards, in addition to everything else that is in this legislation. And they did—General Motors did a major, major change in their fuel economy. They doubled their fuel economy. And from 1977 to 1985 they doubled the fuel economy of their vehicles.

Now, they started with a low number, but there are still lots of opportunities for innovation here, and there are some fabulous engineers in this industry. And I do agree that the management needs to change, but I think that there is capacity to do it.

Mr. CLEAVER. One final question, though. I mean, I agree that we need strong penalty provisions in the law. The problem is you can't penalize people who are broke. You know, can we pass legislation to put——

Ms. CLAYBROOK. It is already in the law. It is already in the law.

Mr. MORICI. Joan, just because something is in the law doesn't mean someone is going to do it. If you have a financial penalty and they have no money to pay, you can't get money from a man with empty pockets. If they are going to go out of business if you don't give them the cash and you say, well, I want you to do X, Y, and Z or I will take the cash away, they are coming here to make up the difference between what their revenues and their costs are. You are right. It doesn't make sense.

Ms. CLAYBROOK. But I think that you have to argue, as has been argued here, that it is going to really hurt the purchasing of these vehicles if they go into bankruptcy.

Mr. CLEAVER. The only thing that would probably trouble them is we say if you violate the letter of the law in this legislation you will have to play football for the Detroit Lions. I mean, that would probably be the worst thing we could do. They are broke. I mean, there is nothing else to do.

I yield back the balance of my time, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

And it was nothing personal there, Ms. Miller. The Patriots are hurting this year, too. We are struggling with the loss of our quarterback. Without good leadership, it is difficult to make it to the Super Bowl.

The gentleman from California, Mr. McNerney.

Mr. MCNERNEY. Thank you, Mr. Chairman.

I want to reiterate that I think this is a great opportunity for us as a Nation to look at our transportation system and start planning how we can make it better for the next century. Now, is Detroit capable of participating in this change? That is the question that is in front of us. I like to think that it is, and I hope that we can find a way to make that happen. But it is not a given in my mind, by any means. They have this culture that we have talked about, but, on the other hand, we have a big stick here. So I think we have an opportunity to do what is needed.

Your inputs have been appreciated. I am kind of intrigued by your technology, Mr. Munger. Could you tell me a little bit about

what you mean when you say 100 miles per gallon? Is that sort of a hard figure or is that sort of a squishy plug-in figure?

Mr. MUNGER. You have highlighted one of the issues around electrification. You know, you have a choice in deciding what kind of propulsion you want. You can have an internal combustion gas-fueled engine, you can have a pure electric vehicle, or you can have a plug-in hybrid. And the issue is one of range. And a pure electric has range constraints. So when you run out of battery, you need to find a place to recharge it.

To solve that, we have proceeded with a plug-in hybrid. Because the cheapest way to get range is actually through an internal combustion engine. Because the average vehicle drives 40 miles or less a day, we tried to optimize with the minimum amount of battery to achieve the most efficiency.

We have a 30-mile pure electric range, and then the vehicle proceeds to drive in hybrid mode and would be about 40 miles per gallon. So on a 50-mile day, as an example, you would use a half a gallon of gas, getting to that hundred mile per gallon number. That is a calculation that is similar to what GM has been using around the Volt. And that is——

Mr. MCNERNEY. So there is a standard way to make that calculation?

Mr. MUNGER. The industry is working towards it, yes.

Mr. MCNERNEY. Okay. What is the limitation in terms of you getting to where you need to be by 2014 or 2012, the number—the year that you gave for the production of your vehicle?

Mr. MUNGER. The primary limitation for us moving forward is capital.

Mr. MCNERNEY. Capital.

Mr. MUNGER. The availability of funds for a $550 million program.

Mr. MCNERNEY. So the battery technology is not a limitation in your mind?

Mr. MUNGER. You know, we have a very deep team in battery technology. John Waters behind me was one of the first builders of a plant to provide lithium ion batteries to the transportation sector in North America. They sold lithium ion batteries into the Segway program out of Delphi. He has been an executive in the industry. So we are pretty well aware of what batteries are able to do. We do also have a fallback to be able to provide a nickel cadmium solution.

Mr. MCNERNEY. Sure.

Dr. Morici.

Mr. MORICI. I don't know those guys. I never met them before. But 3 years ago about I worked on a project for the Defense Department concerning, you know, alternative vehicle technologies; and I went through the Rocky Mountain Institute stuff and all the rest. The difference between this man and Rick Wagoner is no one told him he can't do it. You are looking at the future if you let him happen.

Mr. MCNERNEY. Not bad. Not bad.

Mr. MORICI. It is all there, sir. It is all there. This guy is real.

Ms. CLAYBROOK. What you should do is send a note to the Department of Energy and ask them to hurry up.

Mr. MORICI. Exactly. Get the money to this man as quick as you can.

Mr. MCNERNEY. Well, we don't want to go that far in promoting a business, but I certainly want to encourage new innovation. And one of the things that the gentleman from Washington raised a question is, are we going to be dependent on batteries from overseas? And that is where we don't want to go either. So do you have a comment on that?

Mr. MUNGER. You know, I think there are battery technologies here in the U.S. that are working to build facilities. They have a similar constraint. You know, there is a chicken-and-the-egg problem in the industry where capital providers want to see them on a program, and program developers want them to have a facility. I think maybe you should speak to some of the people that were involved in GM's process. I know—I believe they are going to be applying for section 136 funds.

Ms. CLAYBROOK. Green Car Factory Funds.

Mr. MUNGER. Maybe we should submit for the record that we change that name of that program to the Green Car Factory Fund.

The CHAIRMAN. Thank you.

Mr. MUNGER. But there are efforts under way to get that capacity and technology here into the U.S. You know, people realize that building them here is important.

Mr. MCNERNEY. One other question. In what ways do the future of the auto industry require the resources of the Big Three? So you are proposing that you ramp up production and so on. What do we need from the Big Three if we were to move toward smaller businesses? I mean, there must be some part of that infrastructure that is needed to carry out the transportation needs of our country.

Mr. MUNGER. In our specific case, we have been working actually and talking to all three of the Detroit Three. We have an interest in procuring some of the parts that they use. We have talked to them about buying efficient engines. We are not trying to innovate with a new internal combustion engine. They buy and build lots of them. They have excess capacity in some of their parts. And so we found them to be very productive partners in some of those dialogues.

I think you have to recognize that they do have really good engineers, really good designers. There is a lot of skill set within those companies that is critically important to the industry as a whole.

You know, I don't want to get into what the structure of deploying those resources should be. But, you know, I don't think we should lose sight of the amount of capacity, knowledge, and understanding that exists within those companies because they are important in that light.

Mr. MCNERNEY. Thank you.

With that, I yield back.

The CHAIRMAN. Great.

The gentleman's time has expired. The Chair recognizes the gentlelady from California, Ms. Solis.

Ms. SOLIS. Thank you, Mr. Chairman.

I am really excited to be here to hear this discussion with all of you having your various opinions. I represent a very interesting part of the State in California, Southern California, which is just

a catastrophe right now in terms of air pollution and congestion; and we desperately need help in terms of our fleet vehicles.

I want to just pose a question. No one here has talked about the infrastructure. In California right now, we have an initiative by our governor, Republican Governor Arnold Schwarzenegger, who says he wants us to turn to fuel-efficient vehicles, but we don't have enough stations there to provide that capacity. There hasn't been enough moneys made available to allow for these sorts of traditional stations that need to be set up in appropriate places. So it is beyond me that we can talk about new cars and what have you, but if we don't have an infrastructure that is ready, available, and willing to make themselves available and accessible to our public, then what incentive is there for people in Los Angeles to move in that direction?

That is one question.

The other one, I represent a very poor working class district; and auto parts resonates with me in terms of where people have to get their parts. I hear that a lot. They have to go overseas, and then the reliability of those parts is not very good. They are not very efficient. They break down. You have to spend more money. I would hope that we can somehow begin to address that portion, that we begin to refocus our energies and maybe look at how we can develop those parts here and keep those jobs here.

And then the green collar jobs aspect of it all. I know in South Central Los Angeles there was an experiment that is still going on with Toyota. Toyota wasn't told by the Federal Government to come in and help train workers. They did it on their own; and I think they put in maybe a couple of million, $7 million I think, to help restart and provide free training for individuals in low-income, depressed areas. The Green Collar Job Act was really an idea also to try to get people into these new industries, not just in putting pieces together but also learning the technology.

I have not heard anything from the Big Three about, you know, reinventing themselves in that manner. Because that is where I think the market has focused on in the last few years. I know they target the Latino community very heavily, the Big Three in terms of their SUVs and their pickups. Now we need to change that kind of behavior amongst our community as well.

Toyota has done a great job. They do advertising. They do all kinds of things. They give incentives. They do charitable work. I don't know that the Big Three have done enough to really include communities of color. So those are my issues. And I will let you speak.

And Mr. Munger, one question for you, though. Of the 50,000 cars that you are going to develop, what is the price, what is the unit price for one car, just right off the top?

Mr. MUNGER. We have been talking to our customers about a price in the high 40,000s. In the high 40,000s, and they would save over $5,000 a year in fuel costs.

Ms. SOLIS. That is still relatively high for an average community like mine, where the gross—well, their annual salaries range from 20 to 30,000. So that is not affordable for people that I represent.

Mr. CURLESS. Let me comment on that, too, about volumes. We have been hearing about the 50,000, and that is wonderful. And

what is going to happen is we need the Big Three to handle volume, and we need their understanding of manufacturing and technology to get to this volume. Because we are talking about millions of cars here, folks, millions of cars, not a hundred thousand. So when we talk about, for example, looking at automation, just to automate a factory, we don't even want to start looking at it until we are talking about a hundred thousand parts. And, more typically, I hear about 800,000 parts. This is the kind of volumes that we are talking about to be affordable.

And if we keep trying to buy this overseas, what do you think the foreign companies that our automobile company is sitting right next to those parts makers are doing? They are getting those parts at a lot less price than we are going to pay here in the United States. So we need to bring it here to the United States, and we have got to use our technology for volumes and for automation and for production.

Mr. MUNGER. I just want to jump back on the pricing point a little bit. Because I think the question isn't—you know, very few of the people you are referring to and customers globally actually buy a car in a single lump sum. So what we are talking about is actually a transition of paying a high fixed—you know, a high price for your gasoline and a lease payment for a fixed price more or less that is actually lower on a combined basis.

So there is an education process that needs to take place to help people understand what it means to buy these vehicles. Because you are essentially paying for your gasoline up front. And there are policies that, you know, we have gotten pretty clear confidence from our customers that they will pay that price, because we do have a different demographic target, but also it is really important that, you know, things like feebates that transition or charge a fee for inefficient vehicles and provide a rebate for the most efficient vehicles can help bridge that gap to the consumer to understand it is actually an NPV-positive calculation. So they save money over the time they own the vehicle, but it is hard for consumers to understand that.

Ms. SOLIS. Is that mostly for commercial, though?

Mr. MORICI. He is not selling compact cars, though. He is selling a much larger commercial vehicle. So we are not pricing a $45,000 vehicle against a Mazda Three or a Ford Focus. We are pricing it against a much larger vehicle.

The other thing to remember is that when the Tandy personal computer first came out at Radio Shack it cost about $8,000. You have to have an opportunity to go down the commercialization curve of this technology. If we can start making them, then we will make them cheaper. So, you know, some patience is required. The automobile started out being a vehicle for the very wealthy or a commercial vehicle and then it got commercialized. Well, the same thing will happen here.

As for parts factories that your constituents might work in or people that compete with might work in, the single most significant thing this body could do to assist them would be to fix the Chinese currency problem. That is what is moving all these factories over there. It creates a 45 percent subsidy on Chinese exports to this country. What is more, in order to sell cars in China you have to

make them there; and then they make you move your parts factories there. That is what we have to fix. We don't have a free trade policy with China; we have a dumb trade policy. That has to be fixed, or none of this can be fixed.

Mr. WARDLE. I would quickly like to respond, if I may, to your three questions about infrastructure, spare parts, and green collar training.

I would like to remind the committee that when the Model T Ford was introduced in 1908, there were no filling stations. You had to buy your gasoline at a pharmacy. So I think it a chicken-and-egg situation. As these new kinds of vehicles do come into the market, the infrastructure to support them will follow.

When it comes to spare parts, a lot of these new generations of vehicles which are predominantly electric drive will require less spare parts. Electric motors and the drive trains associated with them are a lot less complicated, a lot more reliable than the traditional internal combustion engine. So your constituents in a few years' time won't be looking for spare water pumps and all of the other things that typically go wrong with older cars.

Also, at the beginning of my career—when it comes to green collar training, you talked about how Toyota has been training and being good stewards. At the beginning of my career, I watched the British car industry crumble as the Japanese car manufacturers moved into Great Britain; and I saw a sea change in management attitudes as these companies came in. They took far more care to make sure that their new, often green in another sense of the word, vehicle workers, factory workers were trained properly. And it brought a completely different dynamic. So it is very, very important that the industry takes care of training its work forces.

The CHAIRMAN. The gentlelady's time has expired.

We just have a few members here. I am going to, as a result, recognize members for a second round of questions.

This is a very important and, actually, an historic panel in terms of what this discussion represents in terms of what our expectations should be for 15 billion, 34 billion, or, as Dr. Morici is saying, an infinity sign next to the amount of money which the automotive industry is going to request from us. Excuse me?

Mr. MORICI. It is very big.

The CHAIRMAN. A big, big number.

So let me go down and ask each of you this question. In testimony last week, Mr. Mulally at Ford and Mr. Wagoner at General Motors submitted plans to the Congress. Here is what the plans said.

For Ford, they said that they would make a 26 percent fleet improvement by 2012. They would make a 36 percent improvement in their fleet by 2015.

Here is what Mr. Wagoner said that General Motors would do for the money, that they would average 37.3 miles per gallon in their cars by 2012 and 27.5 miles per gallon for their trucks by 2012.

Now, some very smart people at the Natural Resources Defense Council translated these standards into grams of CO_2 per mile. When they did that, they found that these plans actually meet the California standard, which is being debated over whether or not there should be a waiver for California to impose these standards.

So that actually translates into an equivalent of 36 miles per gallon by 2015.

So the question is, going back to Ms. Claybrook, if they are testifying to the effect that they can meet that standard and they want money from us, and that is what their promise is to us, even if as Dr. Morici or others might say they might try to wiggle out of it, doesn't it make sense to put their promises technologically into the law as the condition of getting the money so that at least Ms. Claybrook and others can sue them, the NRDC, the Sierra Club and others, if they don't meet that standard, so that they know that there will be some accountability?

Let's go down quickly and have each one of you answer that question. President Bush is saying he really doesn't want to go in that direction. But we are going to have a big debate about this in the next 24 hours. That is the question of whether or not we should have these conditions or some type of conditions attached in terms of what the goals should be of these industries from a mandated perspective, given the fact that they are saying that they can meet these standards.

Ms. Claybrook.

Ms. CLAYBROOK. They should be in the law.

The CHAIRMAN. They should be in the law.

Mr. Munger, in the law, not in the law?

Ms. CLAYBROOK. In the law for all companies, by the way.

The CHAIRMAN. In the law for all companies. Good.

In the law.

Mr. MUNGER. In the law for all companies.

The CHAIRMAN. In the law for all companies. Dr. Morici.

Mr. MORICI. In the law for all companies, including the transplants. Make sure that "all" means including the transplants.

The CHAIRMAN. "Transplants" means?

Mr. MORICI. The Japanese car manufacturers that operate here, the Germans, the Koreans, all those people that make cars here.

The CHAIRMAN. Okay. Good.

Mr. Wardle.

Mr. WARDLE. Yes, I think they should be included in the law. However, I think that the standards, the figures that you have just described are woefully unimaginative for the future. There are companies already that can deliver cars with that corporate average fleet.

The CHAIRMAN. Mr. Wardle, you and Ms. Claybrook have already made this point; and that is why we have you testify. You are idealists who are testifying. But President Kennedy said to people who looked like me when I was 14 years old that our job in politics was to be idealists without illusions, and that is what that 15-foot gap between the witness table and those of us who are sitting up there represents. And so we try to do the best we can, given the incredible political opposition that is presented by very powerful institutions, including someone who sits in the Oval Office of the United States of America right now.

So I agree with your vision. I thank you for it, and I thank Ms. Claybrook. We are trying here to take advantage of a political opportunity as idealists without illusions. And so, yes, I would do more myself if I could, wearing my idealist cap, but I don't have

that luxury right now. I have to try to figure out what we might be able to get done in the next 24 hours or the next 24 days or so when we come back and revisit the issue.

Mr. Curless.

Mr. CURLESS. Yes. You need to put performance measures in. Absolutely.

The CHAIRMAN. And would you take the performance measures that the industry——

Mr. CURLESS. Absolutely. That is the way to do it. Now, you may want to go back and double-check them one more time, but it should be there.

And, technologically speaking, they are going to be able to do this. It is a question of just exactly what vehicles they are talking about and how the mix looks. But, in the end, they can achieve this; and those measures need to be in the law.

Ms. CLAYBROOK. Mr. Chairman?

The CHAIRMAN. Yes, Ms. Claybrook.

Ms. CLAYBROOK. So that is through 2015. But the existing standards go through 2020. So what are you going to do now? The existing standards through 2020 are 35 MPG. They say 36 by 2015. So what are you going to do between 2015 and 2020 in the law?

The CHAIRMAN. I agree with you, Ms. Claybrook. We will try to figure that out. But, as President Kennedy used to say, the fact that we can't make progress on all fronts doesn't mean that we shouldn't make progress on any fronts. So let's look at 2015 right now. If we get them to this standard by 2015, they are going to be hard pressed to say they can't go further than that by 2020.

Right now, you are saying that 35 miles per gallon by 2020 is not a good enough goal. How about 36 by 2015? You know, we should be having some consensus that if they say they can do it that we will hold them to do that. But we know 36 won't be the standard in 2020. We know it will be 38; it will be 39; it will be 40, 41, 42. So we start at 36. And I think that is probably a good way of having this discussion.

Mr. MUNGER. Or—I am sorry, Dr. Morici.

Mr. MORICI. Please forgive me for reversing roles with you, but then that brings me to the next question, is what do we do when these guys 2 years from now are saying we are making all these efforts and all these bad things have happened to us and we need yet even more money than you have given us so we can meet these goals that you are requiring of us? Because you know the reason they wouldn't want to meet them was not because they would—they are not inherently evil people.

The CHAIRMAN. No.

Mr. MORICI. But the reality is if the price of gasoline sinks and stays at a buck and a half a gallon, then all of a sudden those big pickup trucks start looking good again, and they can make a lot of money at them.

The CHAIRMAN. Can I say this, Dr. Morici? And again Ms. Claybrook already made this point. I will restate it.

Which is that, in 1975, over the objection of the auto industry, we doubled the fuel economy standards from 13 to 27 miles per gallon. Now, at that point, we had an oil crisis. We had another one in 1979, 1980. However, as she pointed out, beginning in 1977,

when the rules began to be implemented, by the time we reached 1985–1986 we had gone from 13 to 27 miles per gallon. Now, a lot of that in the 1980s was as the price of gasoline and a barrel of oil went down to $12 a barrel. But they were under a mandate, a Federal mandate.

Now, you say, well, what penalties are they going to have imposed if they don't have any money? All of that, I understand everything you are saying, Dr. Morici. But it happened once. And then successfully they blocked any further increase in the fuel economy standards from 1986–1987, all the way until December of 2007 when my amendment passed raising it to 35 miles per gallon.

Now, believe it or not, it had gone backwards to 25 miles per gallon by 2007. So that 10-mile per gallon increase was the best we could do. Okay? Now, if there is a problem in the subsequent years, at least we will have the law on the books.

Mr. MORICI. I agree with you. What I am saying is watch out for them to come back and say that we need more money to do this, you know.

The CHAIRMAN. I understand what you are saying, Dr. Morici. Okay? The recidivism rate is very high in the auto industry. Okay. If that is your point, I have served in Congress. This is my 33rd year sitting on the very same committee, the Energy Committee. Okay? So I am aware. I am actually an eyewitness to each one of the hearings that has been held on the subject for 33 years. I don't think anyone else in the room, with the exception of Ms. Claybrook, can say that. Okay? So that gives me, you know, a perspective that understands that I could very much look like Charlie Brown with Lucy pulling the football.

But that is why you need a law. Okay? You don't need a promise. That is her point. And you are helping us to say let's turn the promise into legislative language that we then attach, and we might not do it this round, but they are coming back again real soon, okay?

Mr. MORICI. You watch.

The CHAIRMAN. No, again, I have watched over and over and over again. Okay. The law actually called for——

Mr. MORICI. Like a kid with an allowance.

The CHAIRMAN. You need to attach conditions. That is what we are talking about. And then I think that empowers, Dr. Morici, the technologists in the companies, that empowers the younger generation, that empowers the people who thus far have been walled out by the people who went to Harvard Business School. And, by the way, I love Harvard Business School. I love the Sloan School up in my district. I love them. They are great people. I prefer, though——

Mr. MORICI. Don't you love the Maryland Business School?

The CHAIRMAN. Excuse me?

Mr. MORICI. Don't you love the University of Maryland Business School?

The CHAIRMAN. I love the University of Maryland Business School.

Mr. MORICI. I want to make sure you get that in.

The CHAIRMAN. But each of them pretty much gets a three-by-five card that shows you how you make money. We are trying to

empower the people that go to MIT or the University of Maryland, okay—that is the Google boy's father over here at the University of Maryland, who is not in the financial sector but over here in the technological sector, okay—Sergey Brin's father—and say to the technological people at the University of Maryland or at MIT or at Harvard, now you are in control, you know. Because they are going to have to talk to you, the people over at the B school or the Sloan school, huh, as to what you are going to have to now talk about in terms of improving the technology, right?

Right now, they just straight-arm them. They are out of the room. They are not listening to you. You know, we don't have to improve anything. Okay?

So that is really what we are talking about. How do we create a formula that accomplishes that goal?

So my—you know, my goal here is just to find a way of holding them to what they are saying right now they are going to do, like an allowance, okay? There has got to be some penalty. There has got to be something you are going to take away. You are grounded. If you don't perform on the allowance, okay, you are grounded for 2 weeks. And then you have to make it stick, right? So we need to find a way of doing that. When we move forward, you know, we just have to accomplish that goal.

I am just going to ask one more quick question right now. And that is that, Dr. Morici, you proposed that when we provide the assistance to the companies that they perform the R&D and their first large production runs in the United States. The condition would be that beneficiaries share their patents at reasonable costs with other companies who will be here in the United States making vehicles. You suggest that this could attract producers from around the world and rejuvenate the U.S. auto supply chain. Do you think that people would continue to develop these new technologies if the large profit margin disappeared?

And I would like you to just answer that question, so that we don't kind of create something that actually doesn't attract anyone to that fund.

Mr. MORICI. I think that the reasonable has to be reasonable. If you come up with a great idea and it is worth something, the other car companies have access to it, but they have to pay for it as well. And that worked in Japan. It worked just fine. That is what they did in the 1970s and 1980s with their technology program.

If we require that Americans drive vehicles with high mileage standards and we provide R&D incentives to develop the products here, I don't think we are going to have much trouble—the reason I want to do that is I want to get Toyota, Nissan, and Honda involved because we want access to their technology. We want to encourage them to locate more of what they do here.

The CHAIRMAN. Okay. And one of the suggestions on the panel was that these factories that General Motors and Ford and Chrysler have right now that they might not be using in the future might be made available—I think I heard someone say that—to people like Mr. Munger and others. Okay? So it just doesn't get shut down, but we move it over to the new companies. Was that you, Mr. Wardle? Somebody made that proposal.

Mr. WARDLE. Yes, I certainly believe that.

The CHAIRMAN. So talk about that concept in the context of Mr. Munger and Tesla and these other companies.

Mr. WARDLE. There is no doubt that these new companies have already worked out the products that we need; and, at the same time, the legacy auto industry certainly has a lot of expertise and capability of turning products into high-volume manufactured vehicles. And so I think it would be a missed opportunity if some way was not found of harnessing those idle capabilities in the legacy industry to the benefit of the start-up companies so long as none of the defensive attitudes, if you like, of the legacy industry would dilute in any way the innovation of the start-up companies. So it has to be the right relationship so that the best parts of the current auto industry are made available to the innovative aspects of entrepreneurial start-up companies.

The CHAIRMAN. Great. And I will just give you the quote from the White House press spokesperson Perino today. As opposed to building the kind of the promise of the industry into the law, she said, quote, today, if the viability advisor says that they are not making progress, then that company, the automaker, would have to pay the taxpayer back right away. So there is the incentive for everybody to work hard to make this work.

Good enough for you, Ms. Claybrook?

Ms. CLAYBROOK. No.

The CHAIRMAN. Good enough for you, Mr. Munger?

Mr. MUNGER. It is not obvious how you repay a loan when it is a loan you require.

The CHAIRMAN. Dr. Morici, good enough for you?

Mr. MORICI. No, it is not good enough for me. I want more than that.

The CHAIRMAN. Okay. Thank you.

Mr. Wardle. Good enough for you?

Mr. WARDLE. No.

The CHAIRMAN. No.

Mr. WARDLE. No.

The CHAIRMAN. Thank you.

Mr. Curless was shaking his head vigorously sideways. So you know what his answer was.

Let me now turn and recognize the gentlelady from Michigan, Mrs. Miller.

Mrs. MILLER. Thank you, Mr. Chairman; and I appreciate all of the witnesses and some of the testimony that has been given here.

And to my colleague, Mr. Cleaver from Missouri, the Detroit Lions are having a rather tough season this year along with the domestic auto industry, but, hey, how about those Red Wings?

You know, there has been some talk about the CAFE standards. I think uniformity is key. It was interesting for us to note—I realize I sound a little defensive here again—interesting to note that Nissan got a loophole in the CAFE standards last time. I am not quite sure how all of that worked out. But I do think uniformity is a key.

And I appreciate and we are going to see how all of this is going to work when you have various States coming up with their own emission standards, and as part of the law it will be—it will preclude the auto industry from any litigation trying to stop that.

I do wonder sometimes—I mean, for instance, if you took a—maybe an industry from California, from Hollywood, I mean, if you were a movie maker and every single State in the Union could have their own determination of what the rating was on a movie, how would you market that movie? PG in some States and R in others and these kind of things. So I do think uniformity is a key, but I recognize that there is a bit of a double standard here.

But my question would be—and I appreciated some of the comments Mr. Wardle was making about in Britain and the experience that you had there when some of the transplants, as we call them here, came into your country.

But it seems to me that our Nation has not—and our Congress has not done as good a job as we should have of having a manufacturing policy, really, or a comprehensive, cohesive industrial policy. For instance, in Britain now we see Ford manufacturing there a diesel engine which is apparently getting—can get 65 miles per gallon there, but yet there was a concerted effort to incent people—deincent them to purchase gasoline and to incent them to purchase diesel as part of sort of the country's policy and through the EU as well.

I am just not quite sure who I am asking this question of, but it does seem to be that if our Nation had a more comprehensive industrial policy and a manufacturing policy, we could advantage ourselves in many ways because of this crisis that we are finding ourselves faced with now as we are busy putting all of these laws an oversight and et cetera. I think we all want the same thing at the end. Maybe we could look at it in a little broader vision of how we can help our country go forward with such a policy.

Mr. MORICI. Mrs. Miller, we have a manufacturing policy in the United States. We have an anti-industrial policy. It is that simple. Whether we have a Democratic administration or a Republican administration, we get the same Treasury Secretary. We get Bob Rubin in one form or another. The guys from Wharton on up through the Charles River don't know much about factories, aren't much interested in them, and don't really care very much. Okay.

As a consequence, I have watched this body, I have urged, I have written op ed articles, I have sent you press releases over and over again about our toleration of the Chinese currency policy and how it is devastating your part of the country. You know, nothing ever happens.

The inability to move on trade policy has done more damage to the manufacturing base in the United States than can possibly be managed by one man or woman. But we have tolerated. When Wall Street gets in trouble, you guys passed a $700 billion bailout, which gave them essentially all the money they wanted, and then some, and whatever you don't give them, the Federal Reserve gives them, with virtually no strings. They haven't done any of the responsible things to speak of necessary to reopen credit markets, such as reopening the securitization pipeline from good, sound regional banks to fixed-income investors. That goes on and on and on.

So we have a policy. Somebody said to me, People don't want to study engineering in this country. They are too lazy. They are not too lazy. There is a reason the finance department is full. The same math that is in an engineering textbook or physics textbook is in

a finance textbook. I know. I have studied it. But we have lots of kids who want to study finance because that is where the rewards are in our society and, to a large measure, that is a product of public policy. Engineering doesn't pay out because manufacturing doesn't pay out. Manufacturing doesn't pay out because we have a dumb trade policy.

Mrs. MILLER. Mr. Wardle.

Mr. WARDLE. Yes. I see a lot of parallels, as I mentioned before, between what happened in the UK and what is happening in Detroit now, largely because of inept management in the British car industry that refused to acknowledge that overseas companies were developing products that UK consumers actually needed bad. But one of the mistakes I think that was made in Britain, which hopefully can be avoided in the U.S., was that the government intervention in the British car industry was of the wrong kind. What we really need here is clear direction and policy from government, which I believe is something that is always needed, which industry can respond to, which is why I think that, first of all, we need to set up what I would say is a mobility czar to look at this situation rather than an auto czar, so that it is quite clear what kind of transportation future that we have so that we know—and from that, to direct policy so that everybody knows what the hurdles are that they have to jump over or what the parameters are that they have to operate their businesses in.

And so it would be wrong to directly intervene with the existing car industry through too much internal messing around, but the parameters need to be very clear through government legislation and policy. That needs to come from very clear oversight as to what are the right answers. That is something that was never established in Britain in the 1970s. Nobody actually stated what the clear objectives were for the rebirth of the British car industry. So it didn't happen.

Ms. CLAYBROOK. Mrs. Miller, I would like to associate myself with both of those remarks and say that I do hope that this committee and, Mr. Chairman, this committee will have a hearing on transportation policy. Because we actually don't have a transportation policy in this system, in this country, and the President-elect has just announced that he wants to have a huge infrastructure expenditure. If you are going to spend a huge amount of more money on infrastructure, you better figure out what infrastructure you want and what really makes a difference. We have bridges and roads that are in disrepair, admittedly, but we don't have mass transit systems that go to the airport, for example.

One of the provisions in this legislation that you are going to be voting on, section 13, requires the auto manufacturers to study whether or not they should get involved in producing mass transit-type vehicles, whether it is rail or whether it is urban transit as a way to expand the scope and the view of their manufacturing activities.

I would urge that this committee hold some very soon hearings because the infrastructure committee—one of the problems with the Congress, it is divided up. The public works crowd is a different committee than the Commerce Committee, which looks at transportation generally. I would urge both this committee and the Infra-

structure Committee to look at transportation policy and what is it that we really want. What makes a difference.

People in this country are really frustrated with the changes that have been made by the airline industry because they are in financial trouble. Now you can't get from here to there without going through three different cities in an airplane and changing planes. So there is a lot of opportunity here in the middle of this crisis as well for looking at overall transportation policy.

I would like to make one last comment, Mrs. Miller, about something you said about the States setting standards. The reason that advocates like myself have favored that is because the lobbies have overtaken the Congress and stopped any improvement in fuel economy from 1990 when we lost a bill in a filibuster by two votes that would have by 2001 have required 40 miles per gallon fuel economy, which would have——

Mrs. MILLER. Thank you.

Ms. CLAYBROOK. If I could just say, the way that you can get around having it be variable is the manufacturers meet the highest standard. So if California sets the highest standard, then there are not a lot of different standards you have to meet. It is the one standard.

Mrs. MILLER. Just one more question, with the Chair's indulgence. I want to pick up on what has been talked about with the trade policies and some of the disadvantages that our manufacturing companies have run into as a result of that. I want to mention about MAG again. My question is to Mr. Curless. I think it is important to note MAG really was Cross and a number of other various other manufacturers that you have consolidated with. As you mentioned, you are the only remaining U.S. powertrain supplier to the automotive industry and the third largest machine supplier in the world. Yet, if you go into some of the auto plants of the transplants here, the machinery that they use there, do you find any American-produced machinery in those plants, or are they produced in their native nations? If there are no American-produced machinery in those plants, why not?

Mr. CURLESS. That is true. From Japan, the Japanese transplants come here, will not buy MAG equipment. That is our facilities here in the States, in Europe, around the world. We do supply the equipment though to people like the Korean transplants here. So, like the Hyundai engine, that is all MAG equipment, and they are produced in that engine, which is great. That shows that we can do it. We have the affordability factor to go with putting that equipment in there. But it is very clear the Japanese will not work with us.

Now China is going to be a different picture again. That is yet to be decided, what is going to come up there. But at this point I would say there is a good chance we won't get some of that business. On the other hand, we get a great deal of business out of Europe, we get strong business through all the other ones in the United States, and then there are the other companies, the heavy equipment suppliers, the big diesel engines for Caterpillar and Cummins and other companies. We get all that business as well. It is just a matter of what country you are really talking about when you are dealing with these transplants.

Mrs. MILLER. Thank you, Mr. Chairman.

The CHAIRMAN. The gentlelady's time has expired.

The Chair recognizes the gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Thank you, Mr. Chairman. I want to express real appreciation for you today. This has been very helpful to me, although I think Dr. Morici should come here with a bit more passion when you are testifying before Congress.

Mr. MORICI. You should have seen me when I was 35.

The CHAIRMAN. Would the gentleman yield? I have the third most Italian district, so imagine a whole district of people like that.

Mr. MORICI. You don't know how much more I just decided to like you.

The CHAIRMAN. I am used to this.

Mr. CLEAVER. A friend of mine, Hosea Haywood, said to me yesterday, and he is in the automobile industry and he sells automobiles, and he said that a year ago he could take 12 applications to one of the financing arms and he would get two or three approved. Today, he takes 12 and he gets none approved.

The crisis that we are in now is a credit crisis. One of my complaints with the Big Three is that even if we give them money, even if we make this bridge loan, they are still going to have a problem because GMAC, Chrysler financing and Ford financing are all three requiring a credit score of 700. You know where I am going.

If there is a credit crisis with the Big Three, and they all have financing arms, Mr. Munger, how in the world are you going to be able to make it without a financing arm? If we don't figure out a way to put money into the financing arms, maybe the industry can manufacture more cars but the public still won't be able to buy them because there is no credit, and if you are producing trucks with a unit price of $25,000, you are still going to have difficulty, and you will have a much more difficult time than the Big Three. Am I right?

Mr. MUNGER. I hope that by 2012 our credit crisis has passed. But I think you are very accurate in highlighting the issue. Chrysler was actually explicit about the need for TARP funds for Chrysler Financial. There is a differentiation where essentially the auto industry funds itself out of those affiliated lending arms and they aren't able to lend because they don't have access to capital. They have been hurt by the same things. That is why you are seeing them apply to become bank holding companies or do other actions to activate their access to credit to facilitate the flow of vehicles.

You do have the manufacturing businesses losing money, but there is need for assistance on the financial side. The risk profile is very different for a financing entity. That is much more of a TARP situation.

Mr. CLEAVER. Where will the potential customers come from? I mean, where will they get financing for your vehicles?

Mr. MUNGER. We have a commercial offering so it is a totally different financing situation.

Mr. CLEAVER. So they will go to depository banks.

Mr. MUNGER. They have their own lines of credit and there are some other entities that provide credit to that market. It will still

benefit from a smoother, more operating credit market, but we have some time to get there.

Mr. CLEAVER. All right.

Mr. WARDLE. At the risk of sounding like an idealist, I would point out that we see that there are aspects of future mobility systems where direct ownership of vehicles and access to mobility systems is not as necessary as it is today. I think there is a good case for looking at in the longer term how people can access personal mobility without having to make a large loan in the first place through leasing programs or other forms of shared ownership.

Mr. CLEAVER. Dr. Morici.

Mr. MORICI. The securitization problem is really at the root of the automobile financing issue, and that is that historically the finance companies associated with the Detroit Three made the better loans. They are raising their credit scores because they have less money to lend so they are giving it to their best customers. But if we don't solve the securitization problem, we simply will not solve the problem of the automobile industry or the student loan issue, or what have you, and that has to be solved if we are going to pull out of this recession.

It is really not, I know, the scope of this committee, but we need to put conditions on the money we are giving the banks. For example, the banks buying smaller banks does not increase the deposit base. And the deposit base in the United States is insufficient to finance all the auto loans, home mortgages, and what have you, business loans. It has to be financed by accessing fixed-income investors. We haven't imposed those conditions, the Federal Reserve hasn't imposed those conditions, and until it is prepared to do so, we are not going to solve anybody's problems. It is that simple.

I am hopeful that by 2010—if we haven't solved this problem by 2012, we are in the soup in a much bigger way than we discussed today.

Mr. CLEAVER. Thank you very much. Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman's time has expired.

I am going to give each one of you 1 minute to summarize to the Select Committee and to the Nation as to what you think should happen in terms of automotive industry and its relationship with the Federal Government, the taxpayers of our country, and their justifiable expectations if they are going to become partners with the Big Three financially. We will go in reverse order of our opening statements. We will begin with you, Mr. Curless.

Mr. CURLESS. Thank you. First off, I want to reiterate that bailout funds need to be made available to the Big Three. Certainly for the short term, we have an economic crisis going on here, and a lot of the discussions we have had here today have been about the next generation vehicle and the standards and the laws and where do we go for the future and can we get our milestones in and all that. We need to strive for those things but, let's face it, if we keep producing automobiles and there is no one out there to buy them, we are just going to watch that money go down the tubes, not because the automotive companies did a bad thing, it is because our whole economy did a bad thing.

And so we need to look at both aspects of it and maybe do some separation there and make sure that we look at both the short

term and the long term. So from MAG's viewpoint or from a manufacturing company's viewpoint we need those companies there. We need the Big Three. We need the volume. We need to see these millions of automobiles being produced, not just 50,000 or 80,000 or something like that.

So I want to encourage us to try to put more tax incentives in, encourage us to provide other types of incentives to the entire supply chain that is working with the automotive industry, and let's see if we can get this off the ground as far as looking at the next generation while we solve our economic crisis here. Thank you.

The CHAIRMAN. Thank you, Mr. Curless, very much.

Mr. Wardle.

Mr. WARDLE. Yes. I recommend funding for a powerful visionary multidisciplinary commission to define an innovative and far-reaching vision for America over the next few decades; funding in investment in building a far-reaching integrated transportation network across the Nation, which a revitalized American car industry could participate in; and financial assistance to help the innovative start-up companies get their products to market.

When these three things are achieved, then we can talk about the necessary financial assistance for the current auto industry as it adapts to a new business model that will support this overall vision.

I would also like to say my colleagues and I would be very happy to work with the committee to try and define what those requests or initiatives would be to help the so-called little guys in the automotive industry right now.

The CHAIRMAN. We thank you, Mr. Wardle, very much, and your Art Center College of Design in Pasadena, California. Back in 1962, when the Beach Boys were singing The Little Old Lady from Pasadena: "go, granny, go granny, go, granny, go," no one could catch her vehicle, hopefully out of Pasadena will come that new vehicle that we keep selling around the world that is a model for our future, our 21st century, not 100 days, as Dr. Morici said, but 100 years.

Dr. Morici.

Mr. MORICI. As a realist and not an idealist, whether we are talking about a bailout or a structured chapter 11, it is important to provide the industry with the right incentives to create a market here for high-mileage vehicles through higher mileage requirements for cars; to encourage the rapid deployment of higher mileage vehicles with the clunker subsidy to make it possible for people to trade in and get rid of the low mileage vehicles as quickly as possible; to provide development assistance for both vehicle manufacturers and component makers, and require them to share their knowledge with one another at a good return so that they are encouraged to continue developing technology, and to require vehicles and components benefiting from such incentives to be made here, at least in their first commercial runs so that we have an industrial policy that is positive. Finally, we do something about currency manipulation and Asian trade policies that hurt our industries.

The CHAIRMAN. Thank you, Dr. Morici.

Mr. Munger.

Mr. MUNGER. We are at a unique time where industrial need is aligning with the national interest. It is in our interest to have an industry that builds more efficient vehicles to lead to cleaner air, reduce carbon emissions, freedom from imported oil, and an industry that leads in innovation.

It is important to link accelerating efficiency with any bailout that goes along to the Detroit Three. The industry has the skills and the knowledge to do things beyond what they have done to date. There are also existing funding mechanisms in place to help the industry and to help smaller companies achieve those goals. Companies like Bright Automotive are prepared to accelerate this process independently of what is happening in Detroit. But it is important for the Nation that we work together, come up with a solution and achieve a more independent and oil-free country.

The CHAIRMAN. Thank you, Mr. Munger.

Ms. Claybrook.

Ms. CLAYBROOK. Thank you very much, Mr. Chairman, for the opportunity to testify. In the short term, I think that this legislation ought to pass as rapidly as possible, but I would urge the inclusion of a goal for fuel economies we have discussed and also that the citizens be more involved in this process by being defined as interested parties. We are the ones that are supposed to buy the vehicles, right? That is the one group that has been left out of this legislation and also left out are any requirements for them to take into consideration when they do this, redesign the safety rules that are pending in the Department of Transportation.

The longer term issue, I think, is huge. I think you have got some great recommendations today. I agree with preserving the Green Car Factory Fund so that it is the full measure of the $25 billion so that it can support innovative companies such as those we have heard from today. And that the stimulus package include refunding that money so that it is available. And that a transportation policy be looked at in the course of discussing the infrastructure future of this Nation in terms of transportation, and I think that can only help the U.S. auto industry, particularly if it gets into some of the mass transit issues.

Finally, I would say that we need more innovation as well about what we do in terms of personal transportation. There have been proposals on the table, for example, to not allow cars into the inner city and have people jump into free, available, you put a couple quarters in the box and get into an electric car and that is all that can come into the city, and get rid of some of the pollution. So it is an encouragement for people to think themselves differently about what kind of car they want and how they use their car. That is certainly going to influence the industry as well.

The CHAIRMAN. Thank you. We thank each of you.

Now some people are saying, Can we do this? Are we being unrealistic? I remember back as the chairman of the Telecommunications Committee back in 1991, 1992, 1993, 1994, when I was introducing legislation to move from narrow band to broadband. The telephone companies, the bigger companies said, We can't do it. The cable companies, Going to be very difficult. Now, mind you, the telephone companies had already invented these broadband tech-

nologies 15 years before and had won awards in basic research for their invention, but they had not deployed them yet.

And so when finally that law passed in 1996, the Telecommunications Act of 1996, it gave a lot of power to people who wanted to innovate because there was a brand new competitive paradigm created in the telecommunications sector. If someone told you that 10 years later the new language would be Google, eBay, Amazon, YouTube, and that a younger generation wouldn't know anything but that language just 10 years later, you would have said that is completely unrealistic. But what had happened there was because of that law an unleashing of innovation, of competitiveness, that created between 2 and 4 million new jobs in our country. I am very proud of that.

I think the same thing is going to happen here in the energy and the transportation sector. I think if we get the model correct, we are not going to be trying to put a man on the moon, as Mr. Munger said. The technology is largely there. We are talking about batteries. We are talking about technologies that are much more available than that which President Kennedy challenged us to invent in the 1960s to put a man on the moon, and to return them.

So I think that this is a great opportunity for our country disguised as a crisis. Because if we don't meet this challenge in a timely fashion, we will be importing all of these vehicles from India, from China, from Japan, and from Europe. And that would be the tragedy.

So we actually have this warning hopefully in time for us to change the way in which we view our manufacturing sector and what we can do in order to meet this marketplace of 6 billion people who look at us as the innovators. We are 4 percent of the population in the world. The 96 percent of the rest of the world sees us as the technological giant. That is why they want their children to go to our colleges and our graduate schools, because they think we are the best. We must now meet those expectations. If we do so, then I believe that 10 years from now we will look back and we will have actually put us on a path to solve the global warming and energy independence issues that we have ignored for an entire generation.

It is the kind of advice that you have been giving our Select Committee today, however, that the leaders of our country must listen to if we are to accomplish that goal. But if they do, I am confident, like we did in the telecommunications sector, that we can empower the Sergey Brins, the sons of professors at the University of Maryland, to go out and to reinvent the way in which we communicate.

With that final compliment to the University of Maryland, I thank you all for testifying. This hearing is adjourned. Thank you.

[Whereupon, at 12:30 p.m., the committee was adjourned.]

Dear Ms. Claybrook:
Following your appearance in front of the Select Committee on Energy Independence and Global Warming, members of the committee submitted additional questions for your attention. I have attached the document with those questions to this email. Please respond at your earliest convenience, or within 3 weeks. Responses may be submitted in electronic form, at aliya.brodsky@mail.house.gov. Please call with any questions or concerns.

Thank you,
Ali Brodsky

Ali Brodsky
Chief Clerk
Select Committee on Energy Independence and Global Warming
(202)225-4012
Aliya.Brodsky@mail.house.gov

1. **What sort of oversight mechanisms and accountability standards should be in place if any government loans are provided to the Detroit Three automakers?**

An oversight board like the auto task force developed by the Obama administration should continue to oversee the companies. It should be empowered to approve restructuring plans of the companies, and should be able to reject elements of restructuring plans. Changing the leadership, not just the CEO, but the Boards of Directors of companies receiving funds is needed to ensure that new thought and energy are brought to the companies. There should be transparency about what the money is used for, and regular public evaluations by the auto task force of the use of funds with measurements of effectiveness. Regular reports should also be submitted to the relevant committees of Congress.

2. **If the bridge loans or a bailout is provided to the Detroit Three, do you think long-term viability of the companies will develop, or do you anticipate eventual bankruptcy?**

If bridge loans are granted, and the companies make fundamental structural changes with the money, including reducing their dependence on gas guzzling light trucks and SUVs, instead building fuel efficient and safe vehicles that consumers want to buy, then it is possible that the companies can weather the economic turmoil and ultimately return to profitability. If the

companies are permitted to backslide into bad old habits for short term gain, then they will find themselves subject to eventual bankruptcy. Whether the companies can make these kinds of structural changes to their business models quickly enough to capture the public's imagination is less clear. The second round of restructuring plans submitted by General Motors in February changed the projections of what vehicles it would build to go back to building more light trucks. With that kind of thinking, the company will eventually fail. Another relevant factor is whether economic recovery comes soon enough to give the companies time to make essential changes.

3. **If Congress helps the Detroit Three with a bailout, can it do so without explicitly picking winners and losers?**

The success of the bailout money and the companies should be evident in the restructuring plans produced by the companies. The decision of Congress or the administration to disperse funds to the companies must be based on the quality of the manufacturer vision and plans.

4. **Do you believe that the Chrysler bailout in 1979 set a precedent for government assistance in the auto industry that continues today?**

The 1979 Chrysler bailout required the company to make serious changes, including meeting tough new fuel economy and safety standards and hiring a new CEO. These changes resulted in the company returning to profitability. However, after the 1975 fuel economy standards were phased-in in 1985, fuel economy gains made by all the Detroit 3 companies eroded. Chrysler made subsequent bad business decisions, but they weren't particularly distinct from the bad business decisions made by General Motors and Ford. The Chrysler bailout in 1979 shouldn't be interpreted as a precedent to this bailout, and I don't think that the companies acted negligently because they believed the government would rescue them. Instead, they were motivated by a belief that gas prices would remain low, that consumers would continue to buy their cash cow light trucks and SUVs, and that there was no financial benefit to adopting innovations and building fuel efficient vehicles.

5. **Is it more important for auto makers to achieve a return on investment or to meet environmental and safety considerations? What if the Detroit Three can return to profitability without adopting environmental and safety standards?**

The Detroit 3 cannot return to profitability without compliance with environmental and safety standards. The needs and demands of Americans for safe, efficient vehicles exist separate from the viability of the industry, and if the domestic manufacturers aren't able to catch up to their

competitors in providing safe, efficient vehicles, then consumers will take their business elsewhere, as they already have. This was very clearly shown in the summer of 2008, when under the condition of high gas prices but before credit collapsed, consumers shunned the gas guzzling SUVs that had been popular for about 15 years, and instead it was the Honda Fit that was a runaway hot seller.

6. **You said in your testimony that regulation is necessary to spur innovation in the American auto industry. Is there any part of the industry where you believe free-market competition is a better policy than government-imposed regulation?**

Regulations create a minimum performance bar, and it is up to engineers and supplier companies to figure out how to meet that bar. The regulation merely asserts to the companies that the free market competition occurs under the constraint of certain national goals. In terms of fuel economy improvements, those national goals include reduced oil consumption and greenhouse gas emissions. The benefits of these reductions have environmental, public health, national security, and personal financial benefits. After years of debate about the threat of global warming and the possibility of high gasoline prices the public is well aware of the seriousness of these issues and this is governing their purchasing decisions. Everyone but the Detroit companies have made changes.

7. **If the government has an equity stake in the auto companies, would the government have a voice in decisions by the Board of Directors? Would this be a step towards full government control in private business decisions?**

Until the loans are repaid, the American taxpayer has a right to be represented on the Boards of Directors of companies receiving loans. The government representatives would operate like every other member, protecting the interests of the constituents of the members. By investing public money into these companies, the American public becomes a shareholder in the companies. Once the companies return to profitability, and the interest of the taxpayer is met, then the government's role can be removed. The idea isn't to create a mechanism for government control, but to give the taxpayer, as a shareholder, the same protection afforded shareholders of other companies: competent representation on the Board of Directors.

8. **Have you studied how much extra vehicles with all of the safety and environmental standards you propose would cost compared to today's fleet?**

Industry cost estimates of safety and fuel economy technologies are provided to NHTSA as proprietary information, and therefore the specifics are not shared with the public. History shows that industry's estimates of the cost of compliance with safety and fuel economy standards have been vastly overstated. There are no credible independent analyses of the cost estimates provided by the industry that Public Citizen is aware of. The National Academy of Sciences estimated that with available technology in 2001, that a 10 mile per gallon increase in fleetwide fuel economy could be achieved cost effectively within 10 years. We are asking the auto industry to make this improvement 11 years from now, and 13 years from the enactment of the law that would mandate this improvement. From this, Public Citizen concludes that the fuel economy gains needed to comply with stricter standards can be met cost effectively. When I was administrator of NHTSA from 1977-1981 we had the resources to hire contractors to help make independent analyses of the cost of fuel economy rules. But NHTSA has since been starved with no such funding. The amount of money needed is miniscule compared to the seriousness of these issues to the public and the economy.

9. **If foreign auto companies reach similar financial crisis, would you support a bailout for those companies?**

Foreign governments in Japan, Germany and Sweden have already made decisions about providing bailout assistance to auto companies native to those countries. Before the U.S. government considers any involvement, some assessment must be made of the impact of foreign bailouts, and then what the subsequent impact would be to the U.S. economy. At this time, such assistance does not seem necessary, and my intuition about this matter would lead me to believe that such a bailout would not be good for the American taxpayer, which ultimately must be the recipient of benefits from the bailouts.

Dear Mr. Munger:
Following your appearance in front of the Select Committee on Energy Independence and Global Warming, members of the committee submitted additional questions for your attention. I have attached the document with those questions to this email. Please respond at your earliest convenience, or within 3 weeks. Responses may be submitted in electronic form, at aliya.brodsky@mail.house.gov. Please call with any questions or concerns.

Thank you,
Ali Brodsky

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(202)225-4012
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1. What sort of oversight mechanisms and accountability standards should be in place if any government loans are provided to the Detroit Three automakers?

   Bright Automotive is an independent company in which no other automotive entity has an ownership interest. We support the existence of a robust American auto industry, and remained focused on helping to build the future of that industry. At this point, we have not taken a position relative to the ongoing negotiations between GM, Chrysler, and the U.S. Government.

2. If the bridge loans or a bailout is provided to the Detroit Three, do you think long-term viability of the companies will develop, or do you anticipate eventual bankruptcy?

   Providing a full answer to this question would require access to internal strategy and financial discussions relative to the companies in question. Given that no official at Bright Automotive has been involved in these discussions or has access to this information, I have no basis to answer the question.

3. If Congress helps the Detroit Three with a bailout, can it do so without explicitly picking winners and losers?

It has long been my position that a robust domestic automobile industry is in the interest of the United States. If Congress were to provide additional funds to GM and Chrysler, it should be possible to do so without picking winners and losers, so long as that bailout is structured properly.

4. How would a cap and trade scheme affect your manufacturing processes and energy prices?

   A so-called cap and trade bill can take many forms. It would be hard to estimate the effect of a cap on carbon pollution without knowing more details of the legislation.

5. Can you specifically describe how you would use Section 136 funds? Did you already have projects in development prior to the authorization and disbursement of the funds?

   Bright Automotive intends to use Section 136 funds to establish a manufacturing facility in the United States to build our advanced vehicle. In addition, these funds would be used to execute engineering integration of our vehicle including incorporating components, designing tooling and equipment and developing manufacturing processes, including for battery pack integration. This project was undertaken in early 2008, when the company was established to commercialize a concept developed by a consortium of Rocky Mountain Institute, Johnson Controls, Google.org, Alcoa, and the Turner Foundation.

6. In the long-run, would the contraction of one of the Detroit Three open the way for Bright to expand your market share? As a company with a business plan of fuel efficient vehicles, do you believe that a bailout rewards the Detroit Three with a failed business plan?

   I believe that Bright Automotive will gain sales by producing vehicles that consumers want, and that they can afford. We are focused on producing our product, which is designed around the voice of the customer, and will continue to do so regardless of the expansion or contraction of any other automobile company.

7. Do you anticipate expanding production into heavy duty trucks? Would passage of the House-passed Heavy Duty Hybrid Vehicle Research, Development, and Demonstration Act of 2008 affect your business strategy?

At this time, we are focused on bringing one product to market: a light-duty plug-in hybrid electric vehicle. This vehicle fits broadly into the category defined as "light trucks". We may expand into other vehicle products and classes in the future.

8. Are your vehicles flex fuel? Do you support advanced biofuels as an alternative towards increasing fuel efficiency and reducing dependence on foreign sources of oil? Do you support coal-to-liquid technology?

Our belief is that all vehicles – not just those produced by Bright Automotive - should use as little fuel as possible, whatever that fuel may be. PHEV technology, if implemented properly, can help make strides towards that end. The fuel that our vehicles accept will depend wholly on our ultimate engine selection, which could include a flex-fuel capability.

Answers to Submitted Questions
Peter Morici

1. What sort of oversight mechanisms and accountability standards should be in place if any government loans are provided to the Detroit Three automakers?

The oversight mechanism President Obama has put in place is adequate. This statement is not meant to be a judgment about the qualifications of the individuals, only the structure of the mechanism.

2. If the bridge loans or a bailout is provided to the Detroit Three, do you think long-term viability of the companies will develop, or do you anticipate eventual bankruptcy?

That depends greatly on how rapidly the economy and car market recover. All three are making the right moves but Chrysler is very strapped in terms of engineering capabilities.

3. If Congress helps the Detroit Three with a bailout, can it do so without explicitly picking winners and losers?

The bailout makes this question mutt. If it had not bailed out GM and Chrysler one or both companies would have gone through Chapter 11 or Chapter 9

4. The maner in which you characterize the Detroit Three's problems are primarily structural long-term decisions. Without a new business model, do you foresee a way in which the Detroit Three can stabilize and return to profitability?

The most significant problems are the labor contract and debt, including debt to the union for health care and now to the federal government. My feeling is that changes in their business models are underway. They are shifting to more fuel efficient vehicles that better meet customer expectations for quality and amenities.

5. You advocate for Chapter 11 reorganization now to speed up the viability of the automakers. What concerns may arise with filing for Chapter 11 now with the current economic conditions?

A prepackaged Chapter 11, with government providing debtor in possession financing and assurance of quick payment for suppliers would work better than the current arrangement.

6. What is the likelihood of one of the Detroit Three companies completely shutting down production?

Unlikely

7. In your testimony, multiple times you note the structural advantages that the "transplants" enjoy over domestic producers. Are there any near-term steps the Detroit Three can take to narrow the gap in competitiveness? What steps should Congress take to address the disparity? How do you propose that Asian currencies are properly valued?

With a new union contact that eliminates work rules and labor costs disadvantages and debt relief these structural disadvantages could be overcome. Essentially the Detroit 3 need to catch up their models to Japanese standards. I believe without UAW work rules, excessive wages, benefits, etc, they could get their production costs in line with transplants and produce high quality, competitive vehicles. I question whether the current process will truly bring labor costs into line with the transplants and adequate debt relief. GM and Chrysler may emerge replacing private debt with debt to the government—what is the gain?

I would place a tax on dollar yuan conversion equal to the amount of Chinese currency market intervention divided by Chinese exports of goods and services. I would adjust that tax each month to encourage China to reduce its dollar purchases. That would leverage China into revaluing the yuan and then we could negotiate with other countries.

As things currently stand, we are appeasing China—history teaches us the wages of appeasement are nothing we should joyfully anticipate.

THE SELECT COMMITTEE ON
ENERGY INDEPENDENCE AND GLOBAL WARMING

April 13, 2009

To:

Ali Brodsky
Chief Clerk
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(202)225-4012
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From:

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Subject: Response to Additional Questions submitted by members of the Select Committee on Energy Independence and Global Warming

1) What sort of oversight mechanisms and accountability standards should be in place if any government loans are provided to the Detroit Three automakers?

Proper accountability and visibility are absolutely critical during this timeframe. The taxpayers, as stakeholders, and Congress deserve the transparent flow of information outlining exactly how and to what benefit the government loan funds are being used and what the repayment schedule, plus interest, is back to the government. It is suggested that each of the Detroit Three automakers make public the extent of the government loans received via the internet on each company's website within 14 days of receipt. Further, on

each company's website and posted for public review, the use of government funds needs to be made clear. Any changes in the use of these funds are to be fully explained. Lastly, it is strongly suggested that the GAO be tasked with auditing and providing a series of reports every six months. These GAO reports would be focused separately and independently on how each of the Detroit Three automakers implemented any government loans, to what benefit, and each automaker's plan for repayment (plus interest) back to the government. The reports would be concluded upon the final repayment of all government funds plus interest.

2) If the bridge loans or a bailout is provided to the Detroit Three, do you think long-term viability of the companies will develop, or do you anticipate eventual bankruptcy?
Since this hearing the bridge loans were provided, and we now know that Ford seems to be a viable company for the foreseeable future. General Motors seems to be headed for a managed – or Government-directed – bankruptcy. Finally, President Obama made it clear that Chrysler will not survive without some sort of a merger with Fiat, or similar foreign car company.

3) If Congress helps the Detroit Three with a bailout, can it do so without explicitly picking winners and losers?
By definition, Congress would be picking winners (though not necessarily losers) if Congress continues to fund the bailout that has already started. The question is whether there is any alternative. There seems to be little choice, with the auto industry representing so much of the U.S. economy, a bankruptcy would cost hundreds of thousands of jobs not only among the Big Three car makers but also among the suppliers to the industry, which include my company. It is estimated that seven times as many people are employed in the parts and suppliers network as work at the Big Three. Does the Congress really want to see that degree of economic disruption as a result of its inaction? I think not.

4) How would a cap and trade scheme affect your industry and energy prices?
There is no way that a cap and trade scheme would not raise our energy costs. That is a given, and, to some degree, that is the objective of such a scheme, to raise the cost of carbon usage. The question would be how the new revenue brought in by the scheme would be spent and whether the money from the higher utility taxes would be rebated to industry in

order to offset the additional costs associated with the program. Without such a rebate, our company, indeed most American companies impacted by the scheme, would become less competitive against overseas competitors.

5) You mention competitive advantages that foreign suppliers enjoy. What actions is MAG undertaking to match foreign supplier's price? Do you believe that Asian countries' currencies are undervalued?

It is not that MAG is not competitive in our prices or in our technology, but the issue seems to be our customers typically expect 90/10 payment terms. MAG has the following challenges:

- MAG has an inability to secure project financing based on the financial instability of the automotive companies, and US lenders are reluctant to accept automotive receivables as collateral against loans.
- Additionally when lending is available, foreign supported competition, specifically Japanese, receive low to zero percent financing to support the capital invested at 90/10 terms. Based on this, many Japanese competitors will accept terms even greater than 90/10 especially with tier one and tier two suppliers. **Access to the automotive loans or bailout money for project financing at low interest rates is a necessity for US suppliers.**
- Also as requested, MAG needs access to these loans to support R and D spending.

6) You note your company's relationship with the airline industry, as well as the automotive industry. If the domestic automotive industry contracts, will the effects impact your prices on supplies to the airline industry?

No, our prices to the Aerospace Industry are based on specific materials and labor required to meet the similar needs of businesses involving commercial airlines, space, and defense. We have specific factories which can support the requirements and be competitive against other potential suppliers. However, if the automotive industry contracts, MAG would need to downsize its overall operations including factory jobs, administrative, and facilities. This would create a serious penalty to MAG, whereby MAG would face financial difficulties due to processing the discontinued operations and managing the remaining factories on a less

efficient overall operating size. The loss of jobs would contribute to an already weak USA economy.

7) What is the single most effective policy Congress can adopt to ensure the long-term competitiveness of not only the U.S. auto industry, but also the manufacturing sector?

The United States once enjoyed the strongest manufacturing sector in the world. That is no longer the case, in part due to the avalanche of cheaper foreign imports. A concentrated, dedicated and consistent policy by Congress is required to turn that scenario around and raise the current level of American manufacturing back to that of a world leader. There should really be a three-prong policy: 1) ease export controls on all machine tools, especially 5-axis machines, and improve the processing of export license requests to no more than 30 days; 2) increase government investments into manufacturing R&D – both through tax incentives to the private sector and through appropriations to government programs – and allow those programs to link together, such as the Small Business Innovation Research (SBIR) Program with the Manufacturing Technology (ManTech) Program, so that successes from one program can be leveraged by other programs; and 3) increase tax incentives for companies that purchase U.S machine tools.

8) What amount of R&D investment does MAG do to help develop the advanced technologies needed for manufacturing?

MAG's business model is to offer upper end manufacturing products and systems that offer highly efficient operations to its customers. These products and systems make our customers more advanced and competitive in the world markets. Machinery manufacturers typically will invest less than 1% in R&D on average. MAG on the other hand, invests between 2% to 4% of its revenue on R&D. This investment is challenging but is needed to bring forth the upper end technologies required to stay ahead in the world of advanced machine tools. Other countries offer incentives and grants to their machine tool industries to assure a strong manufacturing economy. MAG must compete against these supplements. Anything the USA government can do will help assure a strong future USA based machine tool/manufacturing industry.

9) What are some of the steps and costs to get new technologies to commercialization?

MAG has established a virtual R&D network of partners in industry, academia, and government looking at research roadmaps and agendas. We then work together with these partners to determine what technologies are needed and mature enough to bring to the market. The typical steps for bringing technologies to commercialization include conducting development work for proof of concept, followed by proof of production, and finally having enough confidence to offer serial production ready solutions. All partners are looking for funding assistance because it is too expensive and risky to do on one's own investment. Government funding is often available to some degree, but in many cases it is too limiting and insufficient. Tax incentives need to be continued, specific grants need to be made available, and user-friendly loans targeted specifically at new technology implementation needs to be provided.