

STATEMENT OF:

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BEFORE THE:

Joint Economic Committee

***"Alternative Automotive Technologies
and Energy Efficiency"***

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Members of the Joint Committee:

Thank you for allowing me to address the committee on this important issue. My name is Mary Ann Wright and I am the Director of Sustainable Mobility Technologies and Hybrid and Fuel Cell Vehicle Programs at Ford Motor Company.

Energy security and rising fuel prices are significant issues facing our nation. I appreciate the opportunity to share with you Ford Motor Company's views on the most promising, advanced vehicle technologies.

Industry, government and consumers all have important roles to play in addressing our nation's long-term energy needs. Industry should continue to invest in the development of energy-efficient technologies that provide cost-effective solutions for our customers. And, government needs to take steps to bring advanced technologies to market more-quickly and cost-effectively through customer incentives.

Ford is committed to improving vehicle fuel economy by developing a portfolio of fuel-efficient advanced technology vehicles. Product solutions to improve fuel economy must result in vehicles that customers can afford and are willing to purchase. We know that when customers consider purchasing a vehicle, they are concerned with vehicle affordability, quality, reliability, performance, safety, appearance, comfort and utility. From our perspective, no one factor can be ignored in the highly competitive U.S. marketplace.

At Ford we're committed to developing better ideas and innovative solutions, and we are investing significant resources to develop advanced vehicle technologies. Henry Ford's vision was to provide affordable transportation for the world. Ford Motor Company's vision for the 21st century is to provide transportation that is affordable in every sense of the word – socially and environmentally, as well as economically. In other words, "sustainable transportation." Offering innovative technology that makes a difference for our customers and the world in which they live is not just the right thing to do – it's smart business.

As a result, we're doing substantial development work with renewable fuels and four advanced powertrain technologies, including gasoline-electric hybrids, clean diesels, hydrogen-powered internal combustion engines and hydrogen fuel cell vehicles. I'll briefly cover some of our efforts and accomplishments in each of these areas.

We believe that renewable fuels will play an increasingly important role in addressing U.S. energy security and energy diversity. All of our gasoline vehicles are capable of operating on blends including up to 10% renewable ethanol. In addition, Ford Motor Company has produced approximately 1.5 million Flexible Fuel Vehicles capable of operating on up to 85% ethanol. Overall, the U.S. auto industry has produced over 5 million FFVs. Although the number of E85 vehicles continues to grow, there are only approximately 300 E85 fueling stations in the U.S. As U.S. gasoline prices rise, the price of E85 has made it an increasingly attractive option to consumers. We continue to encourage a renewed focus on Federal policies and incentives that accelerate E85 infrastructure development to support flex fuel vehicles.

We are also at the leading-edge of hybrid vehicle development -- the Ford Escape Hybrid and Mercury Mariner Hybrid are great examples. Our hybrid SUVs can do virtually anything that our regular Escape or Mariner SUVs can, but with approximately 75 percent better fuel economy in city driving. But it isn't just a sensible solution or a new technology that led to 56 U.S. patents for Ford, with an additional 83 U.S. patents pending, these are hot new products creating a lot of market buzz and the Escape Hybrid was recently named North American Truck of the Year.

Over the next three years, we'll have three other hybrids joining the Escape and Mariner – the Ford Fusion, the Mercury Milan, and the Mazda Tribute. Much of what we've learned in developing these hybrids will help us as we explore other advanced technologies. Nevertheless, a key challenge facing hybrids is the incremental costs – both in terms of higher prices for components and engineering investments – that must be overcome for this technology to transition from niche markets to high-volume applications.

Ford is also working on advanced light duty diesel engines. Today's clean diesels offer exceptional driveability and can improve fuel economy by 20-25%. This technology is already prevalent in many markets around the world -- nearly half of the new vehicles sold in Europe are advanced diesels and Ford continues to accelerate our introduction of diesel applications in these markets. There are, however, many hurdles that inhibit wide scale introduction of this technology in the U.S. We are working to overcome the technical challenges of meeting the extremely stringent Federal and California tailpipe emissions

standards. Remaining issues include fuel quality, customer acceptance and retail fuel availability.

We are also working on what we think is the next step on the road to sustainable transportation – hydrogen-powered internal combustion engines. Ford is a leader in this technology. We think it's a bridge to the development of a hydrogen infrastructure and, ultimately, fuel cell vehicles. Ford recently announced that we will develop hydrogen powered E450 shuttle buses for fleet demonstrations in North America starting next year. Ford is also working on applying this engine technology to stationary power generators and airport ground support vehicles to further accelerate the technology and fueling infrastructure development.

Further down the road, hydrogen powered fuel cells appear to be another promising technology for delivering sustainable transportation. Hydrogen can be derived from a wide range of feedstocks to increase energy diversity, and fuel cells are extremely energy efficient and produce no emissions. Our Ford Focus Fuel Cell vehicle is a state of the art, hybridized fuel cell system. We have already placed a small fleet of these vehicles in Vancouver and are working with the U.S. Department of Energy and our program partner BP to deliver vehicles and fueling in California, Florida and Michigan in the near future.

Fuel cells are promising, but there are also tremendous vehicle and infrastructure challenges that must be addressed before they can reach commercial viability. Solutions will require technological breakthroughs and the concerted efforts of government, the auto industry and energy providers.

In conclusion, our objective is simple...give consumers more of what they want which is performance, drivability, affordability, utility and a cleaner environment. Advanced vehicle technologies can increase vehicle fuel efficiency without sacrificing these other attributes. We support policies that promote research and development of advanced technologies and the development of renewable fuel sources. In addition, market-based consumer incentives need to be a key element of a coordinated strategy to effectively address sustainable transportation and energy security. Consumer tax credits for advanced vehicles will help consumers overcome initial costs premiums associated with early-market introductions; bringing more energy efficient vehicles into the marketplace more-affordably and in higher-volumes. Ford Motor Company believes that the current U.S. Energy Bill contains many important policies and incentives to address our nation's energy needs and we encourage Congress to pass this legislation.

Thank you again for the opportunity to address the Committee.