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Written Statement

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to come before you today to testify on the subject of alternative fuels and advanced technology vehicles.

Under the President's leadership, EPA has been and will continue to be a strong supporter of alternative fuels and new technologies for vehicles. The development of such technologies and fuels holds the potential to improve national energy security, save consumers money and protect the environment.

Alternative transportation fuels are also important for growing jobs in the United States. For example, rural communities across the country are benefiting from the bio-refineries that have been built to supply ethanol to meet the renewable fuels standard. Electrification of vehicles is bringing much-needed jobs to Michigan and other states. Sixteen advanced battery companies established ongoing projects in Michigan between August 2009 and August 2010.[1]

Biofuels are a critical part of the evolving alternative fuel landscape. On March 26, 2010, in direct response to the Energy Independence and Security Act (EISA), EPA took final action and set forth the regulations to implement revisions to the national renewable fuel standard program, commonly called the RFS program. These provisions established new year-by-year specific volume standards for renewable fuel reaching a total of 36 billion gallons by 2022. This total includes 21 billion gallons of total advanced biofuels, comprised of 16 billion gallons of cellulosic biofuel, 4 billion gallons of "other" advanced biofuels, and a minimum of 1 billion gallons of biomass-based diesel, that must generally be used in transportation fuel. The revised statutory requirements also include new definitions and criteria for both renewable fuels and the feedstocks used to produce them, including new greenhouse gas emission (GHG) thresholds. The regulatory requirements went into effect on July 1, 2010 and apply to domestic and foreign producers and importers of gasoline and diesel for renewable fuel used in the U.S.

The RFS program will provide both energy security and environmental benefits. We estimate that the greater volumes of biofuels required by EISA will displace about 7 percent of expected annual gasoline and diesel consumption in 2022, decrease oil imports by $41.5 billion dollars, and result in additional energy security benefits of $2.6 billion. The RFS should also

[1] Governor Jennifer Granholm. 2010. Press Release: Governor Granholm Says Nation Must Secure Its Clean Energy Manufacturing Future. http://www.michigan.gov/granholm/0,1607,7-168-23442_21974-245659--,00.html

reduce GHG emissions from the transportation sector by an average of 138 million metric tons of CO2 equivalent per year when the program is fully implemented—equivalent to annual emissions produced by 27 million vehicles.

EPA strongly supports expanded use of advanced biofuels, especially cellulosic biofuels, which under EISA must achieve at least a 60 percent reduction in lifecycle greenhouse gases compared to the 2005 baseline average gasoline or diesel fuel that it replaces. Each year, EPA is required to publish the annual standards for total, advanced, bio-mass based diesel, and cellulosic renewable fuels. In doing so, EPA must determine the projected volume of cellulosic biofuel production for the following year, and if that number is less than the volume specified in the statute, EPA must lower the standard accordingly.

Before proposing annual volume standards, we conduct a thorough review of the cellulosic industry, including one-on-one discussions with each producer to determine their individual production capacities. EPA also consults directly with the Department of Agriculture, the Energy Information Administration (EIA), the Department of Energy's Office of Biomass, and the interagency Biomass Research and Development Board to determine the status of production capacity and capabilities of the cellulosic sector. Since these evaluations are based on evolving information about emerging segments of the biofuels industry, and may result in the applicable volumes differing from those in the statute, we propose the annual volume standard through a transparent rulemaking process, allowing for public review and comment, prior to finalizing the standards. This process ensures the most robust determination possible at the time the standards are set.

In 2010 and 2011, as a result of limited production capacity, we found it necessary to reduce the cellulosic standard to about 6.5 million gallons, substantially below the EISA targets of 100 and 250 million gallons for those years. Under the statute, when the standard for cellulosic is lowered EPA has the discretion to maintain or reduce the total advanced and total renewable fuel standards. In 2010 and 2011, we did not reduce these standards because we expect sufficient volume of other advanced biofuels will be available.

The biofuels sector is a dynamic one, and we frequently hear from companies who are in various stages of developing fuels based on innovative new production techniques or different types of feedstocks. We recognize the importance of evaluating and qualifying such new biofuels, where possible, for use in the RFS program. We already have a strong list of qualified advanced and cellulosic biofuels approved in the current RFS, such as biodiesel and renewable diesel from certain feedstocks; ethanol from sugarcane; biodiesel and renewable diesel from algal oil; ethanol and diesel from approved cellulosic feedstocks; and jet fuel and heating oil from certain feedstocks.

We have also established a process to evaluate new biofuels for approved use in the RFS program, including analysis of GHG impacts that are based on the best available science. Last year we successfully added canola-based biodiesel as an approved pathway, and have approved a number of other new technology-based pathways. Beyond that, we have a number of additional petitions requesting evaluation of new biofuel production processes and new feedstock pathways. We are currently in the process of evaluating each of these requests, working in coordination

with USDA and DOE, and are moving as quickly as practicable to complete and issue final determinations. Many of these offer potential to qualify as advanced or cellulosic biofuels.

EPA also worked closely with industry on a sophisticated enhanced data system designed to accommodate the new EISA standards. This progressive new system is referred to as the EPA Moderated Transaction System, or EMTS. This system supports real time submission of information, accounting and validation of renewable volumes, and close monitoring of many of the program requirements. Since last July, this system has helped manage transactions for billions of gallons of renewable fuels.

Turning from renewable fuels for a moment, I would like to highlight steps EPA has taken to remove barriers to the further development and introduction of alternative fuels and vehicles into the auto sector. Just recently, we finalized an "alternative fuel conversion" rulemaking designed to accomplish that objective.

While the vast majority of vehicles in the United States are designed to operate on gasoline or diesel fuel, clean alternative fuel conversion systems allow gasoline or diesel vehicles to operate on alternative fuels such as natural gas, propane, alcohol, or electricity. EPA supports innovation and encourages the development of clean aftermarket technologies that enable broader transportation fuel choices. At the same time, EPA is responsible for ensuring that all vehicles and engines sold in the United States, including clean alternative fuel conversions, meet emission standards.

EPA is adopting a new approach that simplifies and streamlines the process by which manufacturers of clean alternative fuel conversion systems may demonstrate compliance with these vehicle and engine emissions requirements. The new options will reduce some economic and procedural impediments to clean alternative fuel conversions while maintaining environmental safeguards to ensure that acceptable emission levels from converted vehicles and engines are sustained.

In closing, EPA is currently working to successfully implement the RFS program, both by following the specific direction established in EISA and by recognizing the statute's strong intent to replace conventional petroleum-derived fuels with advanced biofuels. The program today contains several innovative elements that together help incentivize the advanced and cellulosic biofuel sector. We are currently witnessing a period of unprecedented innovation with respect to the development and introduction of new fuels and new vehicle technologies. EPA strongly supports such innovation, and believes the resulting new fuels and technologies hold the potential to reduce our dependence on foreign oil, save consumer dollars, and clean the environment. Thank you for the opportunity to testify today.