



Testimony of Mayor Will Wynn

Select Committee on Energy Independence & Global Warming United States House of Representatives July 12, 2007

Mr. Chairman and members of the committee, I'm honored to be here this morning to speak to you about the potential impact of plug-in hybrid vehicles on both the nation's energy usage and global warming.

Our city has an exceptional asset in our municipally-owned utility, Austin Energy. Our Green Choice program has led the nation in renewable energy sales for the past five years. Our energy efficiency and greenbuilding programs for commercial and residential buildings are national models. Austin Energy is also the first electric utility outside California to join the California Climate Action Registry.

Earlier this year, the Austin City Council adopted a climate protection plan that sets goals and strategies to make Austin the leading U.S. city in the campaign to fight global warming. Plug-in hybrids are part of that future.

The city's interest in plug-in hybrid vehicles took hold as we realized the potential environmental and economic benefits that come with electrifying the transportation system:

- replacing foreign oil with domestic resources for energy independence
- reducing greenhouse gas emissions from vehicles
- powering vehicles with renewable energy

- reducing air pollution in urban areas and
- lowering fuel costs for consumers

The benefits that could be realized from plug-in hybrids aren't some futuristic ideal – the vehicle technology and the electric infrastructure to fuel these vehicles are here today.

In January 2006, the City of Austin launched the Plug-In Partners national campaign to persuade automakers to build PHEVs by demonstrating that a market for the vehicles exists today. Austin Energy has taken the lead in forming this national grassroots coalition, which now counts nearly 600 partners, including 23 of the nation's largest cities.

Our city partners include Los Angeles, New York City, Chicago, Boston, Portland, Seattle, San Francisco, Kansas City Missouri, Milwaukee, Phoenix and Memphis. The coalition spreads over 41 states and includes local and state governments, electric utilities, environmental and national security groups, and the business community -- including the largest auto retailer, who joined because their CEO believes they can sell plug-in hybrids.

The automakers have taken notice: GM has announced plans for two plug-in vehicles, the Saturn VUE and the Chevy Volt, and Toyota and Nissan have both announced they are working on plug-in hybrids. Earlier this week Ford said it expects to sell plug-in hybrids in five years.

Plug-in hybrids have the ability to enhance energy independence in the near term at virtually no cost. Our national power system could charge tens of millions of plug-in hybrid vehicles without requiring new plants. Consumer demand for electricity peaks during the day, but more than 40% of the generating capacity in

the United States sits idle or operates at reduced load overnight. It is during these off-peak hours that most plug-in vehicles would be charged.

The Department of Energy's Pacific Northwest National Laboratory reported that the nation's existing electric generation capacity would be able to fuel 84 percent of U.S. cars, pick-ups and SUVs as plug-in hybrids without a single new power plant being built. This same report found that plug-in hybrids could displace 6.5 million barrels of oil per day, representing 52% of U.S. oil imports, and that greenhouse emissions from vehicles could be reduced by 27 percent.

Earlier this year, the Brookings Institute announced that nothing could do more to reduce oil dependence more quickly than making cars that could connect to the electric grid. Electric utilities could become the gas stations of the future – with the infrastructure already in place and significant unused generating capacity to recharge cars overnight. The only thing plug-in vehicle owners would need is an extension cord.

Plug-in hybrids vehicles offer the most promising approach to reducing carbon emissions in transportation. A California Air Resources Board study of emissions along the entire supply chain found that using today's national grid, a battery-powered electric vehicle generates only 40% of the greenhouse gases produced by an equivalent gasoline vehicle. They would also shift emissions that impact public health from urban areas out to the power plants, where they are more easily controlled.

As the nation's grid becomes greener, so would the transportation sector. Austin Energy produces a lot of wind-generated energy, mostly at night, which provides a perfect fit for environmentally friendly plug-ins. Our Green Choice customers would be fueling their plug-ins with wind from West Texas instead of oil from the Middle East. The environmental benefits of plug in hybrids will be substantially

increased as you enact new federal policies encouraging the greening of the nation's energy grid.

At current U.S. energy prices – that is, with the cost of gasoline at \$3 per gallon and the national average cost of electricity at 8.5¢ per kilowatt hour – a PHEV runs on an equivalent of 75¢ per gallon. And given that half the cars on U.S. roads are driven 30 miles a day or less, a plug-in with even a 20-mile purely electric range could reduce petroleum fuel consumption by about 60%.

In the future when plug-in hybrid vehicles are common, they could also be used to store electricity, thereby eliminating the need for additional peaking power plants. This developing technology, known as vehicle-to-grid (or V2G), will allow electric utilities to draw power during peak hours from plug-in vehicles charged at night when generating capacity is idle. A “smart grid” is essential for this technology.

National legislation that provides tax incentives and funds research is key to making plug-in hybrids a reality. We support the plug-in hybrid provisions in the Energy Bill adopted by the House Committee on Energy and Commerce in June. Demonstration programs for plug-ins are essential to develop these vehicles, as are grant and loan programs for advanced battery research and smart grid deployment.

Austin Energy has committed \$1 million for rebates to customers who purchase plug-in hybrids when they become available. The consumer tax credits for plug-in vehicles authored by Congressman Lloyd Doggett of Austin in the House renewable energy tax bill, coupled with our rebates, will help put plug-ins on the road. This is the road to energy independence and a cleaner future.