

NCSU center to study car batteries

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Easley announces development plan for hybrid vehicle systems

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Gov. Mike Easley and power utility executives announced a research plan Tuesday to develop an electric battery and charging system for a new generation of hybrid vehicles.

Easley, speaking at the 2008 Emerging Issues Forum at N.C. State University, said the state, Duke Energy Corp., and Progress Energy Corp. would pay for a new research center on the N.C. State campus called the Advanced Transportation Energy Center.

The battery would be based on lithium-ion technology, the same that powers cell phones. He dubbed the future battery the "Wolfpack Power Pack."

N.C. State Chancellor James Oblinger said it would take two to five years to develop the battery and other supporting technology, such as special meters that would allow car owners to sell back to utilities any excess power saved in their cars.

The plan would cost \$5 million for startup, plus \$1 million a year for research. The public cost is still unclear, but Easley said leaders of the General Assembly have promised him funding, if he makes a good case.

Hybrids -- vehicles which use electricity and petroleum-based fuels -- are gaining popularity as worries over global warming and air pollution increase. Purely electric cars have been around, but the battery technology has always fallen short and the cars too expensive to produce.

The cost of producing electric batteries is now about \$10,000, Easley said. The price target would be \$3,000. He said the ultimate goal would be to evolve over time to an all-battery car.

The cars, which could be developed by research partners, also would have to be lighter and stronger, he said. "By the time the battery is ready, the car will be in place."

The announcement came as state leaders in government and industry wrapped up a two-day conference on global warming and ways the state can benefit from a growing "green energy" economy.

Easley said the new battery and research would spin off into jobs and new investment in the state.

The institute would also work on developing other needed technologies, such as how to best charge cars on the power grid and how to mitigate the effects of thousands or millions of cars charging at the same time overnight or during busy travel times, said Michael Ligett, director of Market and Energy Services for Progress.

The future cars could be recharged at new electric power filling stations or at home in a standard plug, he said. The electricity could be dumped back into the power grid at special stations using technology that still needs to be developed, he said.

There are numerous battery research projects already under way in the U.S. and abroad, and some smaller companies have exclusive deals with car companies, Ligett said.

But they don't have the resources of a research university and a state government, he said. "The time now is right," Ligett said. "We've turned a corner on the technology."