

With a little help, private sector will change energy

By Rep. Bob Inglis R-S.C.

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Sputnik surprised us. The Soviets announced a race to the moon with an ominous sonic boom. America scrambled, President Kennedy called on Congress to act, public and private sectors got in gear, and we dramatically came from behind to win the race with Neil Armstrong's "one small step" on July 20, 1969.

Gas at \$3 a gallon shouldn't surprise us. The Middle East has big, new customers in China and India. As National Geographic announced on its June 2004 cover, it's "The End of Cheap Oil."

Woe to us if we don't have a replacement.

My friend Sen. John Sununu (R-N.H.) argued in this space last Tuesday that the government has no business in hydrogen — one of several possible fuels of the future. I beg to differ.

Skeptics abound, and pessimists wring their hands about cars with heavy and highly pressurized hydrogen tanks. The grandparents of those naysayers said the same kinds of things to Henry Ford. They preferred hay and water in stables to Ford's highly explosive gasoline in onboard tanks. Maybe they even told Ford that the distribution system wouldn't work. "Why develop an expensive system of pipelines, storage tanks, tanker trucks and gas stations," they might have agued, "when pastures and streams are readily available?"

Ford pressed on. He changed the world. Innovative automakers are pressing on now in the race to a hydrogen future. In 2008, BMW will produce a 7 Series with an engine that can combust either gasoline or hydrogen. (Here's hoping they make some of those cars at their plant in Spartanburg, S.C.!) GM has a hydrogen-fuel-cell vehicle driving around Washington today that fills up at a Shell hydrogen fueling station.

Sen. Sununu argued that government isn't good at picking technologies. He's right. That's why government should invest in basic research that will advance all would-be fuels of the future.

Impatiently and insistently, we should fund basic research supporting the production, storage and distribution of the hoped-for (Sen. Sununu might say "hyped-up") hydrogen economy. Meanwhile, we should hotly pursue better batteries and photovoltaic cells. Those technologies may supplant gas/electric hybrids, taking us to a new plateau of energy independence and perhaps eliminating the need for hydrogen mobility.

Sen. Sununu listed a number of failed government-backed technologies. He's right to roll us past those clunkers. But that clunker cul-de-sac exists because government went beyond its best boundaries of basic research. The new and better model is the one being developed, among other places, at Clemson University's International Center of Automotive Research (ICAR).

At ICAR, government-funded researchers will share the campus of a graduate school of engineering aimed at the car with entrepreneurial types who know how to take products to market. Researchers will do what they do best; industry will do what it does best; and the markets will establish winners and losers.

In the race to reinvent the car, the private sector is taking multiple paths. BMW's hydrogen car introduces liquid hydrogen into an internal combustion engine. GM has spent over a billion dollars developing a fuel cell vehicle that converts hydrogen into electricity to run its electric motors.

One of these technologies may turn out to be the eight-track of the hydrogen economy. Another may be the cassette player. Yet another yet-unknown technology may prove to be the CD of automobiles, which, in turn, may be followed by the MP3.

All along the way, entrepreneurs will be making money and employing people, the air will be getting cleaner and the oil pressure will be coming off the Middle East. And we'll be winning our energy independence.

None of that will happen if we don't get with it. It won't happen if we waste precious research dollars on earmarks to marginal projects. National security demands that we focus our resources on programs with promise, borrowing the peer-reviewed model of competitive grants used by the National Science Foundation.

And we won't win by hoping for salvation in the oil we'll get from the Arctic National Wildlife Refuge. In 10 years, ANWR may be producing 1 million barrels of oil a day. The United States now consumes more than 20 million barrels a day.

But we will win if we work with President Bush in a bipartisan way to launch this modern-day Manhattan Project.

To those who would declare that hydrogen won't work, why not open our minds and our labs to all of the possibilities? Why not embrace the unpredictable benefits of basic science?

Too expensive, some might argue? Try gas at \$3 a gallon!

Inglis is chairman of the Science Committee's Subcommittee on Research and an original organizer of the House Hydrogen and Fuel Cell Caucus.

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