
(June 1, 2006) Op-Ed: Develop ways to use hydrogen as an energy source a

Develop ways to use hydrogen
as an energy source and win a prize

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By Dan Lipinski

<http://www.dailysouthtown.com/southtown/columns/guests/x02-guc2.htm>

Given the current price of gasoline, Americans have focused their attention on the need to change our energy economy. High fuel costs are more than a threat to our pocketbooks. Our current energy policy is also a threat to our national security, the environment and public health. In his State of the Union address, President Bush highlighted these threats, stating that, "Keeping America competitive requires affordable energy. And here we have a serious problem: America is addicted to oil."

While short-term policy fixes are necessary, Congress must find creative long-term solutions to our energy problems.

There are many energy alternatives to oil, including ethanol, biofuels, and solar and wind power. But another energy source shows great potential for powering our economy - hydrogen. In contrast to oil, which is scarce and causes pollution, hydrogen is abundant and emits only water as a byproduct. However, we need scientific breakthroughs in some aspects of hydrogen technology in order to make it a viable energy source to power our economy.

While the federal government currently allocates funds toward hydrogen energy research, we need greater incentives to attract other individuals - outside of national labs and major corporations - to make the needed advances. To address this need, I helped introduce the bipartisan H-Prize Act of 2006. This bill would provide results-driven financial incentives and prestigious national prizes in order to attract the best and brightest teams of entrepreneurs, scientists and engineers to lead the way to the hydrogen economy.

Our legislation, which passed the House by a vote of 416 to 6, sets up three prize categories over a 10-year period. Every two years, the government will award four \$1 million prizes for advances in the production, storage, distribution and utilization of hydrogen and one \$4 million prize for advances in prototype hydrogen vehicles. The grand prize of \$10 million, given after 10 years, is intended for a transformational advance in hydrogen energy technology. Sens. Byron Dorgan (D-N.D.) and Lindsey Graham (R-S.C.) have introduced H-Prize legislation in the Senate.

We did not design the H-Prize to replace research grants, but having done research at a university, I know that these grants often constrain imagination and creativity, and the paperwork involved can discourage potential applicants. Experience tells us that prizes have been an effective way to inspire technological advances, perhaps most famously the Orteig Prize won by Charles Lindbergh for his successful nonstop flight across the Atlantic. More recently, the first team to make two manned flights in a privately built spaceship won the X-Prize. Numerous people invested large sums of money - much higher than the prize money offered - to try to win these prizes. Furthermore, unlike traditional federal funding, only after someone meets the goals of the H-Prize can they take home the award.

The H-Prize relies on a steadfast faith in American innovation to find a solution to our current energy problems. It can serve as a milestone on the road to a cleaner, more prosperous and more secure America. As a former teacher, I know that the H-Prize may be most important in spurring the imagination of our youth, our nation's most valuable resource.

Dan Lipinski, of Western Springs, is the congressman for Illinois' 3rd District.