

Congress considers hydrogen prize House OKs program to reward researchers who find ways to end fossil-fuel dependence

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(05-11) 04:00 PDT Washington -- A group of congressmen think they know the right recipe for getting America started down the hydrogen highway to a new energy epoch -- take a helping of good-old American know-how and throw in the lure of millions of dollars.

The result is the H-Prize, a \$50 million program of awards for researchers who come up with breakthrough technologies that will free America from the polluting fossil fuels used in motor vehicles.

On Wednesday, the House voted 416-6, with one member voting present, to create the program, which features a \$10 million grand prize. The Senate version of the legislation is due to be introduced today.

"Perhaps one day we'll look back on this day as the day that led to a cleaner, more secure America," said Rep. Dan Lipinski, D-Ill., one of the prize competition's creators.

The bill directs the energy secretary to contract with a private foundation to create criteria for the prizes and administer the contest. The grand prize, to be awarded within the next 10 years, would go for creating a "transformational technology" that brings hydrogen fuel or hydrogen vehicles or the infrastructure to distribute hydrogen fuel closer to reality.

The congressional sponsors also hope to hook up the grand prize winners with private financiers armed with millions of dollars to commercially exploit the winning idea.

Prizes of \$1 million or \$4 million would be awarded every two years for lesser technical advances or prototypes of vehicles.

The proposed prize money is separate from government-awarded research funds for creating hydrogen vehicles, which President Bush has made a centerpiece of long-range energy research.

And it is also separate from Gov. Arnold Schwarzenegger's efforts to develop 200 hydrogen fueling stations for what he hopes will be mass-produced hydrogen vehicles.

"This is an exciting opportunity to do for hydrogen what the X Prize did for spaceflight," said Rep. Bob Inglis, R-S.C., the bill's main sponsor.

Inglis was referring to the \$10 million Ansari X Prize, which was won in October 2004 by a group

that managed to privately build and fly a space vehicle that could carry three people to an altitude of about 66 miles, return to Earth, and do it again within two weeks.

Previous prizes, public and private, have helped develop other technologies. Charles Lindbergh flew nonstop from New York to Paris in 1927 to win the \$25,000 Orteig Prize, which had been offered since 1919 for the first pilot to pull off the feat.

And in the 1860s, Congress and President Abraham Lincoln made railroad companies an audacious offer to create a transcontinental railroad. The rail companies got a subsidy for every mile of rail they laid, along with land grants along the right of way. By 1869, they had finished the monumental task.

"We can do it now," Inglis said, "because we did it before."

House Republican leaders cited the legislation as proof they are serious about addressing high gasoline prices, even though any dividends from hydrogen breakthroughs would be years away.

Inglis initially wanted a much more generous prize of \$100 million, but negotiations in the House Science Committee whittled away the amount.

Some of Inglis' fellow GOP conservatives questioned why Congress should offer multimillion-dollar prizes at all. But Inglis said he pointed out that the money will be awarded only if researchers reach the goals set by the judges.

"This is actually fiscally conservative," he said, "because I believe the reinvention of the car can do the same thing as the tech boom" of the late 1990s, when the stock market and the economy took off, flooding the federal government's coffers with tax receipts.

Besides, Inglis said, if nobody is awarded the prizes, the government won't spend the money.

Inglis also said the prize program is designed to get people involved who have never received government research grants and to encourage teams of researchers across disciplines to work together on problems that have defied solution by hydrogen researchers, who so far have produced prototype hydrogen vehicles that cost almost \$2 million.

"Prizes make sense. They incentivize people," said Rep. Sherwood Boehlert, R-N.Y., the Science Committee's chairman.

One hydrogen researcher who agrees is Anthony Eggert of UC Davis' Hydrogen Pathways Program. He said a prize competition inspires people.

"People develop a passion to achieve the goal of winning a competition. Team members give more when the opportunity for recognition is greater, and for the money," said Eggert.

"Each team believes it can win. ... You get much greater leverage than from just funding research."

The competition is open to anyone, including non-Americans, providing their research for the competition is done in this country. Researchers who receive federal grants are eligible, provided their work for the contest is done separately from their federally funded work.

Even if the legislation becomes law, the money for the prizes will have to be appropriated separately later in Congress, always a tricky process.

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