## CONGRESSMAN SHERWOOD BOEHLERT (R-NY) FLOOR STATEMENT ON H.R. 5143, H PRIZE BILL May 10, 2006

## Mr. Chairman:

I rise in strong support of H.R. 5143, and I want to congratulate Chairman Inglis for bringing forward this initiative and for pursuing it with both energy and open-mindedness. This bill has moved swiftly through the Science Committee because Mr. Inglis has been, at the same time, relentlessly focused on his objective and open to compromise. We need more Members who are able to pair those traits.

The H Prize this bill creates would, similarly, allow the government (and the nation) to be both focused and open-minded in pursuit of a hydrogen economy.

Establishing an H Prize would encourage the nation's most creative scientists and engineers, and the public at-large, to focus on overcoming the many technical challenges that stand between us and a hydrogen economy.

At the same time, the H Prize does not presume that any particular technological path will lead us to the hydrogen economy. The bill encourages any interested party to take on the technical risk needed to pursue their particular notion of how to improve the production, storage, distribution or use of hydrogen.

The National Academy of Sciences has encouraged the government to experiment with prizes for precisely this reason. Prizes can draw out new ideas from scientists and engineers who may not be willing or able to participate in traditional government research and development (R&D) programs, while encouraging them, rather than the taxpayer, to assume the risk.

Congress has been following the Academy's lead. For example, the NASA Authorization Act that was enacted last year created a prize program, and the space agency has been implementing it. All these programs draw on several centuries of successfully using prizes to help spur technological advancement, from the prize to invent a way to measure longitude – a key to improving shipping – to the prize Charles Lindbergh won for his trans-Atlantic flight. Our hope is that the H Prize will result in a similar landmark advance in the history of transportation.

I want to emphasize, though, that prizes are just one tool we need to use to kick our nation's addiction to oil. Prizes need to be part of a balanced portfolio of measures to advance technology – a portfolio that needs to include regulations and tax incentives to create demand for new technologies, and traditional R&D programs to ensure a steady stream of work on a range of short- and long-term technology questions.

Moreover, prizes are not the best tools to apply to all problems. But they are especially well suited for hydrogen because we need to solve several major long-term puzzles if a hydrogen economy is to become a reality. We need to elicit every possible idea from every quarter to do that, and we know it is going to take time to figure out what might work.

And the bill structures the prize program to attack hydrogen questions in several ways – with biennial prizes for advancements to encourage ongoing efforts and incremental progress, with biennial prizes for prototypes to encourage continuing work on integrating technologies as they develop, and with a grand prize to encourage work on the toughest, "show stopper" problems that could prevent us from using hydrogen as a fuel.

No one knows how all of this will turn out – that's the nature of research and the nature of a prize program. But we know that the potential benefits of hydrogen are worth the rather small investment required for a prize program. Hydrogen holds out the promise of becoming a clean, domestically produced fuel that could displace, or even replace gasoline as the way we power our cars and trucks.

To achieve that we still need to figure out how to affordably produce hydrogen using renewable energy, nuclear energy or coal with carbon dioxide sequestration; how to affordably store hydrogen on-board a vehicle; how to make fuel cells and batteries more cheaply and have them operate more efficiently; and how to distribute hydrogen economically. That's a tall order, but it's exactly the kind of long-range effort we need.

It's an effort that needs to be combined with proven, short-range ways to reduce the use of gasoline like tighter fuel economy standards, which this House is likely to debate next week.

So I urge support for this bill, which was approved by our Committee by voice vote. It is the right way to help see if we can radically change our energy future. Our dependence on foreign oil is a national security threat. We have to use every weapon in our scientific arsenal to counter it. Thank you.