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Experts: Hydrogen-fueled cars to come sooner rather than later

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WASHINGTON -- Contrary to predictions that hydrogen-powered vehicles are 30 years from being a reality, Rep. Bob Inglis, R-S.C., and automotive industry experts said they could arrive in half that time.

"There are an awful lot of automotive companies who are dedicated to it happening much sooner than that," said Inglis, co-chairman of the House Hydrogen and Fuel Cell Caucus, at a news conference Tuesday about energy independence.

There's no reason that the United States can't be on the road to a "hydrogen economy" by 2010, Inglis said. He cited BMW's recent announcement that it expects within a year or two to produce cars that will run on a combination of gasoline and hydrogen.

"The time is now," said Mark Chernoby, vice president for advance vehicle engineering for the Chrysler Group Business Unit at DaimlerChrysler. "We have probably 5 or 10 years of very intense research and development that needs to go on to make this technology viable."

He said DaimlerChrysler is road-testing 100 hydrogen fuel cell vehicles. "We think the hydrogen fuel cell is the right step because it's the only step which provides not only a vehicle which runs on a renewable energy source, but also does so by putting water (not carbon dioxide) out of the tailpipe," Chernoby said.

Conventional gasoline-powered cars emit carbon dioxide, a greenhouse gas that contributes to global warming. In a fuel cell, the only byproducts from hydrogen are heat and water.

Hydrogen is a method of energy storage, but it is not an energy source. While hydrogen can be procured by using electricity to split water, it is most commonly obtained by re-forming natural gas and other fossil fuels. Even using the electrolysis method, fuel is needed to produce the electricity.

"What we'll see initially is perhaps the continuing reforming of natural gas to obtain hydrogen," Inglis said, adding that there is still a 60 percent reduction in carbon dioxide during the cycle of production from "well to wheels."

He compared the process to the evolution of music storage devices, from the "8-track, to the cassette, to the CD, to the MP3 player."

But just as the inventors of the 78 rpm record decades ago could not have envisioned today's iPod, Inglis considers hydrogen fuel cells merely a first a step in the right direction toward energy independence and said a final solution could lie elsewhere.

"Batteries could become the competition," he said. "That's fine with me. What doesn't work is to continue to rely on fossil fuels for the answer."

Tim Leuliette, chief executive officer of automotive supplier Metaldyne, agreed.

"We don't have the ultimate solution now," he said, although he sees hydrogen as part of the most promising current research.

Hydrocarbons will still be necessary to the process, he said, and "ultimately, nuclear power will play a larger role."

Inglis maintained that hydrogen fuel cells are superior to other alternative fuel sources such as ethanol, which comes from corn and other agricultural products.

"It is relatively limitless compared to ethanol, which has some positive environmental benefits," he said. "Ethanol has still got the (carbon dioxide) issue. Plus, the production of ethanol may get constrained by our ability to farm crops that can turn into ethanol."

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