



Are hydrogen-powered cars the future? Academics and advocates say yes

By: **Raven Santana**, Correspondent | October 15, 2018, 5PM EST

It may look like any other Honda on the road, but underneath the hood of a hydrogen-powered car is an engine that burns zero fossil fuels and produces zero pollution.

“As you know, we have nearly 2,000 miles of coastline here in New Jersey, therefore, we are particularly vulnerable to the effects of climate change. And I think probably most of us have lived through Superstorm Sandy, so we understand how urgent it is to act and the consequences of failing to act,” said Peg Hanna, acting assistant director of air monitoring and mobile sources at the New Jersey Department of Environmental Protection.

“This is the cure for the disease, not the treatment. We no longer have any more time left. A lot of scientists, climate scientists, say that we’ve already reached critical mass. This is the only technology that will turn the ship around and go the other way. Think about putting only pure water in your environment, heat, a little electricity and pure oxygen back into the air. The planet will heal itself,” said Michael Strizki, founder and president of the Hydrogen House Project.

Representatives from Honda and Toyota testified last week at a joint committee hearing to support the use of fuel cell technology, like hydrogen cars, in the state.

“Fuel cell vehicles contain what referred to as a fuel cell stack which, unlike battery electric vehicles, generates the electricity onboard through a chemical reaction to power the vehicle. Fuel cell vehicles contain hydrogen tanks that store the hydrogen necessary for this to take place, and the only byproduct as we’ve heard today, is water,” said Steven Center, Honda vice president.

Of the five hydrogen stations either operating or under construction in the northeast, Toyota representatives say two are being developed in Lodi and Whippany.

One of the biggest challenges discussed at the meeting was how the state could provide funding to support infrastructure for hydrogen-powered cars.

“Are your members prepared, either with the tax incentives or not, to develop these charging stations for hydrogen, just as we see at the big Wawas, for instance, putting in electric charging stations on their sites?” asked Assemblyman Herb Conaway.

“I would be able to answer that question as no — they are not prepared to generate hydrogen. But, I believe I am moving them closer to sell hydrogen, not to generate it,” said Sal Risalvato, executive director of New Jersey Gasoline, C-Store, and Automotive Association.

“Another big concern is that although we can build these fuel cells today, they are very expensive. They’re based on very expensive materials, which is why they’re expensive, so there has to be some development which the state might be able to push forward in the area of finding less expensive materials that can be used to carry out the process,” said Andrew Bocarsly from Princeton University’s department of chemistry.

Currently Toyota, Honda and Hyundai sell or lease hydrogen-powered cars. Toyota’s newest model, the Mirai, costs about \$57,000. At least for now, all three automakers are throwing in free hydrogen-refueling cards worth on average \$15,000.