Op-Ed | This N.J. senator says our transportation future will be fueled by hydrogen

October 11, 2022

President Biden recently signed into law the Inflation Reduction Act, the most comprehensive climate-change legislation in U.S. history. The legislation includes exciting opportunities for federal funding, which will help the state meet its ambitious clean energy goals.

We reached our 2020 greenhouse gas reduction goal years ahead of schedule and are now looking toward our 2050 goal of cutting emissions 80% below the 2006 baseline. Getting to this aggressive target will require more than one solution.

We must take a multifaceted approach to address transportation, which is the largest source of carbon emissions in the Garden State, accounting for more than 40% of our net emissions. This outpaces power plants, factories, commercial buildings and residences.

In March, Gov. Phil Murphy announced a multi-state agreement with Connecticut, Massachusetts and New York to become one of the four regional clean hydrogen hubs envisioned by the infrastructure law. The state should also apply for a share of the $9.5 billion in federal funding allocated for clean hydrogen programs designed to accelerate the deployment of hydrogen energy and fuel cell technology.

Fuel cell electric vehicles (FCEVs), which run on hydrogen, can be a key tool in eliminating harmful emissions. Heat and water are the only byproducts. This innovative technology is widespread in California and other countries, and it’s especially applicable to certain forms of transportation, like long-distance heavy-duty trucking, which we see a lot of here in the state.

The hydrogen-powered economy is already off to a great start. In 2020, I worked with my colleagues in the state Senate to push through legislation establishing a fuel cell task force. The task force aims to boost the adoption of clean energy alternatives and grow the market for fuel cells in New Jersey.

And we’re already seeing incredible progress and innovation. New Jersey Resources Corporation is building a green hydrogen production and distribution facility in Howell. South Jersey Industries is backing a project using wind power to create green hydrogen. And Rutgers University is supporting HydroGEN, a startup that is looking for new ways to get hydrogen from water. These are real businesses and R&D projects that show the promise a larger hydrogen economy could bring.

I am hopeful that the continued growth of the hydrogen industry, coupled with expanded access to electric vehicles for everyday Americans, can greatly decrease transportation emissions here in New Jersey.

One key piece of the Inflation Reduction Act is a $7,500 tax credit for electric vehicles, which should help to make them a more feasible option for residents around the country. In addition, New Jersey will receive $104 million of the $5 billion allocated to building EV chargers and expanding the national network. New Jersey can also compete for part of another $2.5 billion specifically set aside for rural areas and disadvantaged communities.

By transitioning commercial trucking to hydrogen-power, and shifting residential vehicles to battery-powered

EVs, emissions-free transportation can be a reality. New Jersey is ready to be a leader in the zero-emissions revolution; let’s get to work to build a cleaner and greener Garden State.

State Sen. Gordon Johnson represents the 37th Legislative District, which includes parts of Bergen County.