



DELAWARE CLEAN CITIES CONNECTIONS

Winter 2024/2025

Message from the Delaware Clean Cities Director

As we wrap up 2024 and look ahead to the opportunities of 2025, we celebrate the progress made toward a cleaner, more sustainable transportation future. This season is a time to reflect, recharge, and look forward to the next steps we'll take together. In this issue, we highlight exciting advancements, success stories, and opportunities to continue driving positive change.

Wishing you a joyful holiday season and a bright, clean start to the new year!

- Breanne, DE Clean Cities Director



Federal Funding Opportunities



EPA CLEAN SCHOOL BUS

2024 Clean School Bus (CSB) Program **Now Open**

The U.S. Environmental Protection Agency (EPA) recently announced the opening of the 2024 Clean School Bus Program, offering **\$965 million** in rebate funding. Funds can be used to purchase clean school buses and cover associated infrastructure costs as well as training costs for bus drivers, electricians, and others who may be operating or maintaining vehicles and equipment.

Each applicant can request up to 25 buses and choose between battery-electric, compressed natural gas (CNG), and propane buses.

Eligible Applicants Include:

- Public School Districts (local or state governmental entities, and public charter schools)
- Tribal Applicants (an Indian Tribe, Tribal organization, or tribally controlled school)
- Third Parties (nonprofit school transportation associations and eligible contractors)

The deadline to apply for CSB funding is **January 9, 2025**.

[More Information](#)

To learn more about the CSB program, including important dates, available funding, and FAQs, click below.

[Learn More](#)



Federal Funding Announcements

DOE Announces \$18.6 Million for Clean Transportation Projects

The U.S. Department of Energy recently announced \$18.6 million for 15 projects that will partner with over 45 Clean Cities and Communities coalitions.



The new investments support:

1. **Clean Cities Outreach, Engagement, and Technical Assistance:** Providing training and capacity building for fleets to support the transition to zero-emission vehicles.
2. **Training for Critical Emergency Response Workers:** Providing first responders with tools, training, and resources to support safe deployment of ZEVs, including medium and heavy-duty electric vehicles.
3. **Clean Transportation Demonstration and Deployment:** Showcasing innovative clean transportation technologies in coordination with Clean Cities and Communities coalitions through approaches including hydrogen, rail, and non-grid tied EV charging infrastructure within a disadvantaged community.

These projects will work across more than 30 states, advancing clean transportation in urban, suburban, and rural communities. Learn more about the selected projects by [clicking here](#).

Webinars

Green Energy Consumers Alliance

December 18, 2024, 12:00 - 1:00 PM ET

[Charged Up: Everything You Need to Know About EV Charging](#)

Making the switch to an electric car can be intimidating. Join this webinar presented by Drive Green to learn everything you need to know about EV charging so that you feel ready and confident to make your next car electric.

DOT Climate Change Center 2024 Fall/Winter Webinar Series

December 18, 2024, 2:00 - 3:30 PM ET

[Parking Reform as a Climate Strategy](#)

This webinar explores parking reform and curb management as a climate strategy. Participants will hear best practices and learn of innovations from government and NGO experts on topics including parking requirements and planning for electric vehicle charging.

January 15, 2025, 2:00 - 3:30 PM ET

Delaware Dashboard

The First State is Named #1 for EV Ownership

Automotive research and technology firms HERE Technologies and SBD Automotive recently published their second annual [Electric Vehicle \(EV\) Index](#), which assesses the EV infrastructure growth across all 50 U.S. states. To rank each state, the index relied on four key metrics:

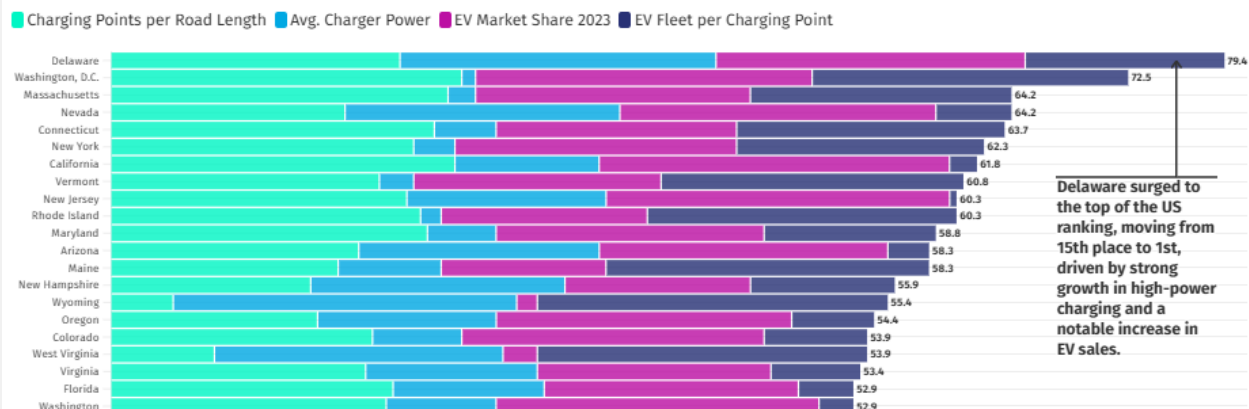
1. How far drivers must travel to find a charger
2. How quickly drivers can charge
3. Number of EVs on the road versus internal combustion engine vehicles
4. Likelihood of finding an unoccupied charger

Between the 2023 and 2024 reports, Delaware rose from 15th place to 1st overall by notably increasing the number of EVs on the road and investing in the expansion of high-power public EV charging infrastructure. In one year, Delaware increased the number of registered EVs by 35%, with electric vehicles now also accounting for 9% of all new vehicles sold in the state. ([Alliance for Automotive Innovation, EV Quarterly Report - Q2 2024](#)).

According to the HERE-SBD Index, when considering all factors involved, there should typically be about 10 to 20 BEVs per charge point when a market fully matures. As of December 1, 2024, Delaware has 18 BEVs per charge point with over 600 publicly available charging ports and over 11,000 registered EVs.

HERE-SBD EV Index 2024

Growth in EV adoption and infrastructure development in US across multiple dimensions.



Source: HERE EV Charge Points API, AFDC, US Census Bureau

Port of Wilmington to Receive over \$125 Million under EPA Clean Ports Program

As part of the Biden-Harris “Investing in America” agenda, The U.S. Environmental Protection Agency recently announced the selection of 55 applicants across 27 states and territories who will receive nearly \$3 billion through its Clean



Ports Program. The program is comprised of two separate funding opportunities for U.S. ports:

1. **The Climate and Air Quality Planning Competition** funds climate and air quality planning activities at U.S. ports to build the capacity to reduce pollution and transition to zero-emission operations over time.

2. **The Zero-Emission Technology Deployment Competition** funds zero-emission port equipment and infrastructure to reduce mobile source emissions at U.S. ports, delivering cleaner air for communities across the country.

Delaware's Diamond State Port Corporation, operating out of the Port of Wilmington, was awarded \$127,510,094 under the Zero-Emission Technology Deployment Competition for electric cargo handling equipment and charging infrastructure.

Selected projects will collectively support the purchase of battery-electric and hydrogen-powered port equipment, including over 1,500 units of cargo handling equipment, 1,000 drayage trucks, 10 locomotives, and 20 vessels, as well as shore power systems and solar power generation.

Visit the EPA's Clean Ports Program Selections page to learn more about the goals of the program and about each selected project. [Clean Ports Program Selections | US EPA](#)

\$20 Million Federal Grant to Aid Modernization of the Cape May - Lewes Ferry Fleet

Source: *WHYY News Climate Desk*

The Delaware River and Bay Authority (DRBA) was recently awarded a \$20 million grant award from the U.S. Department of Transportation's Federal Transit Administration (FTA) that will be used to construct a new diesel-electric hybrid ferry vessel that is expected to join the Cape May – Lewes Ferry fleet in the summer of 2027.



The funding comes as a part of the FTA's larger efforts to expand and modernize the nation's ferry systems. In total, the FTA is providing nearly [\\$300 million in investments](#) for ferries across the country, supporting the movement of people and goods, boosting local economies, and protecting the rivers and waterways they depend on.

The DRBA's new diesel-hybrid ferry is expected to cost approximately \$74 million dollars and will replace an over 40-year-old diesel engine ferry that currently operates daily, serving passengers who travel between Lewes, Delaware, and Cape May, New Jersey.

The hybrid and all-electric operating modes of the new ferry are estimated to reduce fuel consumption by 35% while also achieving the following annual emissions reductions:

- 2,025 tons of carbon dioxide
- 102.7 tons of nitrogen dioxide
- 1.51 tons of particulate matter
- 1.03 tons of hydrocarbons
- 5 tons of carbon monoxide

[Learn More](#)

Delaware's Quest for Clean Hydrogen

Source: *Delaware Business Times Innovation Delaware Publication*

Today, Delaware consumes nearly 80 times more energy than it generates, with most imported energy coming from fossil fuels. As the state looks to increase its energy independence and decrease its carbon dioxide emissions, hydrogen is emerging as an ever more feasible fuel source. Hydrogen, which emits only water when burned, can be applied across a number of sectors, including transportation through hydrogen fuel cell powered vehicles. Historically, hydrogen has been costly to produce and generally relied on polluting carbon-based fuels to do so.



Though the gas itself is invisible, various production methods result in hydrogen labeled as black, grey, pink, blue, or green. Green hydrogen - also referred to as "clean hydrogen" is the only hydrogen produced from renewable energy sources such as solar and/or wind power.

National investment in clean hydrogen infrastructure has been crucial to improving its viability, with President Biden's Bipartisan Infrastructure Law allocating \$7 billion for a Regional Clean Hydrogen Hubs Program. Under this program, a coalition formed between Delaware, Pennsylvania, and New Jersey was awarded \$750 million in 2023 for the creation of a clean hydrogen hub. This hub, known by the acronym "MACH2" – the Mid-Atlantic Clean Hydrogen Hub, is a network of hydrogen producers, consumers, and local infrastructure.

The MACH2 hub is comprised of nearly two dozen public and private entities, with several Delaware companies establishing themselves as key players aiming to advance environmental protection, economic opportunities, and Delaware's position as a clean energy leader.

Though only founded in 2023, First State Hydrogen is setting out to build and operate a 60-megawatt clean hydrogen manufacturing facility in Wilmington, DE by 2026. While the site has not yet been finalized, it will ideally be situated along an existing 24-mile pipeline that is currently regulated by the Department of Transportation for the transport of refined products. The current pipeline would either be re-formulated or re-laid to accommodate the flow of clean hydrogen.

There are several roles surrounding and supporting hydrogen production as well. Versogen, a Newark, DE based company was founded in 2017 with the invention of novel, proprietary ways to manufacture membranes and electrolyzers necessary for hydrogen production and research.

Versogen's hydrogen products have numerous end uses including for hydrogen fuel cells, chemical engineering, and steam methane reforming. Although not a part of MACH2, the Delaware-based Chemours Company is also producing membranes using its fluoropolymer technology to generate large amounts of hydrogen without carbon dioxide emissions.

Continue reading about Delaware's role in hydrogen production by clicking the link below.

[Learn More](#)

Transportation TidBits

As of December 1st, 2024, the following number of alternative fuel vehicles are registered in Delaware:

- 30,342 Hybrid and Plug-in Hybrid
- 11,656 Battery-Electric
- 277 Liquified Gas
- 269 Propane
- 90 Compressed Natural Gas

Combined, alternative fuel vehicles make up only around 4% of vehicles registered in

Helpful Resources and Events



Get Rewarded for your Clean Commute!

Clean commutes are those that take a single occupied vehicle off the roadway, helping to reduce traffic congestion, improve air quality, and make Delaware a better place to live and work. Aside from these benefits, Delaware Commute Solutions offers rewards for trips via:

- Transit/Bus
- Carpooling & Vanpooling
- Walking
- Biking
- Teleworking (working from home)
- Compressed Work Weeks

By joining Delaware Commute Solutions, you'll get FREE benefits like:

- Carpool matching
- A tailored personal commute plan
- [Guaranteed Ride Home](#) in the case of an unexpected event
- Rewards, discounts, and monthly drawings when you record your commute
- [Tax Benefits](#)



How it Works

1. [Sign up FREE](#) if you live, work, or attend college in Delaware.
2. Take a clean commute to work or school, like transit or a carpool.
3. Record your commute [HERE](#) or on the app.
4. You'll earn points for every clean commute.
5. Redeem your points for prizes, discounts, or entries for the \$100 monthly drawings!

[Sign up Now!](#)

[Alternative Fuel News](#)

Science Daily, Alternative Fuel News provides the latest headlines on advancements in the

alternative fuel space.

[On-the-Go Podcast](#)

On the Go is a podcast on alternative fuels, advanced vehicles, and emerging transportation technologies that are transforming mobility as we know it.

[EV Hub Live Podcast](#)

EV Hub Live is a first-of-its-kind video podcast recorded live and distributed for free to the public policy community working to advance transportation electrification.

Alternative Fuel Highlights

Technology Integration 2023 Annual Progress Report

Source: U.S. Department of Energy, Vehicle Technologies Office

Vehicles move our national economy, transporting 18 billion tons of freight and moving people more than 3 trillion miles each day. Providing access to goods and services, jobs, education, and healthcare, the transportation sector is a crucial component of our economy that also requires energy. Transportation, which has historically relied on the burning of petroleum, is the largest source of CO₂ emissions in the country, posing a threat to the stability of our climate and the wellbeing of our people.

The Vehicle Technologies Office (VTO) plays a leading role in decarbonizing the transportation sector by funding research, development, demonstration, and deployment of clean transportation technologies. The VTO Technology Integration Program also shepherds the Clean Cities and Communities program, allowing the more than 75 coalitions to deploy affordable, efficient, and clean transportation fuels.

The recently released 2023 Technology Integration Annual Report discusses the planning and implementation of 47 multi-year clean transportation projects, including several conducted by Clean Cities and Communities Coalitions. Projects range from electric school bus demonstrations to propane infrastructure for mail delivery to CNG station deployment.

To learn more about the various alternative fuel vehicle initiatives funded under the Technology Integration Program and to read the full report, click below.

[2023 Technology Integration Annual Progress Report](#)

Fuel, Eagles, Fuel!

Source: U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy

Lincoln Financial Field's newest feature is a touchdown for clean energy – a hydrogen fueling station that can support vehicles powered by fuel cells. The unit, known as SimpleFuel, came online in October 2024 with the ability to produce up to 10 kilograms of hydrogen per day, using only water and electricity. The electricity used by the system is generated by the more than 10,000 solar panels that surround the stadium, making the Eagles' the first sports team in North America to use clean hydrogen that is produced on site.

The concept for SimpleFuel, developed by PDC Machines, was awarded the \$1 million prize in DOE's H₂ Refuel H-Prize Competition in 2017. Over the past seven years, SimpleFuel has leapt from concept to commercialization, introducing their clean hydrogen production technology to domestic and international markets.

SimpleFuel's success indicates that clean hydrogen infrastructure may soon support advances in clean hydrogen applications. In recent years, the United States has greatly increased its stock of electrolyzers - the devices that produce hydrogen from water and electricity. Today, there are 4.5 gigawatts of planned or installed electrolyzer capacity in the U.S., roughly 25 times more than our capacity in 2021.

As a result, hydrogen is playing a big role in decarbonizing our transportation sector - especially in heavy duty transportation and niche markets such as material handling. As this market expands, the stadium fueling station may serve onsite vehicles such as fork-lifts and shuttle buses alongside future passenger vehicles. Continue reading [here](#), or watch the video below!



Delaware Division of Climate, Coastal and Energy
Delaware Clean Cities | de.gov/cleancities

Delaware Division of Climate, Coastal & Energy | 100 W. Water Street Suite 5A | Dover, DE 19904 US

[Unsubscribe](#) | [Update Profile](#) | [Constant Contact Data Notice](#)



Try email marketing for free today!