

2024 Transportation Technology Deployment Report:

Vermont Clean Cities
Expanded Edition

March 2025



Clean Cities and
Communities

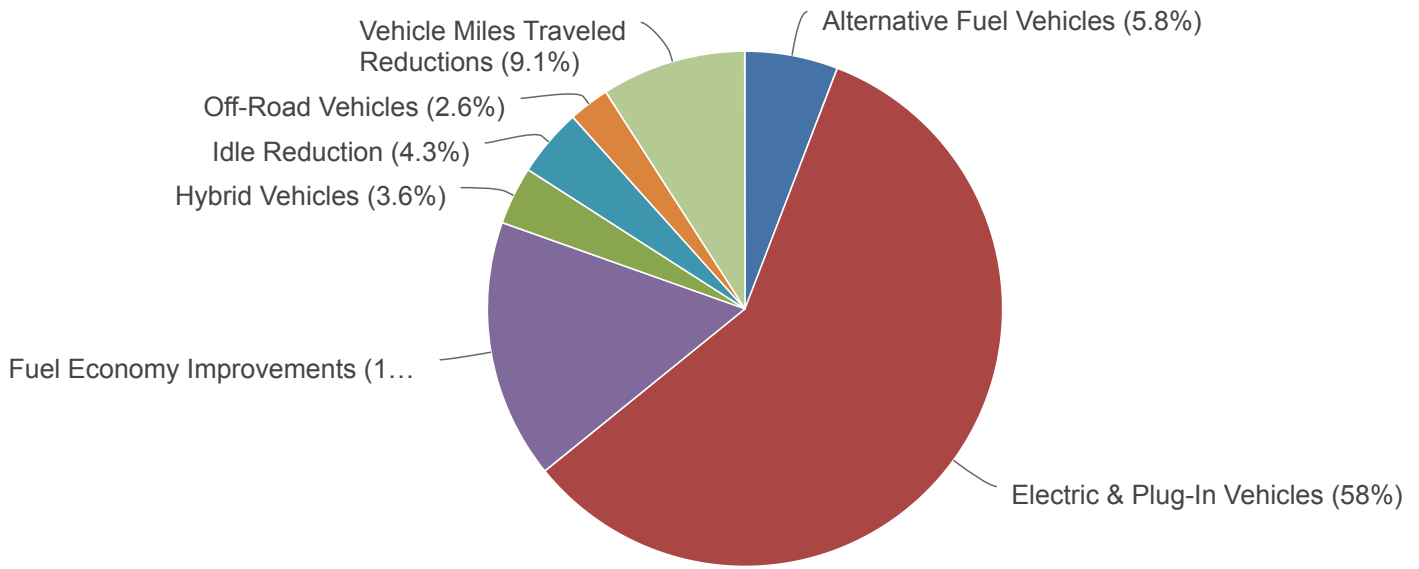
The U.S. Department of Energy's (DOE) Clean Cities and Communities fosters the nation's economic, environmental, and energy security by working locally to advance affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices. A national network of more than 75 active coalitions serve as the foundation of Clean Cities and Communities by working in communities across the country to implement alternative fuels, fuel-saving technologies and practices, and new mobility choices.

Every year, each Clean Cities and Communities coalition submits to DOE an annual report of its activities and accomplishments for the previous calendar year. Coalition directors, who lead the local coalitions, provide information and data via an online database managed by the National Renewable Energy Laboratory (NREL). The data characterize membership, funding, projects, and activities of the coalitions. The coalition directors also submit data on the sales of alternative fuels, deployment of alternative fuel vehicles, idle-reduction initiatives, fuel economy activities, and efforts to reduce vehicle miles traveled. NREL and DOE analyze the data and translate them into energy use impact, greenhouse gas reduction, and other metrics to show progress supporting the Clean Cities and Communities mission for individual coalitions and the network as a whole. This report summarizes those impacts for Vermont Clean Cities.

To view aggregated data for all local coalitions in the network, visit cleancities.energy.gov/accomplishments.

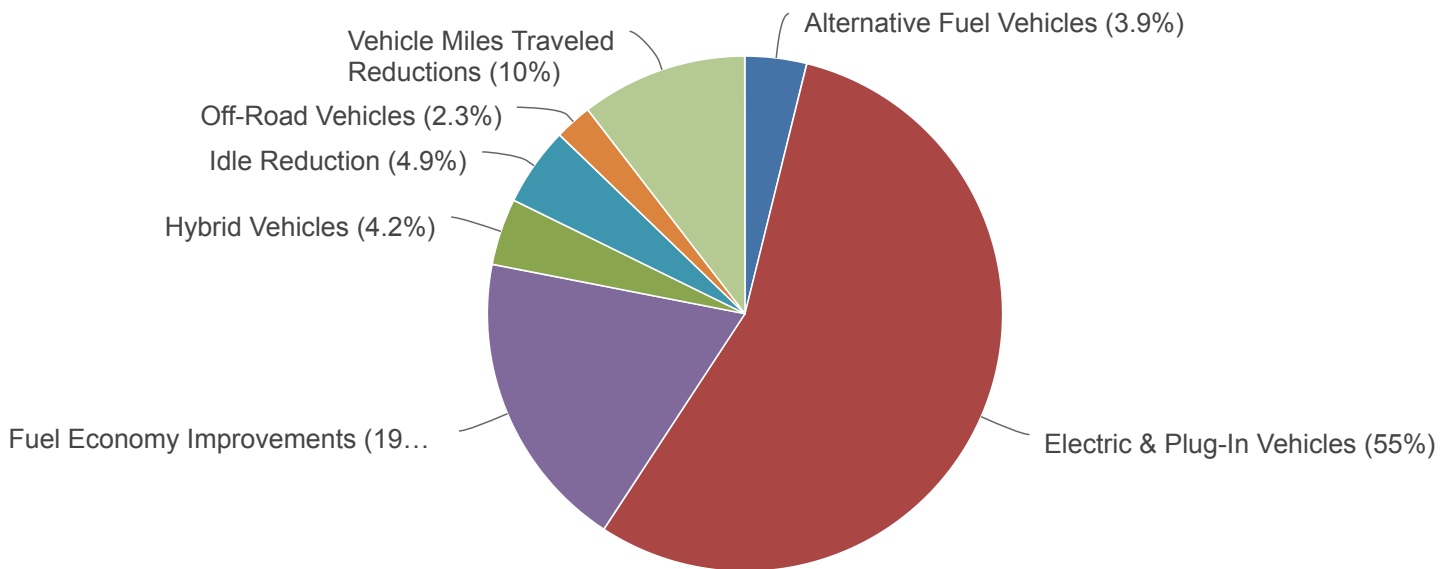
2024 Gallons of Gasoline Equivalent Reduced

2,502,938 gallons

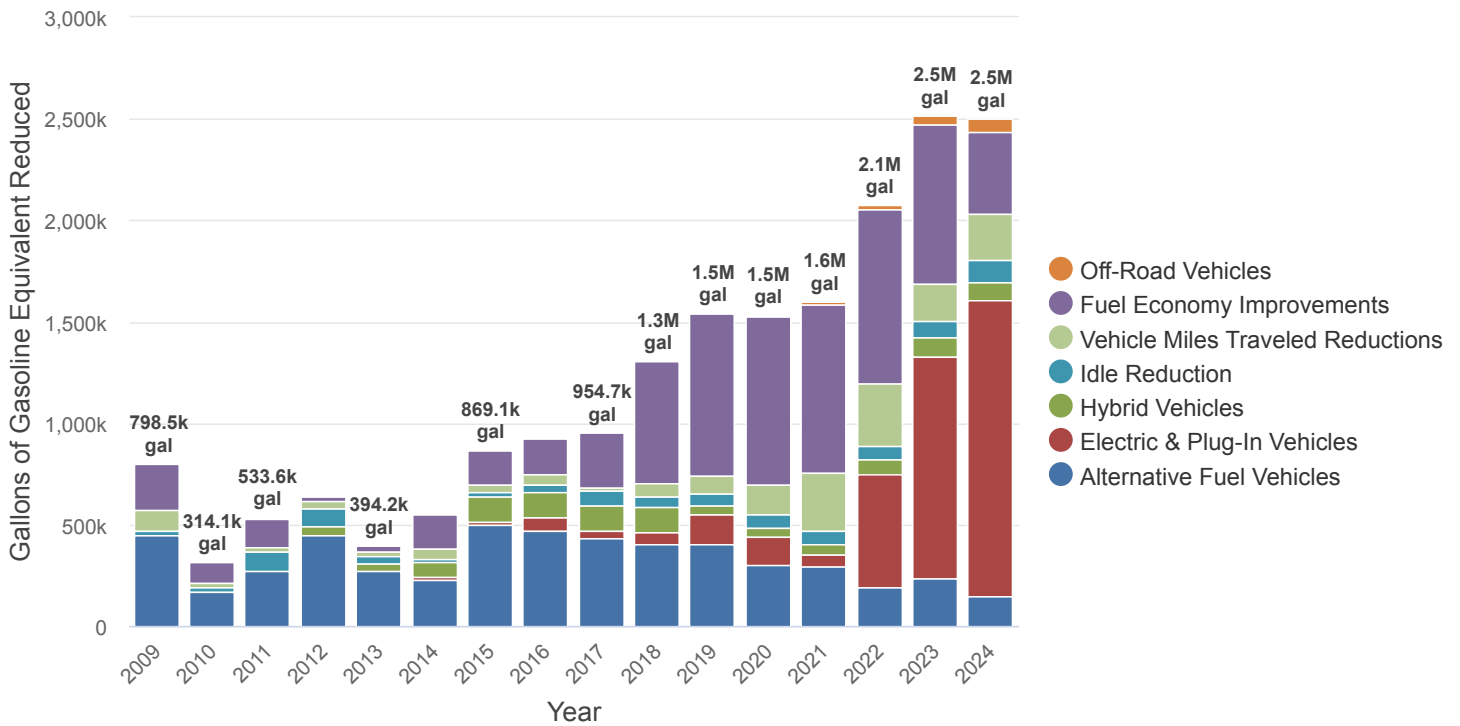


2024 Greenhouse Gas Emissions Reduced

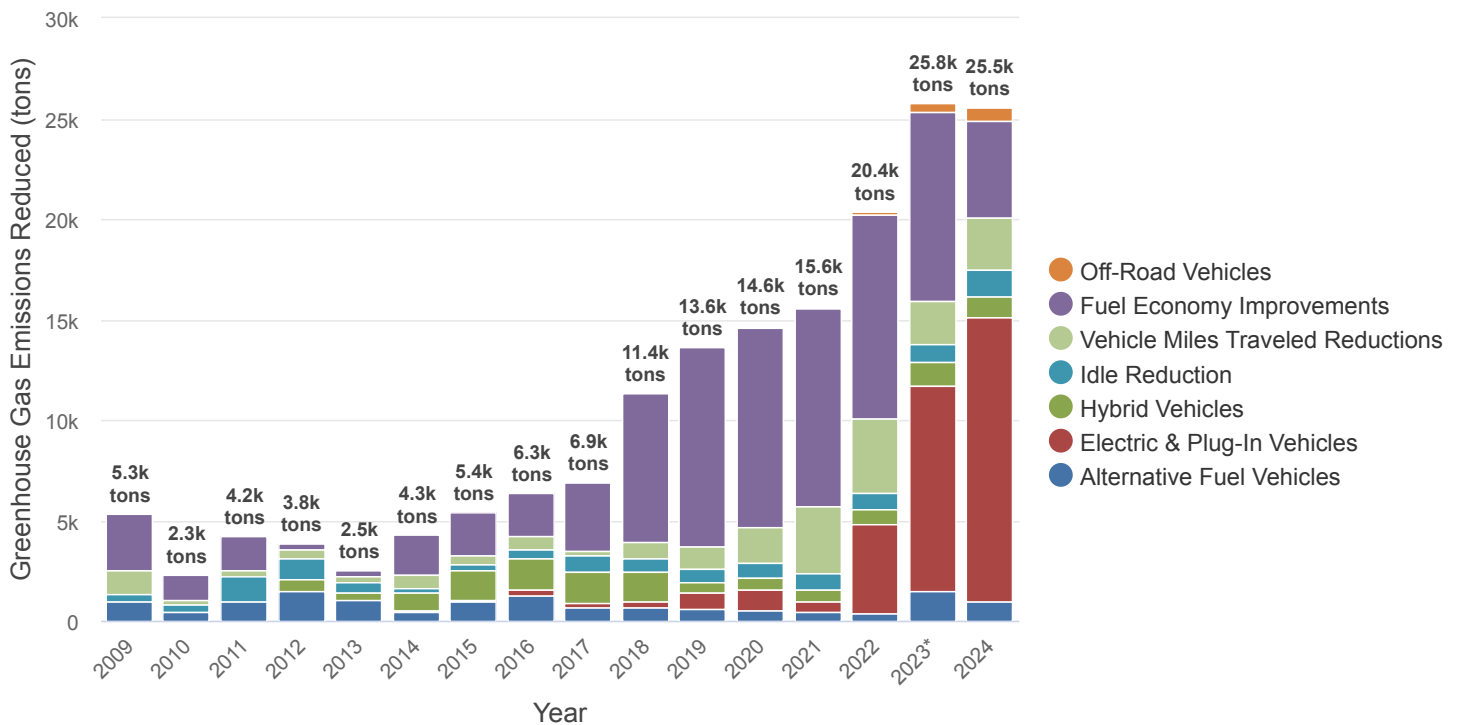
25,521 tons



Historical Gallons of Gasoline Equivalent Reduced



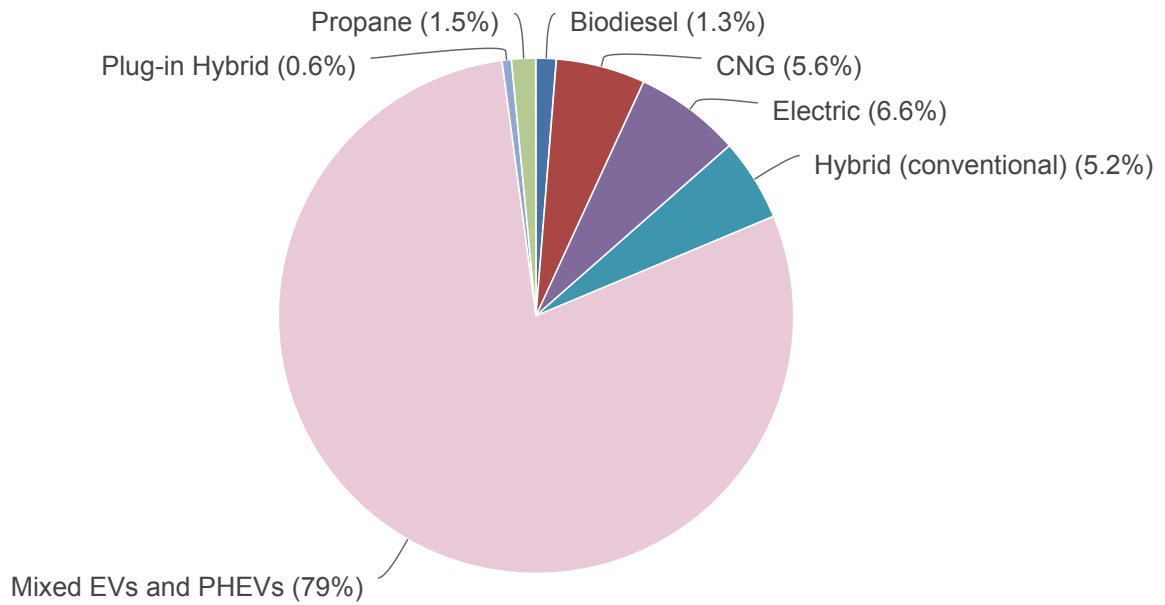
Historical Greenhouse Gas Emissions Reduced



* GHGs displaced from CNG and LNG projects increased in 2023 because Clean Cities and Communities began accounting for the RNG sold into the vehicle fuel market through trading mechanisms set up through the Renewable Fuel Standard and the California Low Carbon Fuel Standard. Please see the Clean Cities and Communities Coalitions 2023 Annual Activity Report for details as to how and why this was allocated.

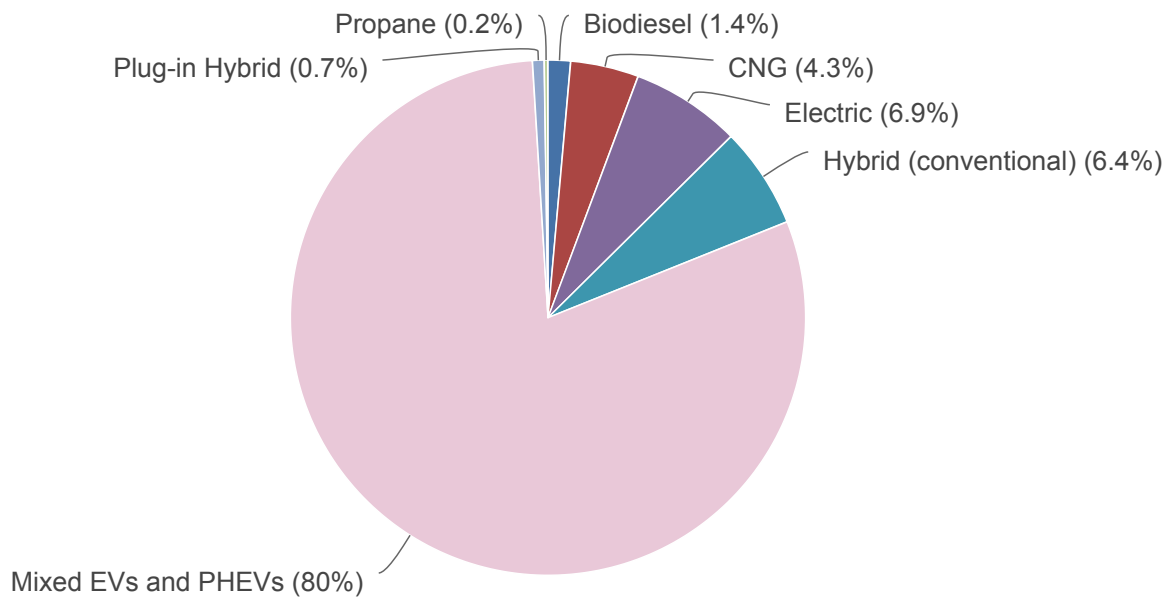
2024 Gallons of Gasoline Equivalent Reduced by Fuel Type for Alternative Fuel Projects

1,761,466 gallons



2024 Greenhouse Gas Emissions Reduced by Fuel Type for Alternative Fuel Projects

16,781 tons



Criteria Pollutant Emissions Reduced

Criteria pollutants are chemicals that have been linked to human health effects and therefore regulated in the Clean Air Act of 1970. Criteria pollutants include nitrogen oxides (NOx) and volatile organic compounds (VOC), both precursors to ozone pollution or smog. They also include particulate matter (PM) grouped into 10 and 2.5 micron sizes. The Clean Cities and Communities annual report calculates them using the same assumptions and default values as AFLEET 2016, with some adjustments to fit specific data inputs. They are quantified at vehicle tailpipes, as those are the emissions contributing to the regulated "ambient" air quality of a given city. Upstream emissions from electric power plants, refineries, and biofuel feedstock farms are not included in this summary since those operations typically do not take place in or near population centers where the vehicles are operated and health effects can be documented. When a specific pollutant surpasses a given threshold for a given area, the area is considered to be in "nonattainment" for that pollutant. Nonattainment areas for given pollutants can be viewed at www.epa.gov/green-book. To learn more about what your emissions numbers mean, please take the Understanding Emissions or Emissions Compliance courses at [Clean Cities and Communities eLearning](#).

Reductions by Technology	CO	NOx	VOC*	PM10	PM2.5
Alternative Fuel Vehicles - Biodiesel	-1,653 lb	-32 lb	172 lb	1 lb	1 lb
Alternative Fuel Vehicles - CNG	6,836 lb	145 lb	583 lb	11 lb	-1 lb
Alternative Fuel Vehicles - Propane	0 lb	0 lb	241 lb	0 lb	0 lb
Electric, Hybrid & Plug-in Vehicles - EV & PHEV Mixed	220,509 lb	6,628 lb	18,493 lb	1,485 lb	267 lb
Electric, Hybrid & Plug-in Vehicles - Electric	11,840 lb	334 lb	621 lb	86 lb	16 lb
Electric, Hybrid & Plug-in Vehicles - HEV	14,724 lb	440 lb	1,198 lb	183 lb	39 lb
Electric, Hybrid & Plug-in Vehicles - PHEV	1,641 lb	49 lb	138 lb	21 lb	4 lb
Fuel Economy Improvements	95,913 lb	2,662 lb	4,341 lb	936 lb	189 lb
Idle Reduction	22,722 lb	642 lb	1,228 lb	236 lb	48 lb
Off-Road Vehicles	15,307 lb	422 lb	650 lb	82 lb	13 lb
Vehicle Miles Traveled Reductions	40,366 lb	1,182 lb	2,865 lb	470 lb	99 lb
Total:	428,204 lb	12,472 lb	30,528 lb	3,510 lb	675 lb

* VOC is interchangeable with NMOG (non-methane organic gases) and NMHC (non-methane hydrocarbons) for all purposes relevant to the Clean Cities and Communities suite of technologies.