U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

2022 Transportation Technology Deployment Report:

Arkansas Clean Cities

Expanded Edition

March 2023

Clean Cities
U. S. Department of Energy

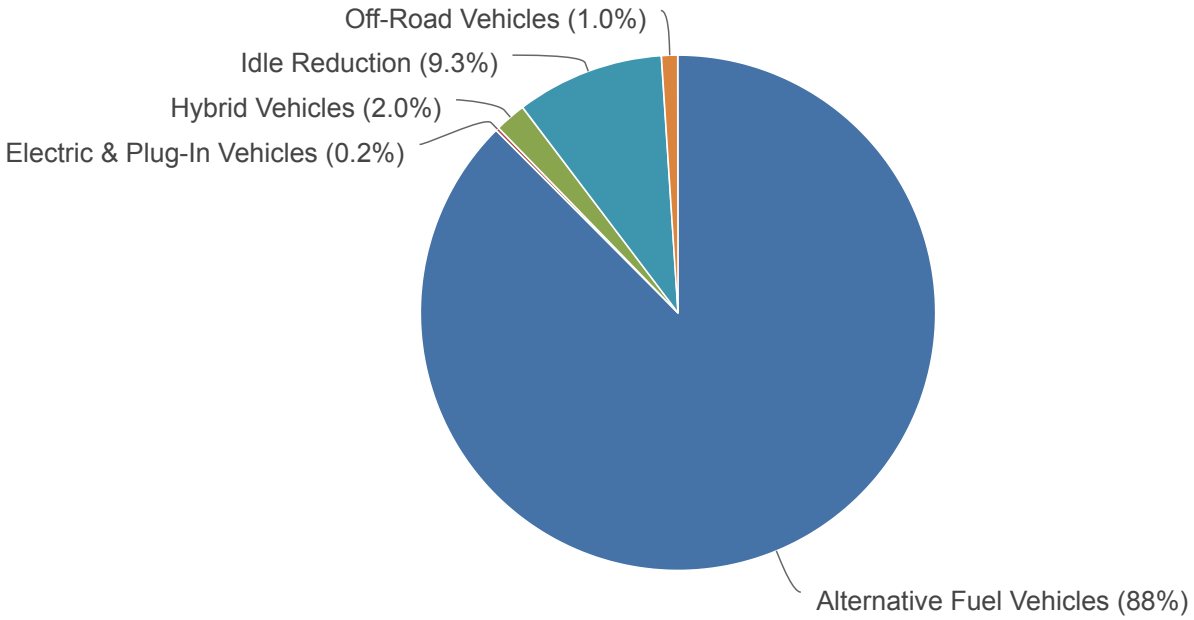
The U.S. Department of Energy's (DOE) Clean Cities Coalition Network fosters the nation's economic, environmental, and energy security by working locally to advance affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices. A national network of more than 75 active coalitions serve as the foundation of Clean Cities 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 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 mission for individual coalitions and the network as a whole. This report summarizes those impacts for Arkansas Clean Cities.

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

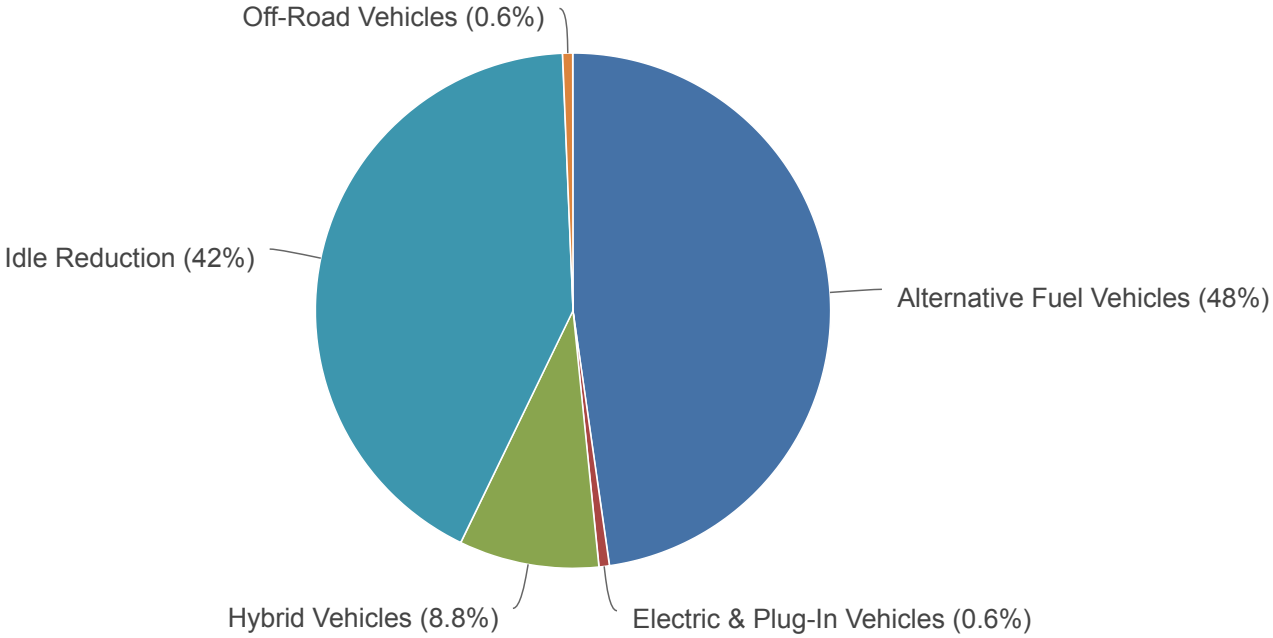
2022 Gallons of Gasoline Equivalent Reduced

753,611 gallons

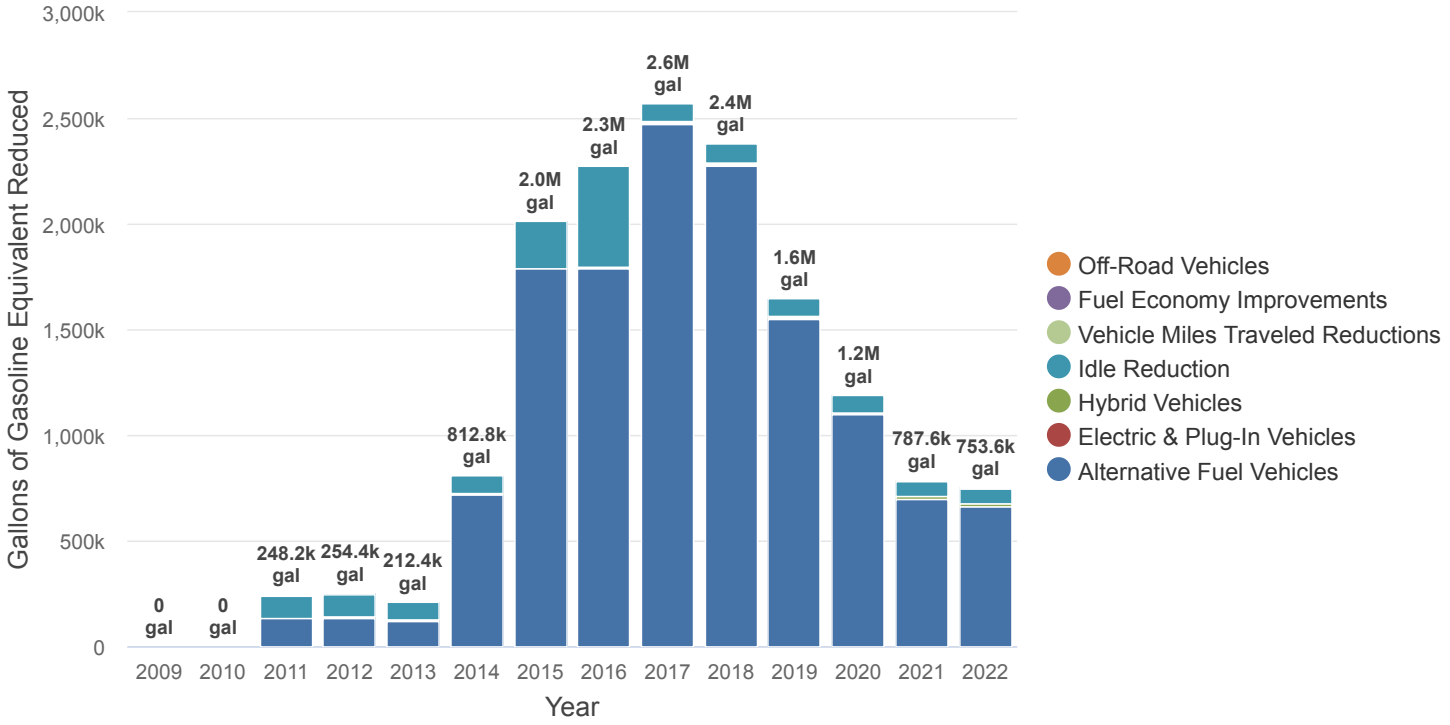


2022 Greenhouse Gas Emissions Reduced

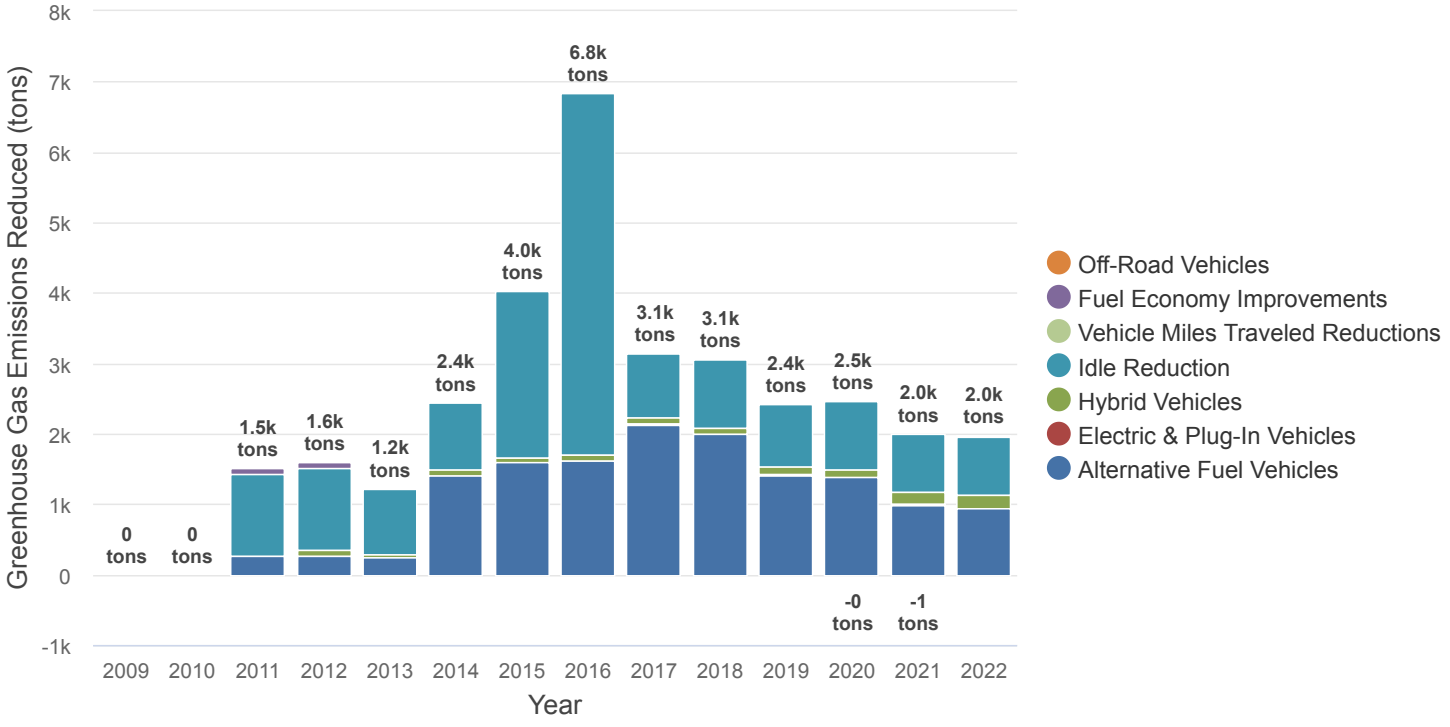
1,971 tons



Historical Gallons of Gasoline Equivalent Reduced

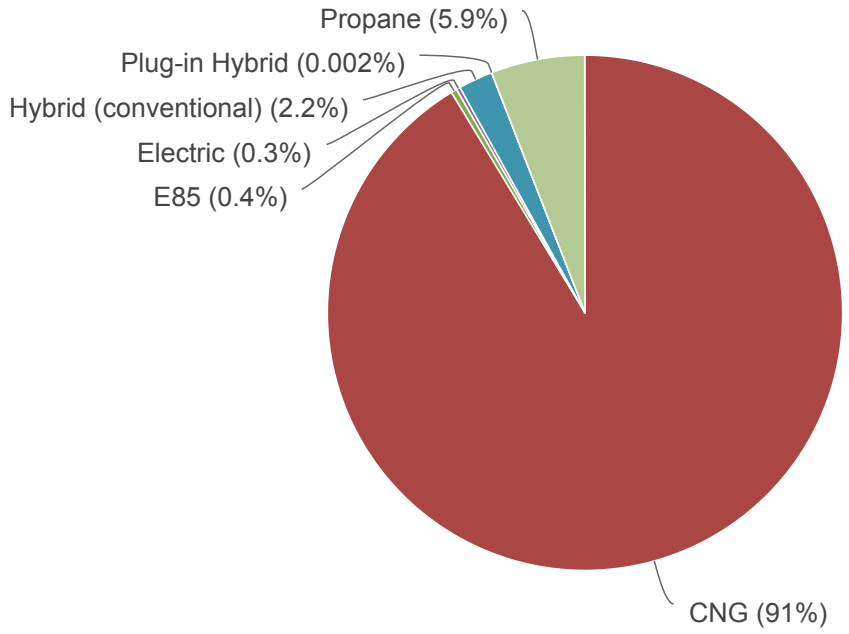


Historical Greenhouse Gas Emissions Reduced



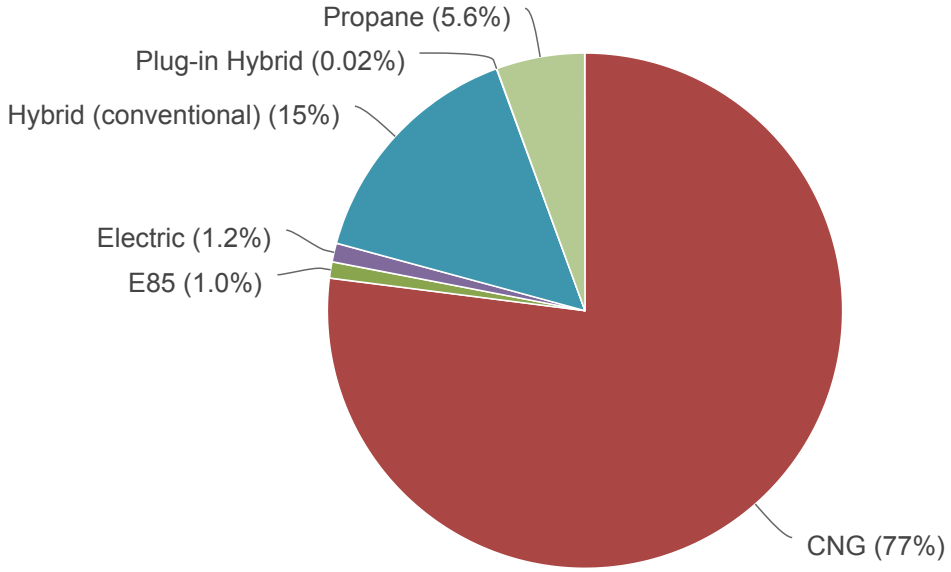
2022 Gallons of Gasoline Equivalent Reduced by Fuel Type for Alternative Fuel Projects

683,669 gallons



2022 Greenhouse Gas Emissions Reduced by Fuel Type for Alternative Fuel Projects

1,140 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 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 University.

Reductions by Technology	CO	NOx	VOC*	PM10	PM2.5
Alternative Fuel Vehicles - CNG	15,549 lb	957 lb	977 lb	105 lb	52 lb
Alternative Fuel Vehicles - E85	0 lb	0 lb	2 lb	0 lb	0 lb
Alternative Fuel Vehicles - Propane	0 lb	0 lb	222 lb	0 lb	0 lb
Electric, Hybrid & Plug-in Vehicles - Electric	248 lb	11 lb	22 lb	1 lb	0 lb
Electric, Hybrid & Plug-in Vehicles - HEV	2,289 lb	102 lb	202 lb	20 lb	8 lb
Electric, Hybrid & Plug-in Vehicles - PHEV	2 lb	0 lb	0 lb	0 lb	0 lb
Off-Road Vehicles	25 lb	1 lb	52 lb	0 lb	0 lb
Truck Stop Electrification	13,542 lb	634 lb	592 lb	114 lb	47 lb
Total:	**31,655 lb**	**1,705 lb**	**2,070 lb**	**239 lb**	**108 lb**

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