

2021 Transportation Technology Deployment Report:

Central Oklahoma Clean Cities (Oklahoma
City)

Expanded Edition

March 2022



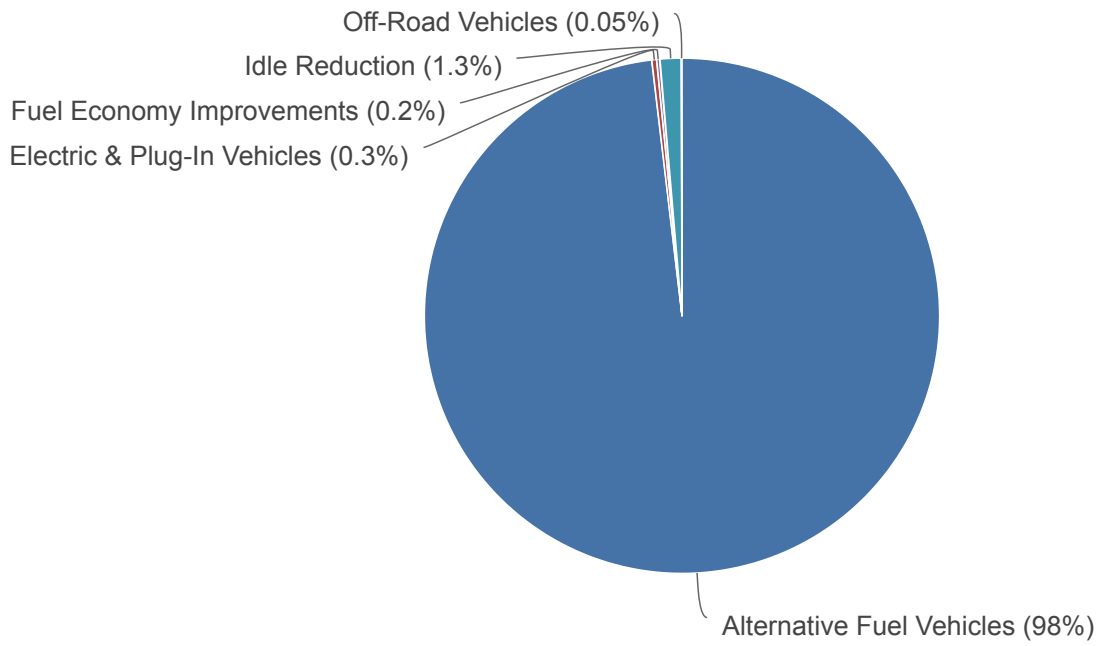
The U.S. Department of Energy's (DOE) Clean Cities Coalition Network fosters the nation's economic, environmental, and energy security by working locally to advance affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices. A national network of more than 75 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 coordinators, 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 coordinators 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 .

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

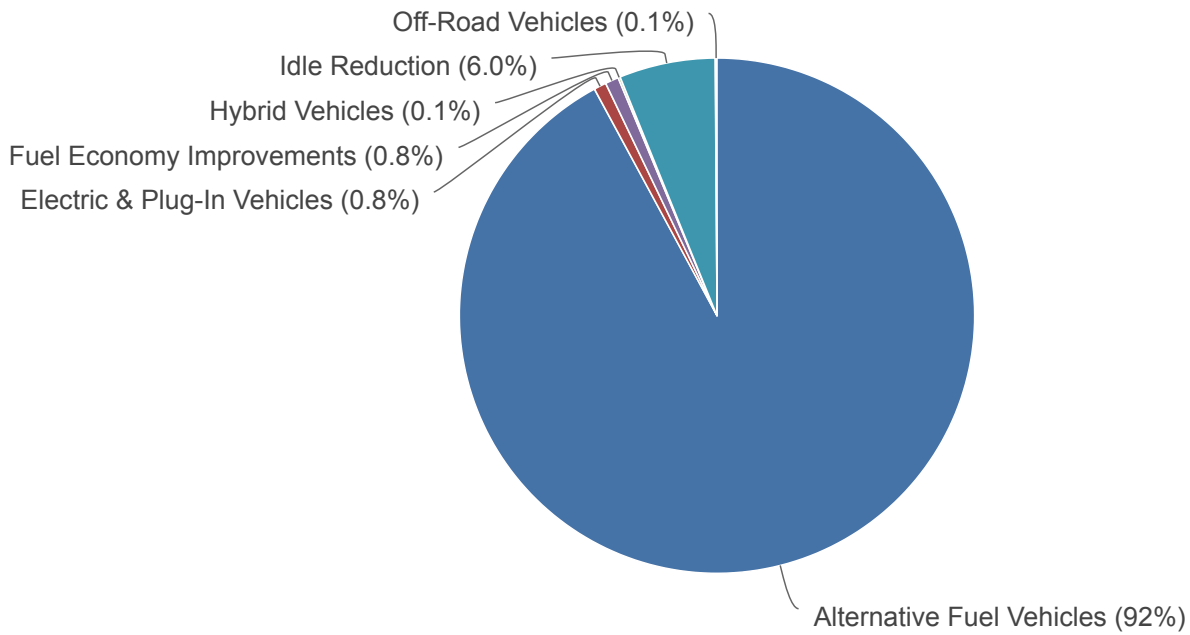
2021 Gallons of Gasoline Equivalent Reduced

12,840,303 gallons

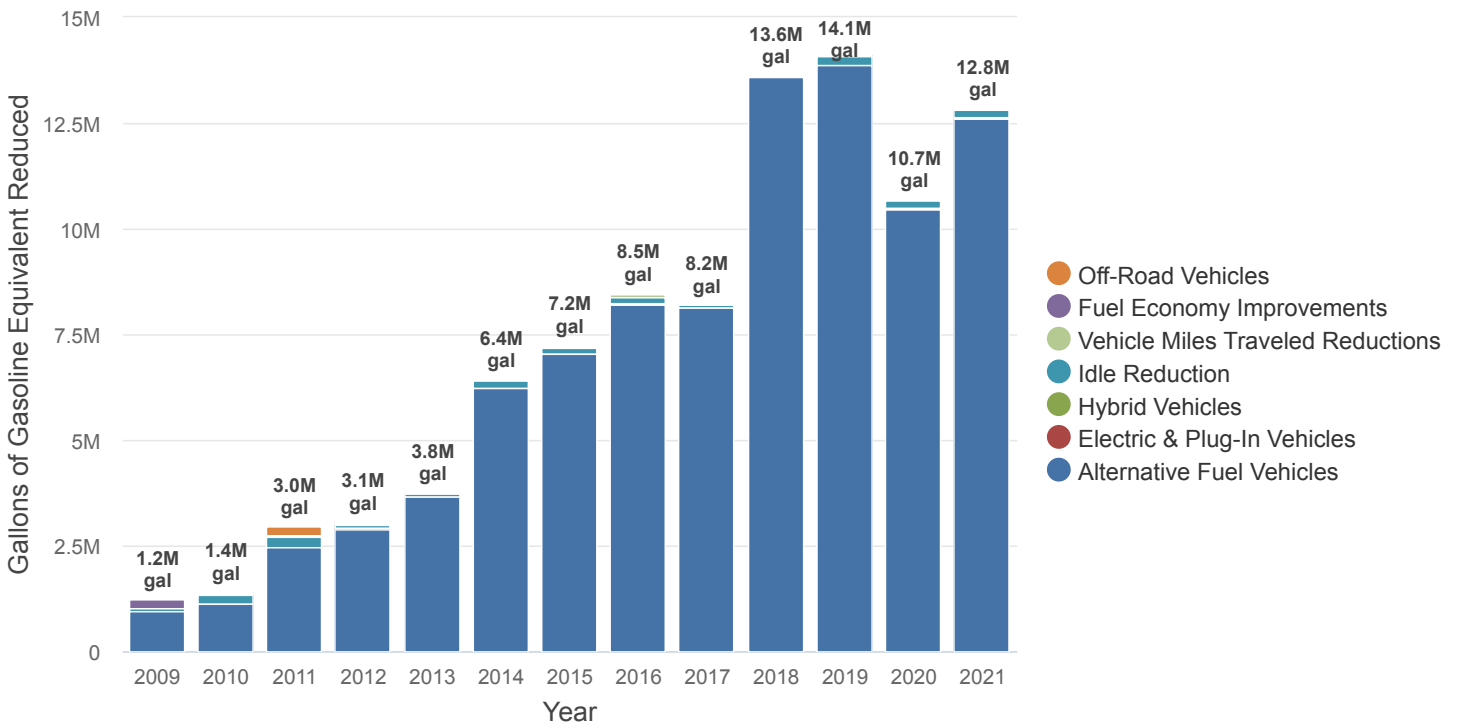


2021 Greenhouse Gas Emissions Reduced

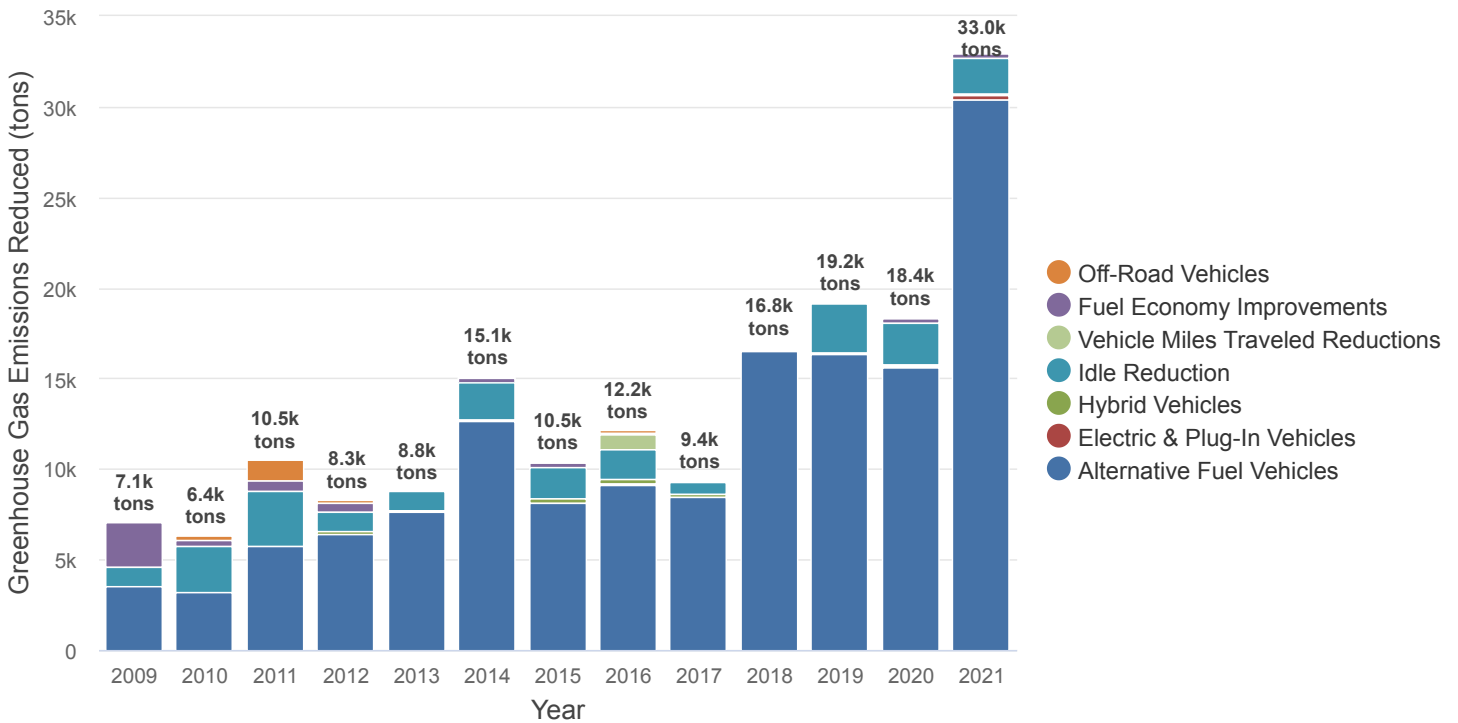
33,011 tons



Historical Gallons of Gasoline Equivalent Reduced

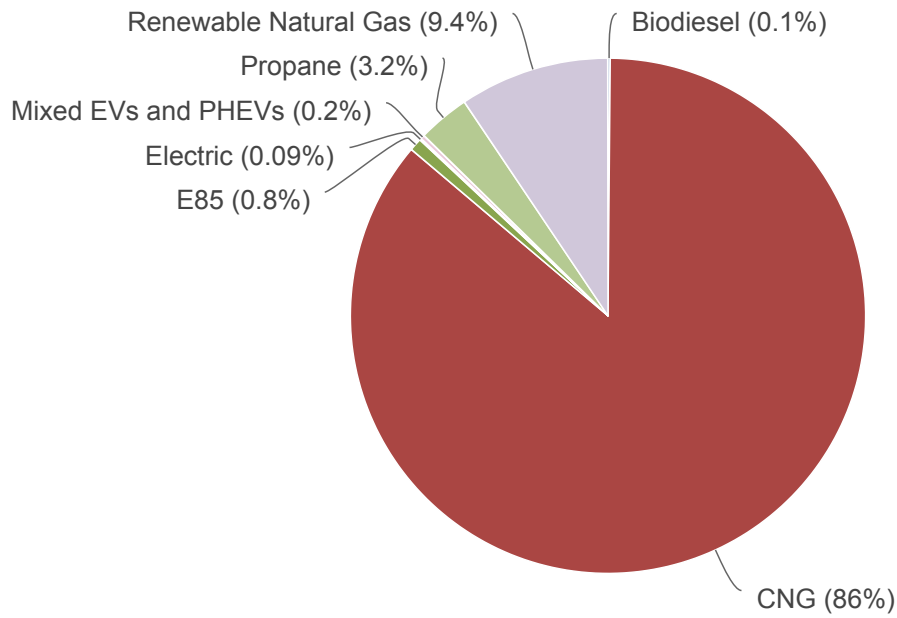


Historical Greenhouse Gas Emissions Reduced



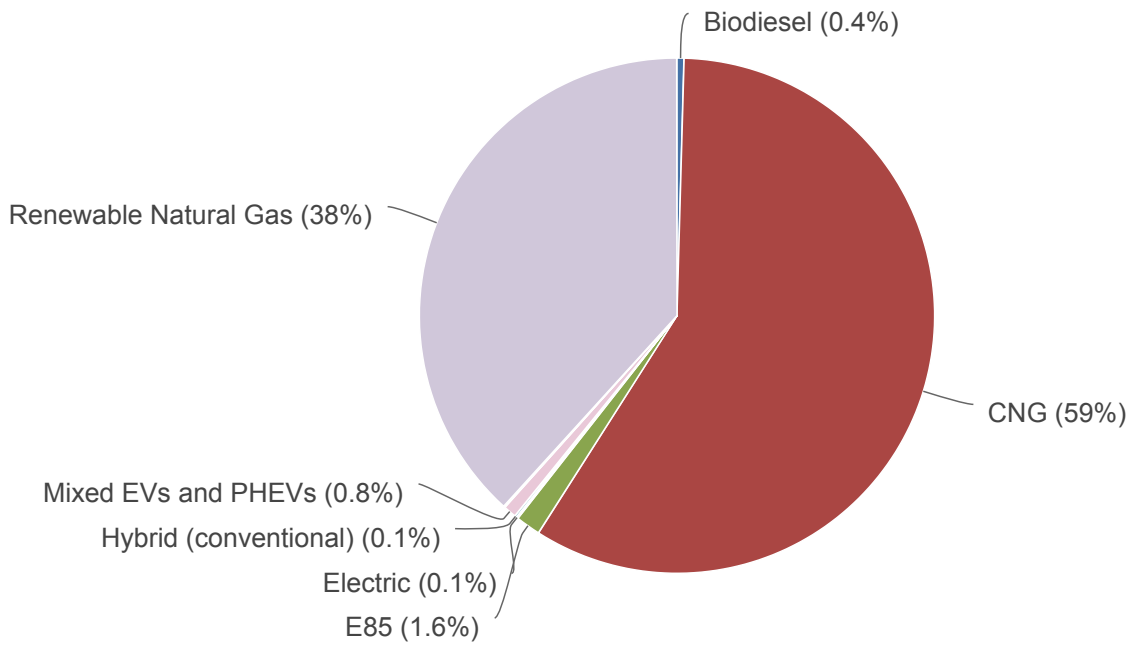
2021 Gallons of Gasoline Equivalent Reduced by Fuel Type for Alternative Fuel Projects

12,648,518 gallons



2021 Greenhouse Gas Emissions Reduced by Fuel Type for Alternative Fuel Projects

30,739 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 (NO_x) 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](http://CleanCitiesUniversity.com).

Reductions by Technology	CO	NO _x	VOC*	PM ₁₀	PM _{2.5}
Alternative Fuel Vehicles - Biodiesel	-36 lb	-4 lb	49 lb	0 lb	0 lb
Alternative Fuel Vehicles - CNG	55,724 lb	3,761 lb	57,106 lb	340 lb	185 lb
Alternative Fuel Vehicles - E85	-11 lb	0 lb	90 lb	0 lb	0 lb
Alternative Fuel Vehicles - Propane	2,329 lb	258 lb	588 lb	3 lb	7 lb
Alternative Fuel Vehicles - Renewable Natural Gas	8,603 lb	581 lb	5,502 lb	52 lb	29 lb
Electric, Hybrid & Plug-in Vehicles - EV & PHEV Mixed	4,888 lb	217 lb	432 lb	14 lb	10 lb
Electric, Hybrid & Plug-in Vehicles - Electric	1,060 lb	49 lb	51 lb	-7 lb	0 lb
Electric, Hybrid & Plug-in Vehicles - HEV	615 lb	28 lb	34 lb	5 lb	2 lb
Electric, Hybrid & Plug-in Vehicles - PHEV	221 lb	10 lb	20 lb	1 lb	0 lb
Fuel Economy Improvements	4,551 lb	213 lb	203 lb	38 lb	16 lb
Idle Reduction	30,312 lb	1,397 lb	1,734 lb	257 lb	105 lb
Off-Road Vehicles	1,117 lb	52 lb	49 lb	2 lb	2 lb
Total:	109,373 lb	6,563 lb	65,857 lb	705 lb	356 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.