2020 Transportation Technology Deployment Report:

Central Oklahoma Clean Cities (Oklahoma City)

Expanded Edition

March 2021



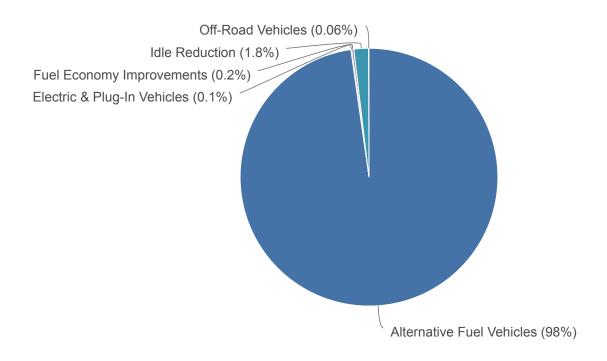
The U.S. Department of Energy's (DOE) Clean Cities Coalition Network fosters the nation's economic, environmental, and energy security by working locally to advance affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices. A national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

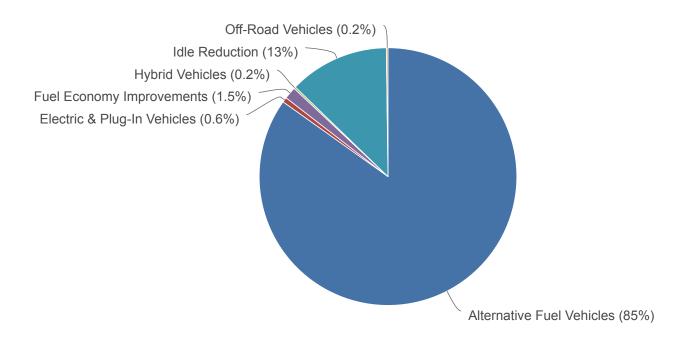
To view aggregated data for all local coalitions in the network, visit cleancities.energy.gov/accomplishments.

2020 Gallons of Gasoline Equivalent Reduced

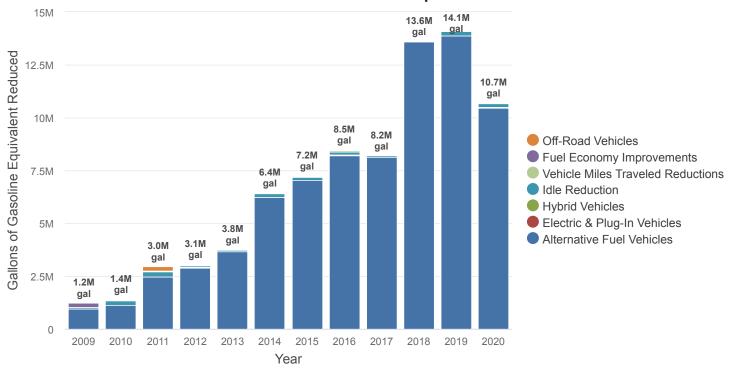
10,712,076 gallons



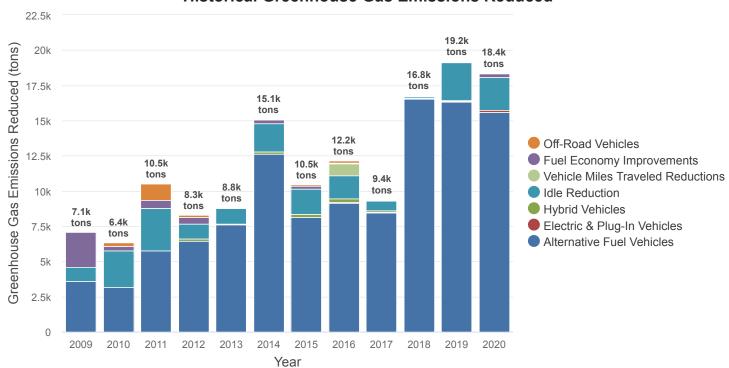
2020 Greenhouse Gas Emissions Reduced 18,384 tons



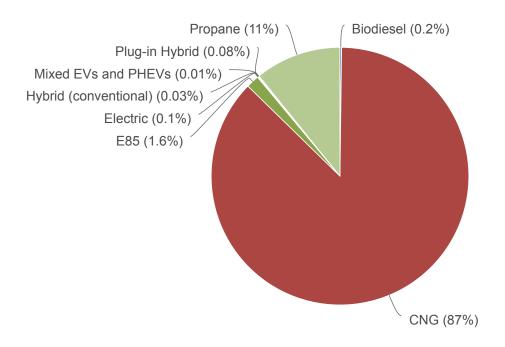
Historical Gallons of Gasoline Equivalent Reduced



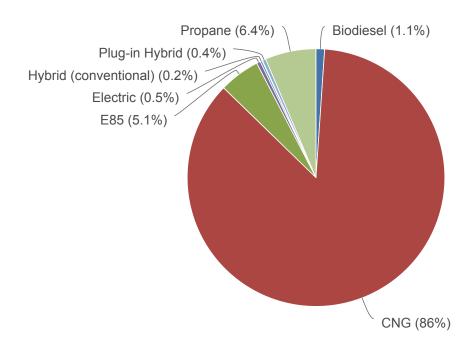
Historical Greenhouse Gas Emissions Reduced



2020 Gallons of Gasoline Equivalent Reduced by Fuel Type for Alternative Fuel Projects 10,494,849 gallons



2020 Greenhouse Gas Emissions Reduced by Fuel Type for Alternative Fuel Projects 15,788 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. Carbon Monoxide benefits are not included since no Clean Cities coalitions are in nonattainment areas for CO. 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*	NOx	VOC**	PM10	PM2.5
CNG - Compressed Natural Gas	102,343 lb	6,480 lb	0 lb	0 lb
E85 - 85% Ethanol	0 lb	38 lb	0 lb	0 lb
Electric (all-electric)	42 lb	37 lb	1 lb	1 lb
Hybrid (conventional)	1 lb	2 lb	0 lb	0 lb
Mixed EVs and PHEVs	3 lb	5 lb	0 lb	0 lb
Plug-in Hybrid	38 lb	59 lb	2 lb	2 lb
Propane	21,797 lb	-1,256 lb	153 lb	36 lb
Total:	124,224 lb	5,365 lb	156 lb	38 lb

^{*} This table accounts for criteria pollutants from alternative fuel vehicle, hybrid vehicle, and VMT reduction projects only. It does not include fuel economy, idle reduction, or off-road projects. Negative values indicate an increase in emissions.

^{**} 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.