

2017 Transportation Technology Deployment Report:

Vermont Clean Cities

July 2018



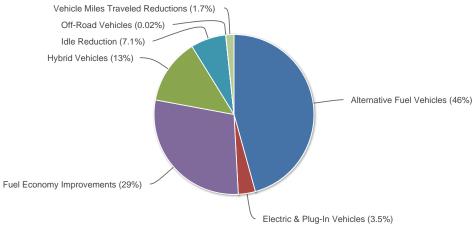
The U.S. Department of Energy's (DOE) Clean Cities program advances the nation's economic, environmental, and energy security by supporting local actions to reduce petroleum use in transportation. A national network of nearly 100 Clean Cities coalitions brings together stakeholders in the public and private sectors to deploy alternative and renewable fuels, idle-reduction measures, fuel economy improvements, and new transportation technologies, as they emerge.

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 and hybrid electric vehicles, idle-reduction initiatives, fuel economy activities, and programs to reduce vehicle miles traveled. NREL and DOE analyze the data and translate them into petroleum-use and greenhouse gas reduction impacts for individual coalitions and the program as a whole. This report summarizes those impacts for Vermont Clean Cities.

To view aggregated data for all local coalitions that participate in the Clean Cities program, visit <u>cleancities.energy.gov/accomplishments</u>.

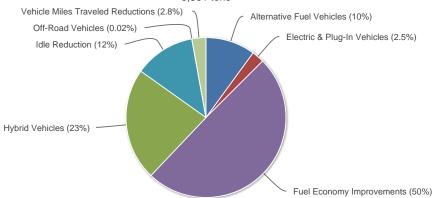
2017 Gallons of Gasoline Equivalent Reduced

954,710 gallons



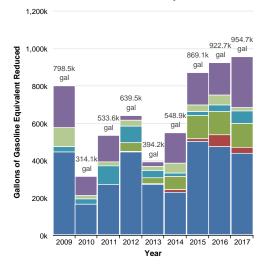
2017 Greenhouse Gas Emissions Reduced

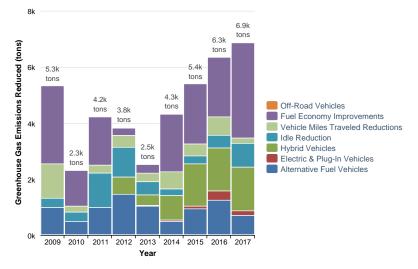
6,861 tons



Historical Gallons of Gasoline Equivalent Reduced

Historical Greenhouse Gas Emissions Reduced





2017 Gallons of Gasoline Equivalent Reduced by Fuel Type for Alternative Fuel Projects

596,117 gallons
Propane (11%)
Plug-in Hybrid (0.9%)
Mixed EVs and PHEVs (3.9%)

CNG (21%)

Electric (0.8%)

Hybrid (conventional) (21%)

2017 Greenhouse Gas Emissions Reduced by Fuel Type for Alternative Fuel Projects

2,421 tons

Propane (1.4%)

Plug-in Hybrid (1.1%)

Mixed EVs and PHEVs (5.0%)

Liquefied Natural Gas (8.6%)

Hybrid (conventional) (64%)

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. 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. This means that they omit emissions from sources such as electric power plants, refineries, and biofuel feedstock farms (where emissions are sufficiently removed from populations in order to minimize health effects). 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 <a href="https://clean.cities.com/cities.com

Reductions by Fuel Type*	NOx	VOC	СО	PM10	PM2.5
Biodiesel	0 lb	0 lb	0 lb	0 lb	0 lb
CNG - Compressed Natural Gas	3,603 lb	4 lb	-11,984 lb	1 lb	1 lb
Electric (all-electric)	15 lb	23 lb	415 lb	1 lb	1 lb
Hybrid (conventional)	197 lb	517 lb	0 lb	0 lb	0 lb
LNG - Liquefied Natural Gas	12,244 lb	0 lb	-49,640 lb	0 lb	0 lb
Mixed EVs and PHEVs	58 lb	100 lb	1,414 lb	2 lb	2 lb
Plug-in Hybrid	65 lb	100 lb	1,834 lb	3 lb	3 lb
Propane	3,215 lb	-224 lb	-5,489 lb	23 lb	5 lb
VMT Reduction (Gasoline)	74 lb	119 lb	2,129 lb	30 lb	7 lb
Total:	19,472 lb	638 lb	-61,321 lb	59 lb	18 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.

COALITION

Vermont Clean Cities - VT

http://www.uvm.edu/vtccc

Designated: 06/25/2001

Boundaries: Entire state of Vermont

Has your coalition registered with www.grants.gov?

COORDINATORS

	0001101117111	3110	
	Address	Telephone	Fax
Abby Bleything	210 Colchester Ave, Farrell Hall		
	Burlington, VT 05405		
Number of coordinators			1
Coordinator(s) hours per week on Clean Cities			16 hours
Other staff hours per week on Clean Cities			20 hours
How long have you been the coordinator?			3 years
	OPERATING INFOR	RMATION	
Host organization			University
Stakeholders			
Number of stakeholders			65
Number of private stakeho	olders		35
Does the State Energy Of	fice provide any financial support to the coalitic	on or stakeholders?	No
How would you rate the q	uality of the data on your survey?		Good
How do you obtain most o	of your data for the survey?		Coalition records, Estimates, Online questionnaire to stakeholders (SurveyMonkey, Google Forms, etc), Paper, e-mail, or spreadsheet questionnaire to stakeholders, Phone

Yes