

VEHICLE TECHNOLOGIES OFFICE



Alternative Fuels Data Center and Related Technology Integration Tools

The U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Office (VTO) Technology Integration Program offers a large collection of helpful tools. These calculators, interactive maps, and databases assist transportation decision makers in their efforts to advance alternative fuels and energy-efficient vehicle technologies.

VTO's Technology Integration Program supports a broad portfolio of technologies that can reduce transportation energy costs for businesses and consumers. People seeking information on alternative fuels and advanced vehicle data for fleets, cities, and regions can benefit from the tools featured in this guide. Find examples of how Clean Cities coalitions and their stakeholders have used the tools.



Find the tools in this guide at afdc.energy.gov/tools and fuelconomy.gov. You can use your phone's QR code reader to scan these QR codes:



afdc.energy.gov/tools



fuelconomy.gov

Vehicle and Emissions Tools



Vehicle Cost Calculator:

Interested in buying a new or used car? By providing information about your driving habits, you can find the total cost of owning that car. You can also learn about total emissions and fuel use for each vehicle model. afdc.energy.gov/calc

Tool in action: A Clean Cities coalition used the calculator to demonstrate for auto show attendees the price differential and total cost of ownership of alternative fuel and conventional vehicles.



Vehicle Search:

From a personal car to a fleet vehicle, find and compare the latest alternative fuel vehicles and engines, electric vehicles, and hybrids. afdc.energy.gov/vehicles/search

Tool in action: A Clean Cities coalition giving an Electric Vehicle 101 presentation used the search to generate a list of vehicles, including their driving ranges.



AFLEET Alternative Fuel Life-Cycle Calculator:

This go-to tool for fleets calculates and compares the economic and environmental impacts of alternative versus conventional fuel vehicles. Users can estimate petroleum use, greenhouse gas emissions, air pollutant emissions, and total cost of ownership for light- and heavy-duty vehicles using detailed spreadsheet or online inputs. greet.es.anl.gov/afleet

Tool in action: A fleet manager used the tool to understand how powering regional haul freight trucks with renewable natural gas would affect greenhouse gas emissions, tailpipe emissions, and total cost of ownership.



Heavy-Duty Vehicle Emissions Calculator:

Public officials, fleet managers, and procurement administrators can weigh the environmental and economic benefits of purchasing heavy-duty alternative fuel vehicle technologies.

afleet-web.es.anl.gov/hdv-emissions-calculator

Tool in action: An industry association used the calculator to show that alternative fuel school buses are a cost-effective emissions reduction strategy in many states.



Find a Car:

Need help choosing a car? Search and compare by make, model, class, MPG, and more. Download the app to find vehicle fuel economy ratings, cost estimates, and emissions ratings for light-duty vehicles on your iPhone or Android. fueleconomy.gov/feg/findacar.shtml

Tool in action: A Clean Cities coalition encouraged dealerships to use the Find a Car app while walking the lot with their customers.

Trip Calculator: FuelEconomy.gov's interactive trip calculator and mapping tool helps you plan your route, pick your car, and estimate the fuel costs for your next road trip. fueleconomy.gov/trip

Tool in action: A company used the calculator to quantify the difference in total fuel cost among the vehicles in its fleet for specified routes.

IdleBox: This easy-to-use electronic education and outreach toolkit focuses on vehicle idle reduction, the low-hanging fruit of fuel efficiency. cleancities.energy.gov/idlebox

Tool in action: A Clean Cities coalition leader tapped the IdleBox resources at his fingertips to help a local student launch an idle-free initiative at his school.

Used Car Label Tool: Rev up your used car sale with a fuel economy sticker. Select a vehicle's year, make, model, and engine options, and the tool creates an MPG label similar to the one displayed on new cars. The graphic features the vehicle's EPA-estimated fuel economy, gallons needed to drive 100 miles, and estimated greenhouse gas emissions. fuelconomy.gov/feg/UsedCarLabel.jsp

Tool in action: A consumer checked out the Used Car Label to compare used cars, select the most fuel-efficient model, and save money at the pump.

Fuel and Station Tools



Alternative Fueling Station

Locator: For over 20 years, the Station Locator has helped fleets and individuals locate alternative fueling stations and assisted transportation decision makers in tracking industry development. Use the website or download the mobile app to answer all your alternative fueling station questions, including location, payments accepted, and hours of operation. Available for iPhone or Android. afdc.energy.gov/stations

Tool in action: A natural gas fuel provider used the Station Locator to assess the market potential for new stations.



Alternative Fuel Corridor

Station Data: Create custom maps of alternative fuel corridors by fuel type and state using these station data and shapefiles. afdc.energy.gov/corridors

Tool in action: A Clean Cities coalition leader used the corridor shapefiles to identify potential alternative fuel corridors in her state to get a federal corridor designation.



EVI-Pro Lite: Navigate through a few simple prompts to estimate how much electric vehicle charging

you might need in your city or state to support your plug-in electric vehicle goal. afdc.energy.gov/evi-pro-lite

Tool in action: A Clean Cities coalition used EVI-Pro Lite to help city transportation decision makers set goals on the number and location of public charging stations needed based on the anticipated number of plug-in electric vehicles.



Fuel Properties: Looking for the technical properties of each alternative fuel? Compare characteristics across fuels using this tool. afdc.energy.gov/fuels/properties

Tool in action: To help a stakeholder determine how tax rates are applied to alternative fuels, a Clean Cities coalition used the gasoline gallon equivalent values found in the Fuel Properties Comparison.



Evolution: E-Drive Vehicle Education: Want to understand the costs and benefits of electric vehicles—hybrid, plug-in hybrid, range-extended-electric, and all-electric—based on where you live, where you drive, charging availability, incentives, and more? The E-Volution tool has the answers. evolution.es.anl.gov/

Tool in action: In the Chicago Auto Show's Electric Room, a Clean Cities coordinator used the E-Volution tool to let consumers compare conventional sedans to electric vehicles, learning about the energy and emission benefits and total cost of ownership.

Informational Tools



State Information Search: Get a state-specific snapshot of alternative fuels and advanced vehicles, including laws and incentives, fueling station locations, fuel production and consumption data, and more. afdc.energy.gov/states

Tool in action: An industry association searched the state information pages to find bioenergy production and infrastructure data to assess a state's capacity to expand fuel production.



Laws and Incentives: Use the Federal and State Laws and Incentives database to identify local incentives and regulations related to alternative fuels and vehicles, air quality, fuel efficiency, and other transportation-related topics. afdc.energy.gov/laws

Tool in action: A propane fuel provider used the Summary Table on the website to demonstrate how many propane incentives are available in their operating area.



Publications Search: A searchable database of informative publications on alternative fuels, vehicles, and infrastructure. afdc.energy.gov/publications

Tool in action: Using the search, a Clean Cities coalition compiled a list of electric vehicle charging station installation resources for a stakeholder.



Case Studies Search: Search by category or keyword, or simply view the most recent videos and stories showing how businesses, fleets, government agencies, and others have successfully implemented alternative fuels. afdc.energy.gov/case

Tool in action: A fleet featured in a MotorWeek video success story used the search to promote their commitment to reducing vehicle emissions and improving air quality.

Maps & Data: Access maps and charts showing transportation data and trends related to alternative fuels and vehicles. This page is the jumping-off point for advanced transportation analysis. afdc.energy.gov/data

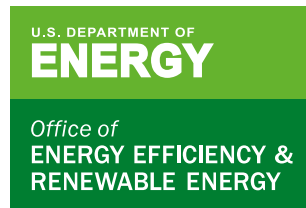
Tool in action: A nonprofit downloaded the U.S. Alternative Fueling Stations by Fuel Type chart to assess infrastructure growth over time.



Clean Cities Coalition Network: Nearly 100 local coalitions serve as the foundation of

Clean Cities. These dynamic organizations work in communities across the country to implement alternative fuels, fuel-saving technologies and practices, and new mobility choices. Connect with your local coalition today. cleancities.energy.gov/coalitions/locations

Tool in action: A fleet interested in installing an electric vehicle charging station used the Clean Cities map to identify their local coalition.



For more information, visit:
afdc.energy.gov

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