

Clean Cities Coalitions:

Advancing Affordable, Efficient, and Clean Transportation Fuels and Technologies

A collaborative network of more than 75 Clean Cities coalitions boosts the country's economic vitality, energy security, and quality of life by advancing the deployment of affordable, efficient, and clean transportation fuels and technologies. Coalitions provide the technical expertise local decision makers and fleets need to understand and implement alternative and renewable fuels, electric vehicles, idle-reduction measures, fuel economy improvements, new mobility choices, and emerging transportation technologies.

As technology deployment partners with the U.S. Department of Energy's (DOE) Vehicle Technologies Office (VTO), Clean Cities coalitions leverage expertise from federal agencies, national laboratories, and their fellow coalitions. VTO's Technology Integration Program and DOE's national laboratories offer technical assistance, information resources, online training, and an array of data and analysis tools. Coalitions bring this expertise directly to the communities they serve and develop community-driven solutions based on a unique understanding of local needs, opportunities, and markets. They build networks of community stakeholders and provide hands-on problem-solving support to fleets.

Thriving on a culture of collaborative change, coalitions harness 30 years of expertise to continue moving our transportation systems into the future.



DOE designated the first Clean Cities coalition in 1993 in response to the Energy Policy Act of 1992, and the network has evolved and expanded ever since. The network has built bipartisan support, made deep connections within the transportation industry, and created active partnerships with 20,000 public and private stakeholders. Coalitions hold the respect and trust of both fleets and industry through their ability to provide objective data and real-world lessons learned, smoothing the transition to

alternative fuels and advanced vehicle technologies.

Coalitions are instrumental in bringing clean transportation technologies to communities large and small, one project, one local decision, and one fleet at a time. Together, they create a compounding impact nationwide that advances U.S. energy independence and reduces vehicle emissions while supporting regional economic development and job growth.



Switching to clean school buses with low or no emissions can help improve air quality around schools, benefiting the health of students. *Photo by Dennis Schroeder, NREL 31480*



More fleets and consumers are choosing electric vehicles as new, competitively priced models with longer ranges hit the market and additional public charging stations are rapidly becoming available. Photo by Werner Slocum, NREL 73925

Clean Cities Coalitions at Work

- Build partnerships with public- and private-sector transportation stakeholders
- Dispense objective information, data-driven online tools, and a suite of resources to fleets and local decision makers
- Empower stakeholders to evaluate and implement the best strategy to achieve their goals
- Collect and share best practices, data, and lessons learned to inform local decisions and build a strong national network
- Engage technical assistance to help fleets and end users implement alternative fuels, advanced vehicles, and fuel-saving practices
- Build relationships with industry partners, fleets, and communities to solve problems and identify and address technology barriers
- Leverage people and resources to encourage private-sector investment, resulting in successful implementation of advanced transportation, fueling infrastructure, and charging equipment development projects.

Coalition Strategies

Coalitions employ multiple strategies to advance affordable, efficient, and clean transportation fuels and technologies:

- Evaluate transportation needs and energy choices to determine the most impactful and cost-effective vehicle options, fuels, technologies, and best practices that make sense for their stakeholders
- Shift to efficient and clean energy sources through the use of alternative and renewable fuels such as biodiesel, electricity, ethanol, hydrogen, natural gas, propane, and renewable diesel
- Improve fuel efficiency through stateof-the-art technologies and strategies
- Reduce greenhouse gas emissions and local pollutants through transition to low- and no-emission vehicles, idle reduction, and other fuel-saving technologies and practices

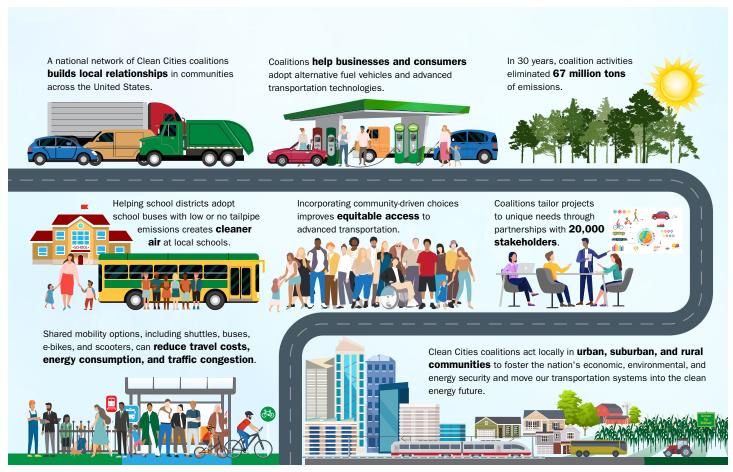


Illustration by Al Hicks, NREL

• Demonstrate and assess new mobility choices that maximize the return on investment for mobility systems in terms of time, cost, energy, and opportunity.

Coalition activities, project results, and estimated energy impact are summarized in an annual report. This gives coalitions the ability to track accomplishments, inform stakeholders of their coalition's progress, and devise strategies for the future.

Moreover, access to these data allows coalitions to identify points of mutual interest with other coalitions and jointly develop projects for larger impact. Summary information is available on the Publications page of the Clean Cities website (*cleancities.energy.gov/publications*).

A National Network of Local Coalitions

The strength of the national Clean Cities network lies within the more than 75 coalitions located throughout the United States. Rooted within their local communities, the coalitions serve as experts and ambassadors, bringing to bear the collective knowledge, experience, and practical know-how of the entire network (from within DOE, its national laboratories, and diverse stakeholders in the field). These diverse partnerships make Clean Cities coalitions unique and successful.

Coalitions are comprised of businesses, fuel providers, vehicle fleets, state and local government agencies, and community organizations. These stakeholders share experiences, information and resources, educate the public, collaborate on transportation projects, and help identify research needs. Nationwide, more than 20,000

stakeholders participate in Clean Cities coalitions, and through their collective efforts they are transforming local and regional transportation markets.

Each coalition is led by an on-the- ground coalition director who tailors projects and activities to capitalize on unique regional opportunities. Stakeholders gain access through the coalition to a wide array of resources, including individualized technical assistance, informational publications and tools, networking opportunities with fleets and industry partners, workshops, funding opportunities, and outreach support. Deeply engaged stakeholders also receive public recognition, highlighting their accomplishments and success.

Furthermore, Clean Cities coalitions host events for stakeholders to share information, work with fleets to evaluate their fuel or technology options, and collaborate on projects that implement these fuels and technologies.

Online Resources

Your local coalition can connect you with a wide array of resources and advise on the appropriate tools to determine a solution that meets your needs.

Clean Cities Coalition Network: Visit the Clean Cities website (*cleancities. energy.gov*) to find out more about Clean Cities coalition accomplishments and how to connect with your local coalition.

Alternative Fuels Data Center (AFDC):

The AFDC (*afdc.energy.gov*) provides a wealth of information and data on alternative fuels, advanced vehicles, and fuel-saving practices. The site features a number of interactive tools, calculators, and mapping applications.

FuelEconomy.gov: Use the official U.S. government source for fuel economy information (*fueleconomy.gov*) to find and compare vehicles, calculate your own fuel economy, and get tips to cut fuel costs.

If you have a need or want to learn more, there is a tool or resource to help!

• Find and compare vehicles:
The Find A Car tool*
(fueleconomy.gov/feg/findacar.shtml)
makes it easy to compare all types of light-duty vehicles, while the
Alternative Fuel and Advanced Vehicle

- Search (*afdc.energy.gov/vehicles/search*) focuses on alternative fuel vehicles across the light- to heavy-duty spectrum.
- Estimate electric vehicle charging needs: The EVI-Pro Lite tool (afdc.energy.gov/evi-pro-lite) provides a simple way to evaluate how much electric vehicle charging you might need at a city and state level.
- Find laws and incentives: The laws and incentives database† (afdc.energy.gov/laws) contains federal and state laws and incentives pertaining to alternative fuels and vehicles, air quality, fuel efficiency, and other transportation-related topics.
- Compare fuel prices: The Alternative Fuel Price Report (afdc.energy.gov/fuels/prices.html) provides publicly available regional fuel prices for biodiesel, compressed natural gas, ethanol, hydrogen, and propane, as well as gasoline and diesel.
- Find fueling and charging stations:
 The Alternative Fueling Station
 Locator*† (afdc.energy.gov/stations)
 helps you find alternative fueling
 stations and electric vehicle charging
 locations throughout the United States
 and Canada.

- Estimate the impact of new vehicles: The Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool (greet.es.anl.gov/afleet) allows you to estimate petroleum use, emissions, and cost of ownership of light- and heavy-duty vehicles using simple spreadsheet inputs.
- See projects in action: Browse a collection of case studies (afdc.energy.gov/case) and videos (youtube.com/user/CleanCitiesTV) to learn how other fleets have implemented alternative fuels and transportation technologies.
- Get help! Let seasoned experts at the Technical Response Service (technicalresponse@icf.com; 800-254-6735) find answers to your questions on alternative fuels, advanced vehicles, fuel economy, and idle reduction.

*There is also a mobile app for this tool!

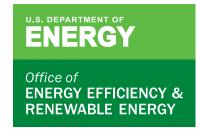
†Data source available via an API and can be used by public and private enterprises.

Transforming Transportation Since 1993

Clean Cities coalitions strive to improve transportation energy efficiency and advance affordable, efficient, and clean transportation fuels and technologies. Their combined efforts have yielded impressive results, which include the following:

- Saved the equivalent of 13 billion gallons of gasoline through diverse transportation projects
- Eliminated more than 67 million tons of carbon dioxide emissions through projects that use alternative fuels and fuel-efficient technologies
- Placed more than 1.3 million alternative fuel vehicles on the road
- Grew from six Clean Cities coalitions in 1993 to more than 75 today, with coalitions in nearly every state
- Convened more than 20,000 public and private stakeholders to participate in local coalitions.





For more information, visit: cleancities.energy.gov

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