

### Kansas City Regional Clean Cities

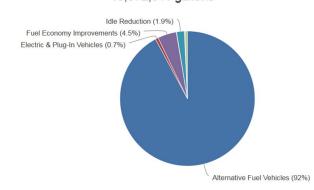
- Established in 1998
- Housed at Metropolitan Energy Center
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- Funding
  - o U.S. Department of Energy
  - U.S. Environmental Protection Agency
  - Local contracts
  - Memberships and sponsorship from stakeholders

#### Central Kansas Clean Cities

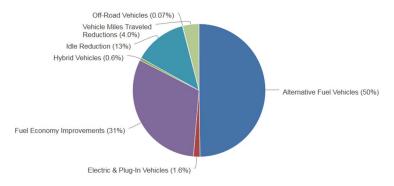
- Established in 2013
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- Funding
  - U.S. Department of Energy
  - U.S. Environmental Protection Agency
  - Kansas Soybean Commission
  - Memberships and sponsorship from stakeholders

Two of approximately 80 U.S. Department of Energy Clean Cities Coalitions. The coalitions partner with members in the public, private and nonprofit sectors to increase use of and assist with new implementation of alternative transportation fuels and its infrastructure. The programs supported by the coalitions and their members strengthen the nation's energy security, improve disaster resilience, improve air quality and support local jobs and state economies.

#### 2019 Gallons of Gasoline Equivalent Reduced 13,372,911 gallons



## 2019 Greenhouse Gas Emissions Reduced 23,864 tons



# **Projects**

Our Kansas City Regional Clean Cities Coalition and Central Kansas Clean Cities Coalition are putting cleaner trucks and buses on our roads (from CNG to propane to electric) and new fuel stations across our corridors in Kansas and Missouri. Below is a snapshot of some current projects. More information at https://metroenergy.org/programs/current-projects/.

Mid-America Clean Diesel Program: Since 2016, our projects have replaced 13 diesel school buses with cleaner-burning compressed natural gas models, along with 28 long-haul diesel freight tractors and 7 diesel heavy-duty work trucks, all within the Kansas City metro area. Through 2023 project participants will replace an additional 74 long-haul, delivery and terminal trucks and school buses in Missouri, Kansas, Iowa and Nebraska with electric, natural gas, propane and updated diesel models, thanks to funding via the Environmental Protection Agency's Diesel Emission Reduction Act. Diesel exhaust is one of the biggest single problems contributing to poor air quality, and one of the biggest single health issues for people with respiratory issues. Dollar for dollar, the DERA program is one of the most effective programs that clean up our air.

Accelerating Alternative Fuel Adoption in Mid-America: This project will deploy a minimum of 76 alternative fuel vehicles (AFV), primarily in Kansas and Missouri local government fleets, and install new biodiesel and electric charging stations across the I-70 and I-35 corridors in Kansas. Anticipated outcomes include annual GHG reductions of 1645 metric tons, annual petroleum reductions of 20,715 barrels, and annual financial savings by consumers and fleets of no less than \$435,353.

**Electric Vehicle Streetlight Charging Research Pilot:** This project will use Kansas City's streetlights to host electric car chargers and collect data and lessons learned throughout the process. This is thought to be more affordable than installing a charging station on a curb or sidewalk and enables EV drivers to charge at many locations, not just at a mall or in a parking garage. It's also a way to make owning an electric car practical for apartment residents in Kansas City, Missouri.

Electrify Kansas and Electrify Missouri: Kansas and Missouri, along with 12 other states across the country, are building state-wide initiatives to accelerate the adoption of electric vehicles. Under <u>Drive Electric USA</u>, states will work with consumers, utilities, regulators and government officials to advance EV infrastructure planning and EV ownership. Stakeholders across the region will participate in Project Advisory Committees focusing on seven target areas to help guide state-wide efforts in increasing EV adoption.

Kansas Biodiesel Outreach and Training: Biodiesel is an important transportation fuel alternative that supports our state economies, provides value add for our farmers, and improves disaster resilience and climate change mitigation. Through our program with Kansas Soybean Commission, we work to change attitudes about biodiesel within the driving public, with fleet outreach and technical information, and by advocating for biodiesel as a solution within the climate change community. This program also provided critical education and financial information to a major independent retailer, who now provides biodiesel to all its truck stop customers in Kansas. Fleets can receive up to \$2000 in rebates for biodiesel purchases.

Electrifying Terminal Trucks to Optimize Freight Yards: Through the project, four all-electric terminal trucks manufactured by Orange EV were recently deployed in the Kansas City and Chicago metropolitan areas. An all-electric demo truck is also available to interested fleets across the U.S. at no cost except a shipping fee of \$500. Ultimately, MEC will create a deployment guide based on the real-world experiences of project participants so fleets across the country can access reliable data in support of cleaner, more efficient freight handling.

Mid-America Green Fleets: Our goal is to significantly improve the environmental performance of business and government vehicle fleets across the region through conversion to alternative fuels and other strategies. This program is composed of working with fleet managers to analyze data and create a green fleet plan, hand-on support and assistance implementing policy, and the development of a regional rating system to recognize those fleets that have made positive progress toward their environmental goals.

### Success Stories

With our project, we have 2 trucks working in the KC metro, 1 in Chigago metro, 1 being demonstrated across the U.S. Data collection to accelerate acceptance. Supporting jobs in Riverside, MO, at Orange EV.





The Kansas City International Airport is a funding recipient through our Accelerating Alternative Fuel Adoptions project. KCI has deployed seven all-electric shuttle buses, marking the first airport-owned deployment of all-electric buses in the United States. KCI currently has an all cleanfuel fleet, with CNG and electric buses. They tentatively plan to transition to all electric by 2025. We are helping them to recruit new fleets to use the CNG station the buses will no longer need.

33 Buses running 24/7

- 7 All-Electric
- 26 Compressed Natural Gas
  Ideal duty cycle for testing automated bus routes

We helped the school district in Grain Valley, MO install a propane fueling station at their bus barn to power their growing fleet of propane school buses, and to access DERA funds. Not only is propane about half the cost of diesel, but kids are more vulnerable to diesel exhaust than adults, and propane is far cleaner than petroleum diesel.







Classroom and hands-on training for fleet maintenance professionals, fire marshalls, fire departments, and local codes officials to help communities understand the proper handling of alternative fuels in everyday and emergency situations.

Building on a prior community initiative to make Kansas City ready for electric vehicles, we are reviving the program in conjunction with a national project, Drive Electric USA, to increase the utilization of our existing electric vehicle infrastructure and strategizing about ways to expand infrastructure throughout the region, so more people and fleets can drive electric.





Leveraging 3 of our projects, in 2020 we were able to help 24/7 Travel Stores, an independent fuel retailer with 10 locations along interstates in Kansas, install a small-scale biodiesel blending system to serve 5 of its stations. With new funds from us and a new grant from USDA, they are now installing biodiesel, ethanol and electric charging stations at all their stores. One or more stores will have all 3 fuel alternatives, while others will have one or two.