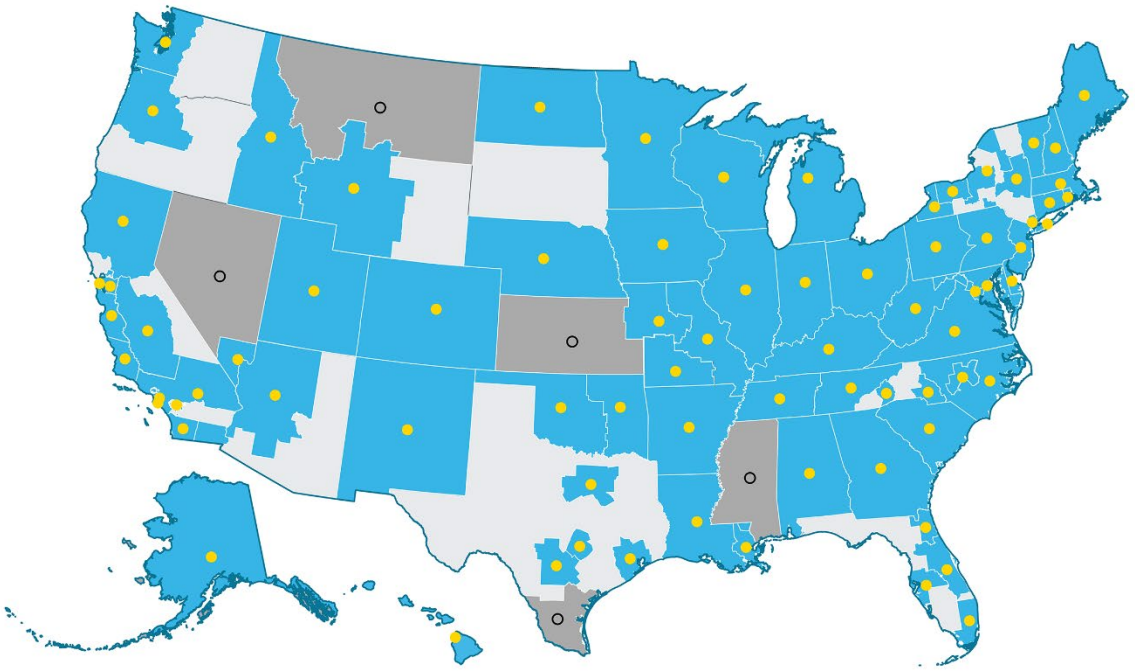
Clean Cities and Communities 101

October 2026

Pittsburgh, PA

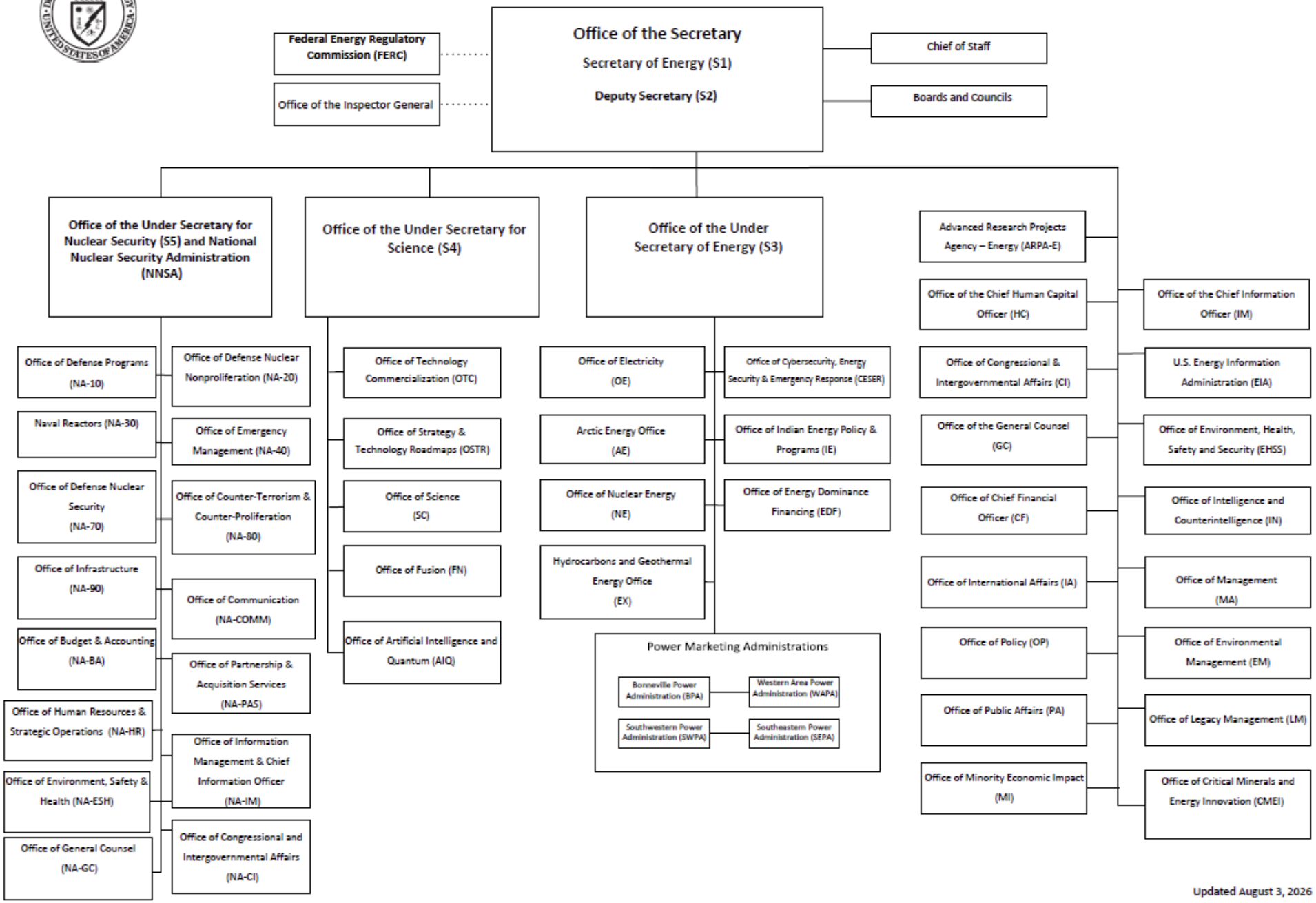


Clean Cities and Communities

Clean Cities and Communities 101 Resource Guide
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October 2026

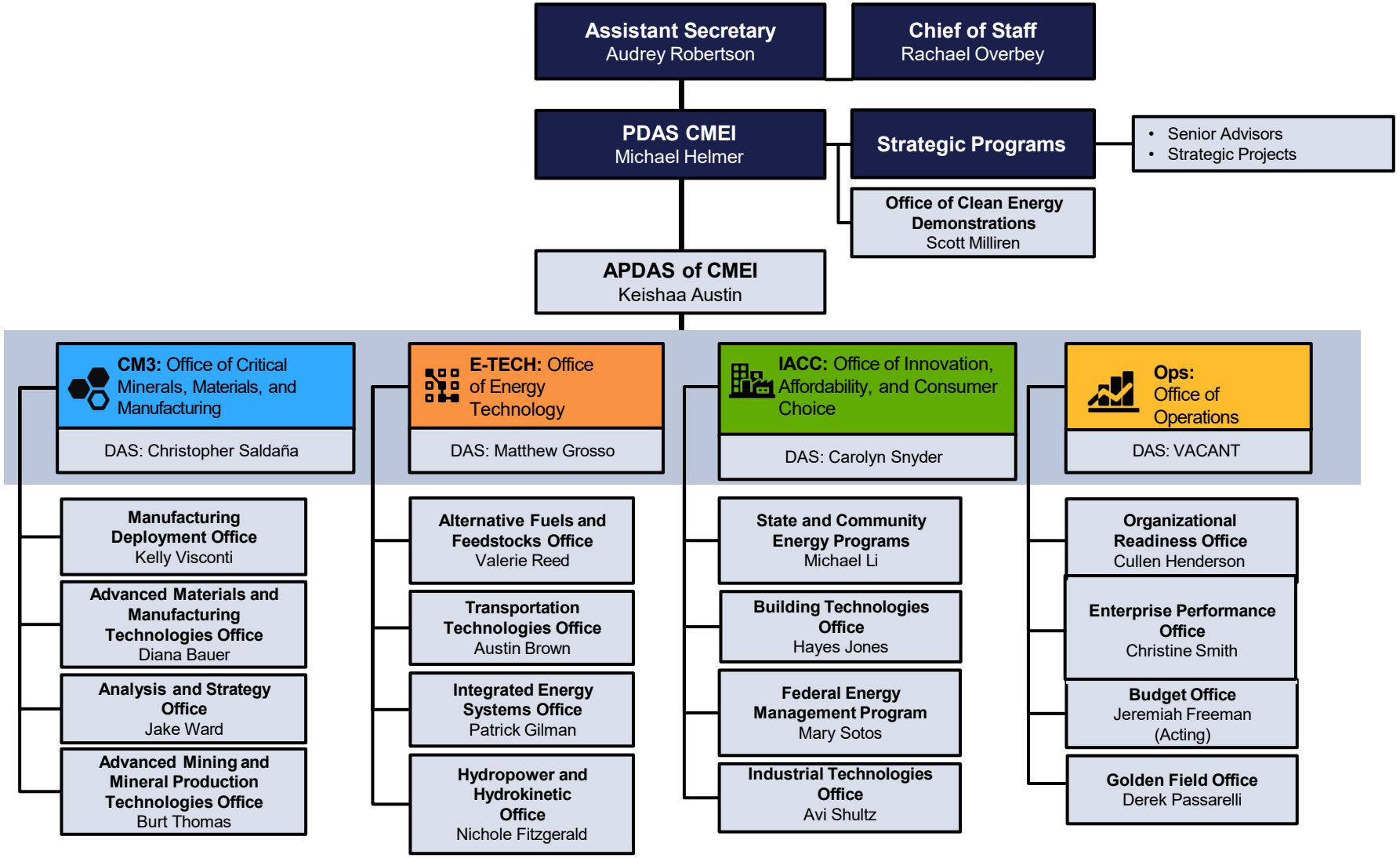
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DEPARTMENT OF ENERGY



Updated August 3, 2026

Critical Minerals and Energy Innovation (CMEI) Organizational Structure

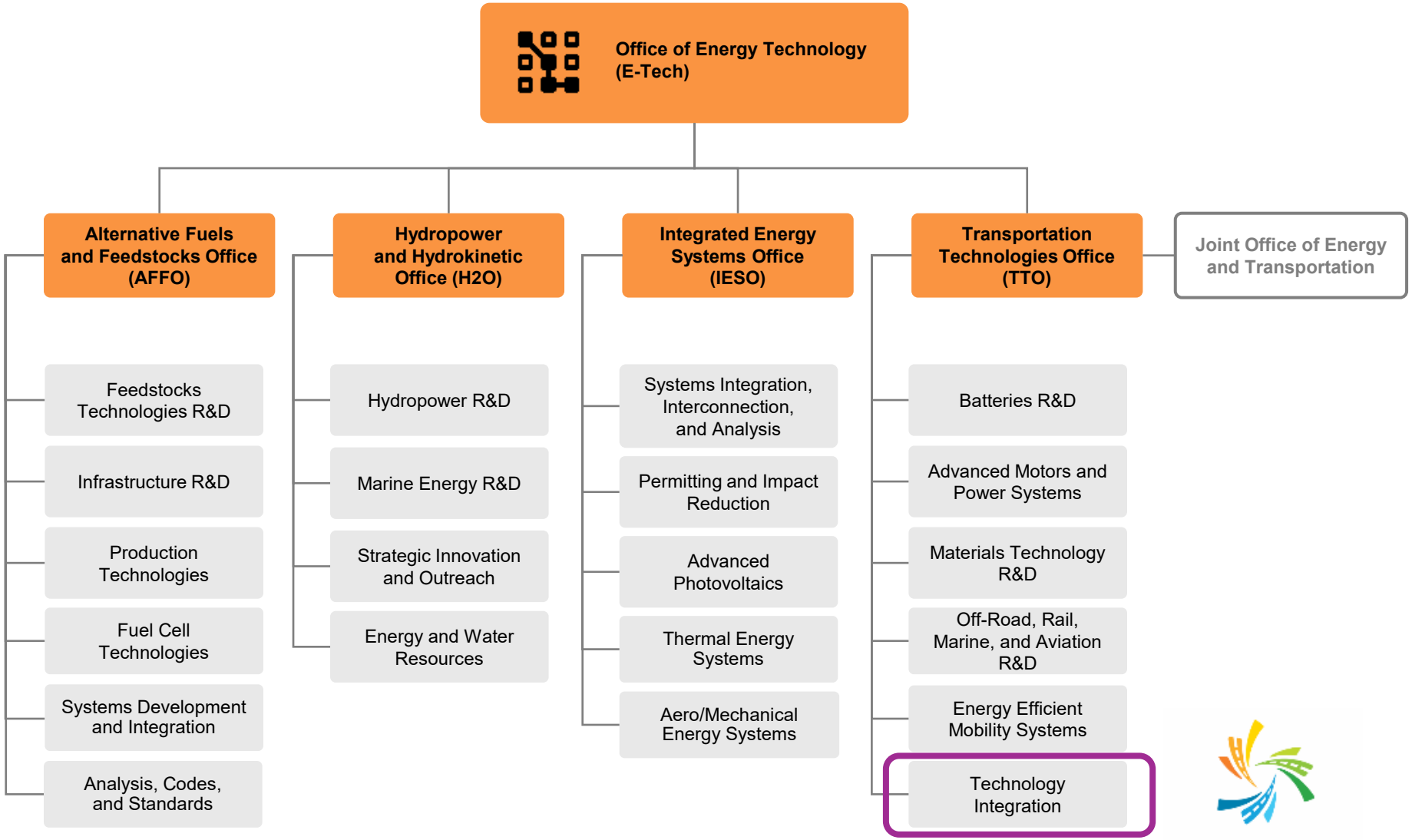


Last updated June 2026

APDAS: Associate Principal Deputy Assistant Secretary

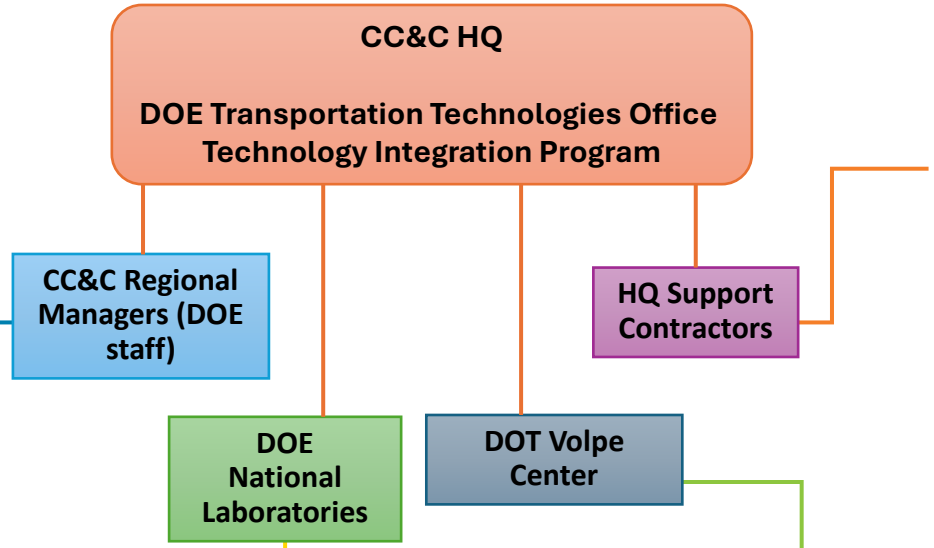
PDAS: Principal Deputy Assistant Secretary

E-Tech Pillar



Clean Cities and Communities

DOE Technology Integration Program staff serve as the CC&C Headquarters (HQ) team. HQ leads CC&C regional managers, DOE national laboratories, and support contractors to create an ecosystem of engaging with and providing technical assistance to CC&C coalitions.



CC&C Regional Managers

DOE field office staff at the National Energy Technology Laboratory who serve as CC&C coalitions' main DOE point of contact, facilitate regional coalition collaboration, and manage DOE project funding.

NATIONAL ENERGY TECHNOLOGY LABORATORY

HQ Support Contractors – Energetics

Provides administrative and programmatic support to the HQ team, assisting with CC&C strategic planning initiatives, training and coalition peer-sharing events, the CC&C Forum, and the designation and redesignation processes.

CLEAResult energetics Energy Sustainability Consulting

Volpe Center

The U.S. Department of Transportation (DOT) Volpe National Transportation Systems Center provides technical and programmatic support for Technology Integration and CC&C coalitions through various special projects and interagency collaborations, including the National Electric Vehicle Infrastructure Formula Program, the Charging and Fueling Infrastructure Discretionary Grant Program, the Congestion Mitigation and Air Quality Formula Program, and the Alternative Fuel Corridor Designation Initiative.

U.S. Department of Transportation Volpe Center

Argonne National Laboratory

Develops and updates tools based on unbiased economic and emissions analysis; manages the renewable natural gas, ports, and EV car sharing working groups; the intern program; and technical assistance on international collaboration efforts.

Argonne NATIONAL LABORATORY

National Laboratory of the Rockies

Provides broad support to CC&C coalitions related to communications and trainings, develops outreach products, manages the Alternative Fuels Data Center, produces the annual CC&C Activity Report, leads technical assistance for stakeholders, and leads other efforts.

National Laboratory of the Rockies

Oak Ridge National Laboratory

Provides tools and information on light-duty vehicle fuel economy to the public through the Fuel Economy Guide and fueleconomy.gov.

OAK RIDGE National Laboratory

DOE Staff Working with CC&C Coalitions

Clean Cities and Communities Headquarters (HQ) Team



Clean Cities and Communities Regional Managers – DOE Field Staff
National Energy Technology Laboratory (NETL)

Labs and Contractors Working With Coalitions

DOE NATIONAL LABORATORIES

National Laboratory of the Rockies

Sandra Loi

Coalition support, Peer-to-Peer, trainings

Mandy Bongiovanni

CC&C Forum, Toolbox, and website access and updated contacts



John Gonzales

Technical assistance

Mollie Putzig

Outreach and communications materials, eLearning

Argonne National Lab

Marcy Rood

Main ANL point of contact



Andy Burnham

AFLEET and analysis

Lisa Heineman

CC&C Accelerate

Oak Ridge National Lab

Stacy Davis

Fuel economy tools and outreach, Transportation Energy Data Book





Mike Scarpino

Stephen Costa

Heather Richardson

DOE-DOT Interagency Initiatives and Programs

Volpe

U.S. Department of Transportation



Walt Zalis

CC&C Framework for Success, strategic planning

Victoria McGarril

Coalition virtual discussions, national training workshop

Benjamin White

Program support, re-designation

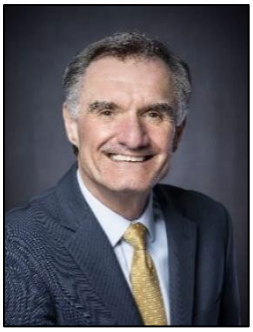
Energetics

HQ SUPPORT CONTRACTORS

Who's Who in Technology Integration

Department of Energy Headquarters

Mark Smith, Technology Integration Program Manager Located in Washington, D.C.
202-287-5151/mark.smith@doe.gov
Contact regarding: DOE Technology Integration Program



Mark Smith is the Technology Integration Program Manager within the U.S. Department of Energy's (DOE) Office of Critical Minerals and Energy Innovation's Transportation Technologies Office. In this role, he oversees a broad technology portfolio, which is focused on the development and use of advanced vehicle technologies to support affordable, domestic transportation fuels and other fuel-saving technologies and practices. The Technology Integration Program portfolio includes alternative fuels, fuel economy, energy efficient mobility systems, and the alternative fuels regulatory program.

Before joining DOE in 2010, Mark was an alternative fuel vehicle consultant to American Honda. In this position, he promoted the use of Honda's advanced technology vehicles to public and private fleet managers and implemented programs to increase adoption of these vehicles. Mark also understands that alternative fuel vehicle use hinges upon the development of refueling/charging infrastructure. From his previous positions with FuelMaker and Clean Energy, he has provided alternative refueling solutions ranging from home refueling of a single vehicle to some of the largest commercial, airport, and transit fueling stations in the United States.

Mike Laughlin, Technology Manager Located in Washington, D.C.
202-536-8023/michael.laughlin@doe.gov
Contact regarding: Energy Efficient Mobility Systems, MD/HD Vehicles



Mike Laughlin is a Technology Manager in the U.S. Department of Energy's (DOE) Office of Critical Minerals and Energy Innovation's Transportation Technologies Office (TTO). His role for the Technology Integration (TI) Program includes day-to-day management of several TI-funded activities, and he serves as an interface between TI and other TTO research programs, in particular the Energy Efficient Mobility Systems Program. He also serves as the executive manager for the 21st Century Truck Partnership, a government/industry research partnership for medium- and heavy-duty vehicles. Additionally, he serves as the TTO lead for the Advanced Vehicle Technology Competitions with prominent North American universities through the EcoCAR EV Challenge and Battery Workforce Challenge.

Before joining DOE in 2019, Mike served in program director and project manager roles for several TTO contractors. He has worked with CC&C coalitions since nearly the beginning. He developed early databases for tracking CC&C alternative fuel vehicle and fueling station statistics, created the initial Alternative Fuel Price Report, directly assisted local coalition directors with coalition activities as associate coordinator, and provided analytical and technical input to case studies on a variety of medium- and heavy-duty alternative fuel vehicles. He also served as technical and management support for the 21st Century Truck Partnership in developing key technical resources, including its blueprint, internal website, and roadmaps.

Mike has almost 30 years of experience in alternative fuels and advanced transportation and holds a Bachelor of Science in mechanical engineering from the University of Akron and an MBA from Walsh University (Ohio).

Who's Who in Technology Integration



Margaret Smith, Clean Cities and Communities National Manager Located in Washington, D.C.
202-586-5487/margaret.smith@doe.gov
Contact regarding: Clean Cities and Communities

Margaret Smith is a technology manager in the U.S. Department of Energy's (DOE) Office of Critical Minerals and Energy Innovation's Transportation Technologies Office (TTO). She serves as the CC&C National Manager providing strategic direction for the federal partnership with a team of leaders across DOE and its national laboratories. She manages a portfolio of federally funded projects that foster transportation energy choice through outreach, engagement, technical assistance, and deployment.

Before joining DOE in 2020, she provided programmatic and technical support to the TTO Technology Integration (TI) Program team as a contractor for over 10 years. Margaret supported various TI activities, such as organizing CC&C trainings and peer sharing discussions, developing resources for CC&C coalitions, and assisting with program management responsibilities. Additionally, Margaret worked with coalitions to develop and implement projects addressing barriers to electric vehicle deployment.

Prior to working with TTO, Margaret worked for Sustainable Energy Strategies, Inc. In this role, she supported biodiesel and ethanol projects that improve infrastructure, develop feedstocks, educate stakeholders, and promote the use of biodiesel. She has two years of experience with the design, manufacturing, and sales of underground stormwater treatment systems that remove pollution from stormwater runoff. After graduating from college, Margaret served in a year-long service program affiliated with AmeriCorps where she worked at Catholic Charities food pantries in Buffalo, New York. Margaret holds a Bachelor of Science in computer engineering with a concentration in cognitive science from the University of Virginia.



Grace McGinnis, Technology Manager Located in Washington, D.C.
301-366-9807/grace.mcginnis@doe.gov
Contact regarding: Designation; Re-Designation; Off-Road, Rail, Marine, and Aviation

Grace McGinnis is a technology manager in the U.S. Department of Energy's (DOE) Office of Critical Minerals and Energy Innovation's Transportation Technologies Office (TTO). She manages designation and re-designation processes for the CC&C partnership; serves as liaison between the TI team and TTO's Off-Road, Rail, Marine, and Aviation R&D program; and manages a portfolio of federally funded projects supporting advanced transportation technologies that can deliver affordable, reliable, and secure transportation energy to businesses and consumers.

Grace comes to TTO from DOE's State and Community Energy Programs Office, where she developed technical assistance around electric school buses and supported vehicle technical assistance for the Better Buildings Challenge. Before DOE, one of her first jobs out of college was leading a biofuels education program for a CC&C coalition. She has also supported a variety of public sector energy initiatives, including for the New York City Department of Education and the Southeast Michigan Regional Energy Office. She also spent several years in the solar industry, where she learned how to understand and deploy new energy technologies. Grace holds a Bachelor of Science in biology and environmental science from the College of William and Mary and a Master of Science in sustainable systems and environmental policy from the University of Michigan.

Who's Who in Technology Integration

National Energy Technology Laboratory DOE Regional Managers

DOE Regional Managers at the National Energy Technology Laboratory (NETL) manage Technology Integration grants, projects, and Notices of Funding Opportunity. They also offer guidance to CC&C coalition directors in their regions, monitor regional coalition activities, and foster relationships among coalition directors in neighboring states.

Contact your regional manager regarding: Regional calls/meetings, coalition cooperative agreement



Neil Kirschner, PMP, CC&C Regional Manager Team Supervisor,
CC&C Regional Manager **South Central**
Located in Pittsburgh, PA
412-759-0107/neil.kirschner@netl.doe.gov

Neil Kirschner is a senior project manager and engineer at the U.S. Department of Energy's (DOE) National Energy Technology Laboratory (NETL). Neil's group directly supports the DOE's Office of Critical Minerals and Energy Innovation's Transportation Technologies Office. Neil is the CC&C regional manager for the South Central Region. He is the primary point of contact for CC&C coalitions in Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas. He also serves as the team supervisor for the Technology Integration/Energy Efficient Mobility Systems team, which houses all the CC&C regional managers located at NETL.

Neil has been a CC&C regional manager since August 2006. Prior to that, he worked at NETL performing a wide variety of duties as a DOE employee in support of the Department of Homeland Security's Office of the Assistant Secretary for Infrastructure Protection and DOE's Office of Electricity Delivery and Energy Reliability. Neil has extensive knowledge and experience in advanced vehicle technologies and energy sources, as well as a mechanical engineering degree from the University of Pittsburgh.



Jordan Foster, CC&C Regional Manager **Intermountain West**
Located in Pittsburgh, PA
412-386-9479/jordan.foster@netl.doe.gov

Jordan Foster serves as the CC&C regional manager for the Intermountain West Region. He is the primary point of contact for Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Utah, and Wyoming.

Jordan started at the National Energy Technology Laboratory (NETL) in 2023. He supports the Critical Minerals and Energy Innovation Division within NETL's Technology Development Center. Prior to joining NETL, Jordan worked as a project manager within the heavy civil construction industry. Jordan's experience includes managing federal, state, and municipal projects and providing expertise with global project management functions ranging from design and engineering to project operations and execution.

Who's Who in Technology Integration



Trev Hall, CC&C Regional Manager **Southeast**
Located in Morgantown, WV
304-285-5290/trevelyn.hall@netl.doe.gov

Trev Hall is the CC&C regional manager for the Southeast Region. He is the primary point of contact for CC&C coalitions in Alabama, Florida, Georgia, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, and Virgin Islands. Trev has been a CC&C regional manager since January 2013. Prior to that, he started with the U.S. Department of Energy as a project manager in the Weatherization Assistance Program in 2009. He has a Bachelor of Science in industrial engineering and a master's degree in business administration from West Virginia University. Trev brings experience working as a process-improvement engineer, co-founding start-ups, and leading small-growth companies. Trev has served as an adjunct professor at West Virginia University teaching entrepreneurship/business planning and has a passion for training, technology, marketing, and outreach.



Nicole Kirby, CC&C Regional Manager **Great Lakes to Mid-Atlantic**
Located in Morgantown, WV
304-276-0485/nicole.kirby@netl.doe.gov

Nicole Kirby is the CC&C regional manager for the Great Lakes to Mid-Atlantic Region. She is the primary point of contact for Delaware, District of Columbia, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin. Nicole also supports work related to the U.S. Department of Energy's Office of Critical Minerals and Energy Innovation's Transportation Technologies Office.

Prior to joining the National Energy Technology Laboratory in 2022, Nicole worked as a project manager, chemist, and educator. She holds a bachelor's degree in chemistry from Glenville State University and a master's degree in educational leadership from Western Governors University. Nicole is a certified special education dyslexia advocate and actively volunteers in her state, working with parents and schools to increase access to education.



Erin Russell-Story, CC&C Regional Manager **Northeast**
Located in Pittsburgh, PA
412-386-7334/erin.russell-story@netl.doe.gov

Erin Russell-Story is the CC&C regional manager for the Northeast Region. She is the primary point of contact for Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

Erin became a CC&C regional manager with NETL in 2009. She has over 25 years of experience in the transportation, energy efficiency, and renewable energy fields. She initiated the Northeast Ohio Clean Cities Coalition in 1997, where she was the coordinator until 2001, and then served as the director for Vermont Clean Cities until 2003. She was honored with the Clean Cities Coordinator of the Year Award in 2003 and inducted into the CC&C Hall of Fame in 2011.

She has supported programs for the former U.S. Department of Energy Northeast Regional Office, the Gas Technology Institute, Renewable Energy Vermont, the Vermont Biofuels Association, and the Northeast Combined Heat and Power Initiative. Additionally, Erin has an extensive portfolio of nonprofit organizational skills, including fundraising, grant writing, marketing, and media relations. Erin has a graduate certificate in sustainable transportation: planning and livable communities from the University of Washington, a Master of Science in environmental studies from Antioch University New England, and a Bachelor of Fine Arts from Ohio University. She is also a certified project management professional.

Who's Who in Technology Integration



Damara Strong, CC&C Regional Manager **West**
Located in Pittsburgh, PA
412-286-3560/damara.strong@netl.doe.gov

Damara Strong is the CC&C regional manager for the West Region. She is the primary point of contact for Alaska, California, Hawaii, Oregon, and Washington. Damara also supports the Technology Integration Program in the U.S. Department of Energy's Office of Critical Minerals and Energy Innovation's Transportation Technologies Office.

Prior to joining this position at the National Energy Technology Laboratory (NETL) in 2024, Damara worked as a project coordinator and data analyst as a research support contractor for NETL. Damara holds a bachelor's degree in environmental science from Northern Arizona University and a master's degree in geology and environmental science from the University of Pittsburgh. Damara is also a STEM and environmental science consultant and writer for children's activity books and has a professional background in STEM outreach.

Who's Who in Technology Integration

National Laboratory of the Rockies



Sandra Loi, Project Manager
Located in Golden, CO
303-275-4345/Sandra.Loi@nlr.gov
Contact regarding: NLR questions, 101 and other trainings, Peer 2 Peer (mentoring), conferences and events

Sandra Loi is a project manager in the Center for Integrated Mobility Sciences at the National Laboratory of the Rockies (NLR). She focuses on Technology Integration (TI) Program coordination, education, training, and outreach activities, including supporting coalitions, preparing new initiatives, and organizing training for coalition staff and stakeholders. Sandra supports the network of more than 75 CC&C coalitions throughout the United States as the main NLR point of contact. She develops and strengthens partnerships with community organizations, industry partners, media, and other stakeholders. She also manages the Peer 2 Peer program, which pairs coalitions with peers to tackle a specific idea, project, or challenge. In 2020, Sandra received the U.S. Department of Energy's (DOE) Transportation Technologies Office Distinguished Achievement award for outstanding service to DOE and TI partners.

Before joining NLR, Sandra worked for the Propane Education & Research Council in Washington, D.C., as a project manager, focusing on product commercialization and marketing for on- and off-road vehicles, forklifts, and agricultural engines. Sandra also conducted education and outreach for propane technology. Sandra holds a Bachelor of Business Administration in international business and marketing from The George Washington University in Washington, D.C., and a Master of Science in management and organizations with a specialization in global management from the University of Colorado.



John Gonzales, Senior Engineer
Located in Golden, CO
303-275-4393/John.Gonzales@nlr.gov
Contact regarding: Technical assistance

John Gonzales is a senior engineer for technical assistance and deployment of alternative fuel vehicles for CC&C. He provides technical assistance on a variety of natural gas, propane, and electric vehicle projects.

Before coming to the National Laboratory of the Rockies, John worked for the Natural Fuels Corporation promoting natural gas as an alternative fuel for automobiles, trucks, and buses. As the fleet manager for Adams 12 Five Star School District in suburban Denver, Colorado—a district of 42,000 students—he was responsible for 140 school buses and 120 support vehicles. John's hands-on experience helps him relate to the concerns of fleet managers who are adopting and using a variety of alternative fuels and advanced technologies.

John graduated from the Colorado State University with a B.S. in automotive engineering. He has served as a board member for the American Lung Association of Colorado, as chairman of the Denver Metro Clean Cities Coalition, and as chairman for the Colorado Chapter of the Rocky Mountain Fleet Management Association.

Who's Who in Technology Integration



Mandy Bongiovanni, Business Support Professional
Located in Golden, CO
303-630-5396/Mandy.Bongiovanni@nlr.gov
Contact regarding: CleanCities.energy.gov updates, coalition director email list updates

Mandy Bongiovanni is a business support professional in the Center for Integrated Mobility Sciences at the National Laboratory of the Rockies. She has 8 years of experience in the transportation sector as a previous business owner for a diesel and 4x4 shop in Golden, Colorado, with experience switching medium- and heavy-duty trucks to alternative options. She looks forward to working more with the CC&C teams to advance transportation energy choices nationwide.



Caley Johnson, Research Analyst
Located in Golden, CO
303-275-3607/Caley.Johnson@nlr.gov
Contact regarding: Annual report

Caley Johnson is a senior analyst at the National Laboratory of the Rockies (NLR). He assesses the economics of advanced fuel and transportation technologies in various applications, locations, and policy environments. This work has included business cases for convenience stores selling E85 fuel, municipal fleets using compressed natural gas, airports using electric vehicles (EVs), EV service companies implementing battery-swap, bus rapid transit systems using EVs, and other stakeholders. Caley also administers the CC&C coalition annual report and uses the data to write the annual Clean Cities and Communities Partnership Activity Report.

Before joining NLR, Caley was a project manager in the U.S. Environmental Protection Agency's Climate Protection Partnerships Division and a co-founder of the solar power company Soltage. He holds a bachelor's degree in biology from the University of Colorado and a Master of Environmental Management degree from Yale University.



Kaylyn Bopp, Project Leader
Located in Golden, CO
303-384-6312/Kaylyn.Bopp@nlr.gov
Contact regarding: Jumpstart funding, coalition building, capacity building

Kaylyn Bopp is a transportation project leader in the Center for Integrated Mobility Science at the National Laboratory of the Rockies (NLR). Kaylyn provides technical assistance and analysis in support of alternative fuel transportation and deployment. She supports the CC&C partnership by leading Jumpstart funding and supporting the coalition building and capacity building efforts.

Before joining NLR, Kaylyn worked for the Regional Air Quality Council in Denver, Colorado, as a project manager and focused on designing and managing financial incentive programs for alternative fuel vehicles and infrastructure in the state. Kaylyn holds a Bachelor of Arts in environmental science from the University of Colorado.

Who's Who in Technology Integration



Mollie Putzig, Project Manager
Located in Golden, CO
303-275-3292/Mollie.Putzig@nlr.gov
Contact regarding: Communications, CC&C eLearning

Mollie Putzig is a project manager in the Center for Integrated Mobility Sciences at the National Laboratory of the Rockies (NLR). She manages CC&C communications, outreach, and education activities, including publications and CC&C eLearning. Mollie works with the NLR and U.S. Department of Energy Technology Integration Program team and CC&C coalitions to develop and maintain resources on the CC&C website, Coalition Toolbox, and Alternative Fuels Data Center. Prior to joining NLR, she served as a public information officer and business development assistant for Smith Environmental & Engineering. Mollie holds a master's degree in journalism from the University of Colorado Boulder, where she earned a graduate certificate from the Renewable and Sustainable Energy Institute. She also has a bachelor's degree in environmental planning and management from the State University of New York at Plattsburgh.



Lauren Reichelt, Project Manager
Located in Golden, CO
Lauren.Reichelt@nlr.gov
Contact regarding: NLR support of the CC&C partnership

Lauren is a project manager in the Center for Integrated Mobility Sciences at the National Laboratory of the Rockies (NLR), supporting transportation technology deployment. As the NLR lead for the CC&C partnership, she works closely with the U.S. Department of Energy's (DOE) Transportation Technologies Office Technology Integration Program team to ensure the lab's CC&C projects support increased CC&C partnership impact and evolving coalition needs. Her current projects include managing DOE's Energy to Communities peer-learning cohorts and supporting the CC&C partnership through the development of trainings, resources, and peer-exchange opportunities that build capacity throughout the coalition network. Prior to joining NLR, Lauren was the director of the Sustainable Transportation Coalition of Hawaii, a DOE-designated CC&C coalition. She earned her master's degree in sustainable development from Hawaii Pacific University and a bachelor's degree in biology from the University of Wisconsin-Madison.



Sarah Cardinali, Manager
Located in Golden, CO
720-557-1007/Sarah.Cardinali@nlr.gov
Contact regarding: Technical assistance, general inquiries

Sarah Cardinali is manager of the Applied Research and Engineering for Transportation Systems group at the National Laboratory of the Rockies (NLR). She manages NLR's technical assistance activities for both the CC&C partnership and the Joint Office of Energy and Transportation and specializes technically in vehicle and battery safety, as well as connected and automated vehicles. She also provides program management support for NLR's CC&C work. Prior to joining NLR, Sarah spent over 18 years in engineering and management roles in the light-duty automotive industry, most recently as senior manager of product safety at Nissan North America, Inc. She has a master's degree in science, technology and public policy from George Washington University and a bachelor's degree in mechanical engineering from Purdue University.

Oak Ridge National Laboratory



Stacy Davis, Group Leader, ORNL National Transportation Center
Located in Knoxville, TN
865-341-1256/davissc@ornl.gov
Contact regarding: Fuel Economy Guide, fueleconomy.gov

Stacy Davis is group leader for the Transportation Analytics & Decision Sciences Group at Oak Ridge National Laboratory's (ORNL) National Transportation Research Center, where she manages the Fuel Economy Information (FEI) project. The FEI project supports the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency by preparing and distributing the annual Fuel Economy Guide, as well as maintaining and continuously updating the website https://fueleconomy.gov/.

Stacy has worked with transportation energy data at ORNL for 38 years and has been the lead author of the Transportation Energy Data Book since 1988. She has written and prepared DOE's Office of Critical Minerals and Energy Innovation's Transportation Technologies Office Transportation Fact of the Week since 2001. In addition, Stacy led data-related research for the U.S. Department of Transportation in policy and safety. She is active in the Transportation Research Board's Committee on Transportation Energy and the Committee on Alternative Transportation Fuels and Technologies. She holds a Bachelor of Science in transportation and logistics from the University of Tennessee.

Who's Who in Technology Integration

Argonne National Laboratory



Marcy Rood, Technology Integration Manager, Transportation Market Analysis and Economics, Transportation and Power Systems Division Located in Illinois
217-413-8446/mrood@anl.gov
Contact regarding: Argonne team, ports

Marcy Rood worked at the U.S. Department of Energy's (DOE) former Office of Technologies Office in Washington, D.C., from 1995 to 2008 as the Clean Cities Program Manager. She currently manages a team of experts at Argonne National Laboratory (ANL) supporting the Technology Integration Program in a number of areas, such as techno-economic and pollution analysis and tools supporting alternative fuel and electric-drive on-road and off-road vehicles and infrastructure markets; idle reduction technologies; renewable natural gas; and ports. For these areas, communication products and training efforts are part of the portfolio. She leads the monthly Ports Working Group. She also advises on CC&C Accelerate, a workforce development initiative.

During her time at DOE, she served as the deputy director of CC&C and the director of CC&C coalitions, directing the efforts of both headquarters and regional DOE staff; overseeing the activities of the network of coalitions; and collaborating with national and international stakeholders, fuel trade associations, infrastructure developers, and federal agencies. She provided direction for grant programs, training initiatives, and the Alternative Fuels Data Center, and assisted in the planning of national CC&C conferences. She is a native Ohioan, with a Master of Public Administration from The Ohio State University and is currently a trustee for Richland Community College in Illinois.



Andy Burnham, Principal Environmental Scientist, Transportation Market Analysis and Economics, Transportation and Power Systems Division
Located in Lemont, IL
630-252-6606/aburnham@anl.gov
Contact regarding: Alternative fuel vehicle and infrastructure cost/pollution analysis, AFLEET suite of tools (heavy-duty vehicle emission calculator, AFLEET-Charging and Fueling Infrastructure calculator, Off-Road Payback calculator, EV Utility Rate Charging calculator, EV Charger TCO calculator, Idle Reduction calculator)

Andy Burnham is a principal environmental scientist at Argonne National Laboratory. Andy's research focuses on the energy use, total cost of ownership, and pollution of advanced vehicle technologies, alternative fuels and vehicles, and infrastructure. Andy is most known for developing the Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool for CC&C stakeholders to estimate petroleum use, air pollutants, and cost of ownership of light-duty, heavy-duty, and off-road vehicles.

Who's Who in Technology Integration



Lisa Heineman, Technology Integration Project Coordinator, Sustainable Transportation Education and Partnerships
Located in Lemont, IL
630-252-1872/lheineman@anl.gov
Contact regarding:* CC&C *coalition internships (Accelerate)

Lisa Heineman is a technology integration project coordinator with Argonne National Laboratory's Sustainable Transportation and Educational Partnerships team where she manages a workforce development initiative, Accelerate, funded by DOE. She has a background working in nonprofit and educational settings. Lisa previously served as a CC&C intern at the Earth Day Coalition in Cleveland before moving to South America, where she discovered her joy for working with students. After returning to the United States, she accepted a client-facing role managing a portfolio of more than 12 educational programs with Project Exploration, an organization that seeks to improve access to high-quality STEM education for students. She then joined the Young Center for Immigrant Children's Rights, a human rights organization that seeks to reunite immigrant children with loved ones, where she supported the philanthropy team and coordinated many successful fundraising campaigns and events, grossing over $1.4 million annually. Lisa is thrilled to support Accelerate interns in the early stages of their professional journey, helping them become future leaders in the transportation energy industry.



Marianne Mintz, Principal Transportation Energy Analyst, Transportation Market Analysis and Economics, Transportation and Power Systems Division
Located in Lemont, IL
630-252-5627/mmintz@anl.gov
Contact regarding: Renewable natural gas and JOBS suite of tools

Marianne Mintz is a principal energy analyst within Argonne National Laboratory's Transportation and Power Systems Division. She has over 40 years of experience in transportation and energy analysis and has authored over 150 publications in the field. Her current work centers on infrastructure requirements of alternative fuel pathways (especially renewable natural gas, electricity, and hydrogen), economic impacts of fuel cells, electricity, and hydrogen and natural gas vehicles and fueling infrastructure. She manages the RNG database which tracks U.S. RNG facilities in development or operational producing transportation fuels. She is an emeritus member of the Transportation Research Board's Transportation Energy Committee. She holds a master's degree from UCLA and has completed post-graduate work at the University of Illinois at Chicago.



Yan Zhou, Group Leader, Technoeconomic and Market Analysis, Economic Energy Systems and Infrastructure Assessment Division
Located in Lemont, IL
630-252-1215/yzhou@anl.gov
Contact regarding: Infrastructure techno-economic analysis (Charging Hub and Economic Costing Tool (CHECT) and Heavy-Duty Electric Vehicle Infrastructure Scenario Analysis Model (HEVISAM) tools

Yan (Joann) Zhou is a principal analyst and group manager at Argonne National Laboratory. She leads several U.S. Department of Energy and industry-sponsored research projects on energy and pollution impacts analysis of alternative fuel and vehicle technologies, electric vehicle charging, and alternative fuel infrastructure modeling. Yan is a member of the Transportation Research Board's Transportation Energy Data and Technology committee. She received her master's degree and doctorate in transportation engineering from Clemson University.

Who's Who in Technology Integration

Idaho National Laboratory



John Smart, Senior Manager, Advanced Transportation
Located in Idaho Falls, ID
208-403-4525/**john.smart@inl.gov**
Contact regarding: Electric vehicle charging infrastructure installation, grid integration, and cybersecurity

John Smart leads the Advanced Transportation Department at Idaho National Laboratory (INL), focused on ensuring the nation's increasingly connected transportation and energy infrastructure is affordable, reliable, and secure. Since joining INL in 2007, he has led cross-functional teams of experts in electric transportation, energy storage, power systems, cybersecurity, and data science. He also helped found the Joint Office of Energy and Transportation and launch the National Electric Vehicle Infrastructure Formula Program. John has fostered successful partnerships with numerous private companies, universities, CC&C coalitions, and government agencies to conduct electric vehicle and charging infrastructure research and development, demonstration, and deployment projects across the country. Before joining INL, he spent six years at Ford Motor Company, leading powertrain product development and manufacturing teams. John earned a bachelor's degree in mechanical engineering from Brigham Young University and an MBA from Boise State University.



Kang-Ching "Jean" Chu, Group Lead, Mobility Analytics
Located in Ann Arbor, MI
734-272-8755/**jean.chu@inl.gov**
Contact regarding: Electric vehicle data analysis and user behavior

Dr. Kang-Ching "Jean" Chu is a senior research data scientist and group lead of Mobility Analytics at Idaho National Laboratory's (INL) Advanced Transportation department. Her research focuses on electric vehicle (EV) charging behavior, vehicle-grid integration, and how charging interacts with the grid to reduce costs and improve reliability. She also served on detail with the Joint Office of Energy and Transportation, supporting the deployment of a nationwide EV charging network. Before joining INL, Jean worked on the future mobility research team at Toyota Motor North America, investigating transportation patterns and the energy impacts of emerging mobility concepts such as Mobility as a Service, automated driving, and vehicle electrification. She holds a Ph.D. in mechanical engineering and an M.S.E. in industrial and operations engineering from the University of Michigan, Ann Arbor, and bachelor's and master's degrees in mechanical engineering from National Taiwan University.

U.S. Department of Transportation—Volpe National Transportation Systems Center

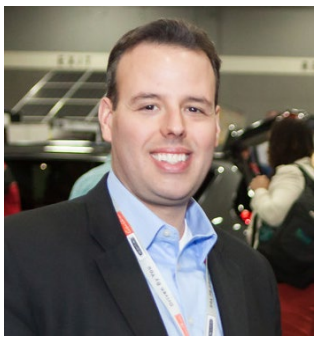


Mike Scarpino, Transportation Project Engineer Energy Analysis & Sustainability Division
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Contact regarding: Alternative Fuel Corridors, National Electric Vehicle Infrastructure Formula Program, Charging and Fueling Infrastructure Discretionary Grant Program, and other U.S. Department of Transportation programs

Mike Scarpino is the principal technical advisor for ground vehicle alternative fuels, electrification, and deployment at the U.S. Department of Transportation's (DOT) Volpe National Transportation Systems Center and provides technical and programmatic support for the Technology Integration Program through various special projects and interagency collaborations. Mike's current responsibilities involve providing support for DOT and the U.S. Department of Energy (DOE) for various transportation electrification and alternative fuel initiatives and activities, such as the Joint Office of Energy and Transportation's National Electric Vehicle Infrastructure Formula Program and Charging and Fueling Infrastructure Discretionary Grant Program, Federal Highway Administration's Alternative Fuel Corridor Designation Initiative, and DOE's CC&C partnership.

Mike has been involved with CC&C and Technology Integration since May 1997, previously working as the Northeast CC&C regional manager for DOE's Northeast Regional Office in Boston, Massachusetts, until June 2006, and at DOE's National Energy Technology Laboratory from June 2006 to September 2013. Mike is considered one of the "program old-timers" and in 2009 received a Lifetime Achievement Award for "leadership, creative thinking, and devotion" to CC&C. Mike also received a 2015 DOE Office of Critical Minerals and Energy Innovation Transportation Technologies Office Distinguished Achievement Award for contributions to CC&C and strengthening DOE and DOT collaboration.

Mike worked for two years as a nuclear engineer at DOE's Savannah River Site in Aiken, South Carolina, (1995–1997) and for 10 years as a nuclear engineer for the Department of the Navy at Portsmouth Naval Shipyard in Portsmouth, New Hampshire (1985–1995). Mike has a bachelor's degree in mechanical engineering from the University of Maine.



Stephen Costa, Technical Analyst
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Contact regarding: Alternative Fuel Corridors, National Electric Vehicle Infrastructure Formula Program, Charging and Fueling Infrastructure Discretionary Grant Program, and other U.S. Department of Transportation programs/initiatives

Stephen Costa is a technical analyst at the U.S. Department of Transportation's (DOT) Volpe National Transportation Systems Center. He supports a variety of projects and interagency collaborations to advance the production, transport, and distribution of alternative fuels, the expansion of alternative fuel infrastructure and adoption of alternative fuel and advanced energy technology vehicles, and strategic energy planning for modal administrations across DOT. He also supports DOT programs aimed at advancing transportation safety and infrastructure development. He assists programs and initiatives at the Joint Office of Energy and Transportation, Federal Highway Administration, U.S. Department of Energy (DOE) Transportation Technologies and Alternative Fuels and Feedstocks offices, DOT's Office of the Assistant

Secretary for Research and Technology, the Federal Aviation Administration, and other DOT modal administrations.

Prior to joining Volpe in 2006, Stephen worked at DOE's Office of Critical Minerals and Energy Innovation for over six years. There he led and supported a range of energy efficiency and alternative fuel programs targeted to public and private partners in fleet management, building administration, and domestic manufacturing, as well as individual consumers. He holds a Bachelor of Science in environmental science from UMass Amherst and a Master of Art in energy and environmental analysis from Boston University.



Heather Richardson, Transportation Planner, Energy Analysis & Sustainability Division
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Contact regarding: Alternative Fuel Corridors, National Electric Vehicle Infrastructure Formula Program, Charging and Fueling Infrastructure Discretionary Grant Program, and other U.S. Department of Transportation programs

Heather Richardson has been at the U.S. Department of Transportation (DOT) Volpe Center since 2013. She has supported strategic transportation planning and program development across multiple U.S. DOT Volpe Center partners, including the National Park Service, Joint Office of Energy and Transportation, Advanced Research Project Agency-Infrastructure (ARPA-I), Office of the Secretary—Research, Federal Highway Administration, and Federal Transit Administration. Her projects largely revolve around congestion management, public transportation, transportation electrification, and innovation for which she leverages skills in stakeholder engagement, facilitation, program development, and cross-team coordination.

Who's Who in Technology Integration

Energetics



Walt Zalis, Director of Climate and Resilience
Located in Baltimore, MD
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Contact regarding: CC&C Framework for Success, strategic planning

Walt Zalis provides strategic and programmatic support to the U.S. Department of Energy's (DOE) Transportation Technologies Office Technology Integration (TI) Program as an employee of Energetics. He facilitates regular discussions among the TI Program team and among CC&C coalition directors, reviews and updates program materials, and provides strategic planning support to improve program functions. Walt has worked at Energetics since 2006, where he is currently the director of the Climate and Resilience group. He has worked on a variety of projects focusing on strategic planning, facilitation and road mapping, stakeholder engagement, and market transformation and analysis support, typically for alternative fuel and energy efficient programs and technologies. He works regularly with DOE's Transportation Technologies Office, Alternative Fuels and Feedstocks Office, and the Building Technologies Office. Walt also works with the Department of Homeland Security, the National Institute of Standards and Technology, and other state and local stakeholders on projects related to community and energy security, as well as program planning. He has a Bachelor of Arts in communications from McDaniel College and a Master of Arts in public communications from American University.



Victoria McGarril, Senior Analyst Sustainable Transportation
Located in Northampton, MA
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Contact regarding: Coalition peer sharing activity, national CC&C training workshop

Victoria McGarril provides support to the U.S. Department of Energy's Transportation Technologies Office Technology Integration Program as an employee of Energetics. She coordinates peer sharing meetings for coalition directors, reviews and updates program materials, and leads the agenda planning efforts related to the national CC&C coalition director training workshop.

Victoria supports transportation energy initiatives at the national, state, and local level for a variety of projects for Energetics. Since joining in 2017, Victoria has assisted in the facilitation and implementation of electric vehicle (EV) charging technology, working with local municipalities, businesses, and industry partners. Much of her work includes research and the dissemination of information on transportation technology and associated benefits. She has presented at professional conferences, workshops, and meetings on EVs and EV charging technology. Victoria continues to support community education and engagement on EVs and EV charging technology at state and local events and workshops.

Who's Who in Technology Integration



Luis Carias, Senior/Principal Transportation Program Data Analyst
Located in Washington, D.C.
Luis.Carias@doe.gov
Contact regarding: Annual Fuel Price Report

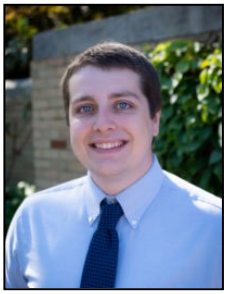
Luis Carias is the senior/principal transportation program data analyst contracting with Energetics supporting the U.S. Department of Energy's (DOE) Office of Critical Minerals and Energy Innovation's Transportation Technologies Office (TTO). Luis is the point of contact for reviewing, organizing, and analyzing data needed for producing the quarterly CC&C Alternative Fuels Price Report (AFPR) as the AFPR coordinator. The AFPR is used by multiple stakeholders within the TTO's Technology Integration Program and by external stakeholders. He also assists across multiple TTO programs, with completion of the DOE TTO/Annual Merit Review Publication Annual Report, transportation technology research and demonstration projects, and other projects. Before joining TTO in 2023, Luis was the program data analyst contracting with Allegheny Science and Technology supporting DOE's Office of the State and Community Energy Programs from 2020 to 2023.



Shannon Lawn, Energy Analyst
Located in Philadelphia, PA
267-241-7368/slawn@energetics.com
Contact regarding: Coalition peer sharing activity

Shannon Lawn provides support to CC&C through her role as energy consultant with Energetics. She coordinates and facilitates peer-sharing sessions and organization type discussions for coalition directors, coordinates regional meeting documentation processes, and supports national training workshop planning and execution.

Lawn earned her bachelor's degree at Washington College and her master's degree in environmental anthropology from The University of Texas at San Antonio. Since joining the Energetics team in 2022, she has served as a stakeholder engagement specialist, energy analyst, and project manager for a wide variety of projects for national, state, local, and private-sector contracts. Her work spans transportation, resilience, community benefits, workforce development, and organizational planning, with experience in facilitation, qualitative and quantitative research, strategic framework development, and producing technical reports and impacts analyses.



Benjamin White, Energy Analyst
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419-234-4134/bmwhite@energetics.com
Contact regarding: CC&C Forum, Re-designations

Benjamin White provides support to the U.S. Department of Energy's (DOE) Transportation Technologies Office Technology Integration Program as an Energetics employee. Ben is the primary contact for the re-designation process. His other primary focus within CC&C has been enhancing the capabilities of the CC&C Forum, a web-based platform for coalition communication and information sharing. Ben has experience in web development, facilitating discussions, disseminating information, and specialized curriculum development.

Since joining Energetics in 2022 as an energy analyst, Ben has also contributed to projects for DOE's Building Technologies Office and Industrial Technologies Office, as well as for the United Nations Industrial Development Organization, Clean Energy Ministerial, International Energy Agency, and Saudi Energy Efficiency Center. Prior to Energetics, Ben worked as an environmental specialist at Hamilton County Public Health in Cincinnati, Ohio, and led initiatives at Miami University in Ohio and Lakeside Chautauqua, Ohio. Ben earned his Bachelor of Science in biology and environmental sciences from Miami University, where he also

completed his Master of Environmental Science with a focus in applied ecology and conservation.

ICF

ICF supports the U.S. Department of Energy's (DOE) Technology Integration Program through a contract with the National Laboratory of the Rockies (NLR). ICF staff respond to DOE transportation technology portfolio inquiries sent to the Technical Response Service (TRS) (**TechnicalResponse@icf.com; 800-254-6735**) and the State & Alternative Fuel Provider Fleet Program (EPAct); support the Alternative Fuels Data Center (AFDC) databases, such as the Alternative Fueling Station Locator (https://afdc.energy.gov/stations/); and support Technology Integration Program publications and resources.

Contact ICF staff via the TRS regarding Technical Assistance or updates to the AFDC such as the Alternative Fueling Station Locator or Laws and Incentives Databases

ICF team members you may interact with most frequently are noted below:

Carrie Giles, Clean Transportation Senior Director
Located in Salt Lake City, UT
240-422-1115/carrie.giles@icf.com



Carrie Giles leads ICF's team of transportation energy experts providing support to NLR for Technology Integration-related tasks, including the Technical Response Service, additional technical assistance, AFDC database maintenance, and more. Carrie has been with ICF since 2013. Before joining ICF, she was the coalition director for Utah Clean Cities. Carrie has a master's degree in environmental science.

Valerie Farmer, Clean Transportation Researcher
Located in New York, NY
valerie.farmer@icf.com



Valerie Farmer supports the Technical Response Service and the AFDC Station Locator. Valerie joined ICF in June 2024. Prior to joining ICF, Valerie was a Clean Cities University Workforce Development Program assistant at East Tennessee Clean Fuels Coalition while obtaining her bachelor's degree in sustainability studies from the University of Tennessee, Knoxville.

Hallie Rosenfield, Clean Transportation Researcher
Located in New York, NY
hallie.rosenfield@icf.com



Hallie Rosenfield supports the Technical Response Service and the AFDC Station Locator. Hallie joined ICF in June 2024. Prior to joining ICF, Hallie received her bachelor's degree from the University of Miami in environmental science and policy and geography and sustainable development.

DOE Technology Integration Program Roles and Responsibilities

Technology Integration (TI) is a program within the U.S. Department of Energy's (DOE) Office of Critical Minerals and Energy Innovation's Transportation Technologies Office (TTO) and consists of five core activities:

- Clean Cities and Communities (CC&C) partnership
- Information and tools
- Technical assistance
- Training, outreach, and partnerships
- Financial assistance.

The TI Program staff serve as the CC&C Headquarters team (HQ) at DOE. HQ leads a team of CC&C regional managers, DOE national laboratories, U.S. Department of Transportation Volpe Center, and support contractors to create an ecosystem of engaging with and providing technical assistance to CC&C coalitions.

This document provides a brief overview of roles and responsibilities for:

1. CC&C coalitions
2. DOE TI headquarters
3. DOE regional managers
4. DOE national laboratories
5. Supporting federal agency
6. Consulting and contractor support.

1. CC&C Coalitions

CC&C is a DOE partnership to enhance the nation's energy security and support economic prosperity by fostering locally driven transportation energy choices. Coalitions work locally in urban, suburban, and rural areas across the country to deliver objective technical expertise based on a unique understanding of local markets. Coalitions accomplish this by:

- Providing real-world feedback to inform the research and development efforts at DOE's Transportation Technologies Office
- Delivering technical expertise on alternative fuel and energy efficiency transportation technologies
- Educating users, industry, and local decision makers
- Serving as a conduit between DOE and end users
- Communicating local stakeholder issues, concerns, and needs to DOE
- Participating in data collection activities, such as reporting annual coalition activities and other data
- Developing, planning, managing, and marketing the completion of transportation energy projects and activities by creating partnerships and obtaining commitments from stakeholders
- Identifying fleets and other users and facilitating projects to demonstrate alternative fuel and advanced transportation technologies
- Managing coalition activities, establishing and implementing coalition-specific goals, creating and managing the coalition's organizational structure, overseeing

stakeholder membership, and conducting stakeholder meetings
- Establishing coalition metrics and evaluation processes
- Working with local and national stakeholders to identify funding opportunities and (as appropriate) obtaining funding to complete coalition projects and sustain the coalition
- Working with coalition directors and peer coalitions throughout their regions, DOE regional managers, and TI staff (as appropriate) to strengthen CC&C impact
- Identifying representatives for and conducting the Coalition Council working group comprised of a coalition director from each of the CC&C regions. The council strives to facilitate communication between CC&C coalitions and DOE, other government agencies, associations, industry, and other partners; develop strategies; and set priorities to benefit the coalitions. Coalition directors who are council members achieve these goals by:

    - Participating in all council calls
    - Serving as representatives and advocates for their regions
    - Seeking input from coalition directors in their region on key issues for the council's consideration
    - Reporting council activities and information to all CC&C coalitions
    - Participating in task groups and subcommittees as needed.

2. DOE TI Headquarters

The role of TI headquarters in Washington, D.C., is to oversee TI activities by:

- Establishing TI priorities and program direction, which includes planning, budgeting, and creating synergies with other DOE programs
- Leading a team of DOE regional managers, national laboratories, and contractors supporting TI activities
- Providing strategic direction for a strong CC&C partnership achieving mission-driven impact
- Coordinating coalition activities with various DOE programs, including TTO, Alternative Fuels and Feedstocks Office, Federal Energy Management Program, Energy Policy Act fleet programs, as well as other federal agencies, states, and industry associations
- Engaging with the CC&C coalitions and Coalition Council
- Assisting in building relationships with national-level partners
- Leveraging funding, developing tools, providing technical assistance, holding training workshops, and working with industry and others to address technical issues (e.g., UL and fuel quality)
- Establishing metrics and evaluation processes that include data collection, management, and analysis
- Managing the designation process for new CC&C coalitions
- Managing the re-designation and partnership renewal processes for existing coalitions
- Assisting with planning and conducting special national-level events.

DOE Technology Integration Program Roles and Responsibilities

3. DOE Regional Managers

National Energy Technology Laboratory—Pittsburgh, Pennsylvania, and Morgantown, West Virginia

CC&C regional managers are DOE field office staff at the National Energy Technology Laboratory who serve as coalitions' main DOE points of contact, facilitate regional coalition collaboration, and manage DOE project funding. Regional managers also serve as project officers for competitively awarded financial assistance projects. Regional managers are federal employees whose duties include:

- Serving as the main DOE point of contact for the coalition, including listening to the coalition needs, concerns, ideas, challenges, etc. and providing advice, coaching, or connection to other TI Program staff to assist the coalition director
- Managing coalition cooperative agreements, including answering questions, reviewing quarterly progress reports, and conducting general project management
- Facilitating information sharing and collaboration among regional coalitions through monthly virtual regional meetings and occasional in-person regional meetings
- Participating in the national-level CC&C management in collaboration with TI Program staff, including DOE headquarters, contractors, and DOE national laboratories
- Reviewing and providing recommendations on program plans for potential new coalitions, re-designation materials, and partnership renewal letters.

4. DOE National Laboratories

DOE national laboratories provide technical assistance in support of the TI Program. The national labs are a technical resource for DOE, coalitions and coalition staff, and fleets nationwide.

National Energy Technology Laboratory—Pittsburgh, Pennsylvania, and Morgantown, West Virginia

The National Energy Technology Laboratory (NETL) is the only DOE lab whose employees are federal employees. NETL provides management of grant projects and regional coordination of key CC&C activities. Details are outlined above in the DOE Regional Managers section.

National Laboratory of the Rockies—Golden, Colorado

The National Laboratory of the Rockies (NLR) supports TI by:

- Evaluating coalition and stakeholder needs and strategically responding with approachable resources using multiple delivery platforms, crafted for targeted

audiences
- Maintaining the CC&C website with up-to-date information about activities, accomplishments, partnerships, projects, and events
- Equipping the Coalition Toolbox with CC&C-specific training and resources
- Managing a suite of more than 50 CC&C eLearning courses covering alternative fuels and advanced vehicle deployment, laws and regulations, and topics related to coalition administration to help strengthen coalitions and support stakeholders
- Managing the Technical Response Service (TRS), a rapid technical assistance service available to coalition directors, staff, stakeholders, and the public
- Connecting coalitions through Peer-to-Peer mentorship, which pairs up coalition directors to tackle specific ideas, projects, or challenges
- Maintaining the Alternative Fuels Data Center, a website designed to efficiently deliver key information stakeholders need to implement TI priorities
- Providing technical assistance to coalitions, stakeholders, and industry, and serving as a resource for particularly challenging technical questions and projects.

Oak Ridge National Laboratory—Oak Ridge, Tennessee

Oak Ridge National Laboratory (ORNL) provides data, analyses, and insight into the transportation industry with tools, resources, and outreach materials that benefit coalitions, such as:

- Conducting research on fuel economy, providing consumer information, and publishing and distributing the annual Fuel Economy Guide
- Maintaining the FuelEconomy.gov website
- Collaborating with *MotorWeek* on video segments highlighting CC&C successes
- Providing technical assistance to coalitions.

Argonne National Laboratory—Lemont, Illinois

Argonne National Laboratory (ANL) provides technical expertise, develops transportation modeling tools, and assists CC&C by:

- Maintaining the Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool for coalition directors and fleet managers to estimate fuel use, vehicle emissions, and cost of ownership of light- and heavy-duty vehicles and off-road equipment
- Developing the Heavy-Duty Vehicle Emissions Calculator to provide decision makers with information on the costs and benefits of alternative fuel vehicles
- Maintaining IdleBox, an outreach toolkit containing marketing products and technical information developed for coalition directors to assist fleet managers and consumers with adopting idle reduction best practices and technologies
- Managing the Renewable Natural Gas and Ports working groups, providing technical support, resources, and communication products for coalitions

- Managing CC&C Accelerate, which provides stipends for college students to assist competitively selected coalitions with event planning, communications, and analysis
- Managing the Advanced Vehicle Technology Competition series, providing university and community college students with real-world training following multiyear vehicle development through designing, integrating, and refining efficient mobility solutions
- Managing the renewable natural gas (RNG) database, which tracks U.S. RNG facilities in development or operational producing transportation fuels.

Idaho National Laboratory—Idaho Falls, Idaho

Idaho National Laboratory (INL) supports TI by providing technical support for electric vehicles, electric vehicle charging equipment, grid integration, and cybersecurity.

5. Supporting Federal Agency

Volpe National Transportation Systems Center—Cambridge, Massachusetts

The U.S. Department of Transportation (DOT) Volpe National Transportation Systems Center provides technical and programmatic support for TI and CC&C coalitions through various special projects and interagency collaborations, including the National Electric Vehicle Infrastructure Formula Program, the Charging and Fueling Infrastructure Discretionary Grant Program, the Congestion Mitigation and Air Quality Improvement Program, and the Alternative Fuel Corridor Designation Initiative.

6. Consulting and Contractor Support

Consulting and contractor support services staff assist TI at all levels by providing on-site support, assisting with developing program strategies, and coordinating TI activities. The primary companies supporting TI are Lindahl Reed and Energetics.

Energetics—Washington, D.C.

Energetics supports TI at all levels of the program, including:

- Assisting with strategic planning to support coalitions in reaching coalition goals
- Assisting with implementation by coordinating activities with various DOE programs, other federal agencies, states, industry and associations, regional managers, the Coalition Council, national laboratories, and CC&C coalition directors
- Developing resources and providing technical assistance
- Working with organizations that have applied for designation as official coalitions, including guiding them through the process, reviewing materials, and assisting with webinar preparation
- Leading the CC&C coalition re-designation process by serving as a liaison between regional managers and individual coalitions, issuing notifications, reviewing materials,

and scheduling and conducting webinars
- Preparing the quarterly Alternative Fuel Price Report and responding to coalition directors' requests for assistance
- Working with national labs, DOE, and coalition directors to enhance and optimize user experience on the CC&C Forum
- Assisting with planning and conducting special national-level events and coalition director training
- Conducting research and performing analyses to support TI activities
- Supporting coalition directors by helping with specific technical and programmatic questions and other projects
- Conducting research and performing analyses to support TI activities
- Updating and revising CC&C manuals and guides
- Maintaining historic records
- Representing TI at select conferences, workshops, and stakeholder meetings.

Clean Cities and Communities:
Coalition Director Job Description Resource

Clean Cities and Communities (CC&C) is a U.S. Department of Energy (DOE) partnership that fosters collaboration and innovation to advance transportation energy choices nationwide. More than 75 DOE-designated CC&C coalitions work in urban, suburban, and rural areas to deliver objective technical expertise based on a unique understanding of local markets. As partners with DOE's Transportation Technologies Office, coalitions build bridges between national priorities and local needs to support affordable, reliable, and secure transportation systems.

Coalition directors provide vision, leadership, and day-to-day management of a single coalition within the national network of local coalitions. Coalition directors also serve as the primary coalition point of contact with DOE regarding the CC&C partnership. The coalition director is an executive or senior manager with the skills needed to work with stakeholders in business, government, and non-governmental organizations, often at similar levels. The coalition director is also a quick learner, able to provide subject matter expertise and guidance to coalition stakeholders and partners.

Coalitions vary widely by type, size, and specific transportation energy priorities. Some are nonprofit organizations, others are hosted by a larger organization, and many are both nonprofit and hosted. Coalition staff sizes, capacities, and priorities vary significantly. Thus, job duties of coalition directors vary widely.

Coalition management and governance can use this document as a general resource to develop a specific job description and job opportunity posting. The coalition director may also use this resource to develop descriptions and opportunity postings for additional staff, so these positions fit within a coherent structure headed by the coalition director.

Responsibilities

- Ensure the coalition has the organizational capacity to perform key coalition activities such as those necessary to maintain good standing as a legal entity and/or with a host organization, meet the Active and Effective Requirements, and execute the scope of work for all funding agreements.
- Serve as primary or lead coalition point of contact with DOE and facilitate communication (as relevant) between board leadership, host organization management, and stakeholders.
- Serve as principal external spokesperson for the coalition at events (e.g., conferences, forums, ribbon cuttings).
- Collaborate closely with and support stakeholders, especially the coalition stakeholder group (e.g., advisory committee or governing board), including meetings and functions of this group and any subcommittees.
- In collaboration with the advisory or governing stakeholder group, lead or facilitate development of a multiyear coalition strategic plan.
- Develop annual and quarterly work plans that include ongoing improvement and execution of existing and new mission-aligned and strategic projects, programs, and activities.
- Provide day-to-day management of internal administration and external programs/activities.
- Access and help other staff leverage substantial information and technical support from DOE, its national laboratory partners, and the peer network of coalition directors and staff.

- Provide or ensure provision of trusted technical assistance[1] (TA) to stakeholders, especially those responsible for deployment and execution of transportation energy options.
- Conduct or oversee research on mission-aligned funding opportunities to help stakeholders evaluate transportation fuel and technology choices.
- Directly engage or oversee engagement with government officials around best practices (including applicability of existing law/policy) to remove barriers to and otherwise foster transportation energy choices.
- Offer support from the coalition to regulated fleets in meeting Energy Policy Act alternative fuel vehicle acquisition requirements.
- Manage federal project funding, including meeting all contractual requirements.
- Ensure performance and timely reporting of deliverables to DOE and other funders.
- Lead efforts to build the capacity of the coalition to deliver greater mission impact, including developing additional government and nongovernment sources of funding for expanded coalition activities.
- Ensure development and regular updates of coalition communications, including but not limited to website or webpage, social media, earned media, email, and newsletter. (Ensure communications about CC&C and the coalition's relationship to DOE adhere to DOE's messaging and logo use guidelines[2].)
- Participate in CC&C partnership activities, including national and regional peer exchanges and meetings. (Facilitate participation of additional coalition staff and stakeholder leadership, as allowed and relevant.)
- Engage, collaborate with, and support peer coalition directors.
- Ensure responses are given to requests for information from DOE in a timely manner.
- Supervise staff (administrative, program execution, interns, others) and consultants as appropriate.
- Train new coalition directors and staff to understand the CC&C partnership and perform key coalition activities

Qualifications and Experience

Specific qualifications for coalition director positions will depend on needs and circumstances of the individual coalition. Generally, qualified candidates will be excellent communicators, self-starters, motivators, leaders, organizers, and project developers or managers. Coalition directors should possess creativity; strong professional organization skills; outreach, education, political, and consensus-building skills; and a functional understanding of technical issues, including policies related to alternative fuels and alternative fuel technologies (e.g., alternative fuel vehicles, electric vehicles, idle reduction, energy efficiency). Depending on the coalition's specific situation, the coalition director may not need to possess all these qualities initially. However, they should demonstrate the aptitude and drive to learn and develop them with support. DOE also provides resources[3] to help mentor, train, and develop the coalition director.

[1] TA should be centered on iterative dialogue with stakeholders (especially those responsible for on-the-ground execution of technology deployments, programs, or policies) and based on priorities that are driven and defined by stakeholders. The goal is successful implementation that fosters transportation energy choices. The coalition should engage industry partners and experts to serve this process without driving it based on their business interests.
[2]Clean Cities and Communities messaging and logo use guidelines are available on the Coalition Toolbox.
[3] These resources include Peer-to-Peer, CC&C eLearning, and additional training on-demand, virtual, and in-person.

Clean Cities and Communities:
Coalition Director Job Description Resource

Relevant experience for the coalition director position may vary widely depending on the specific coalition. Questions to consider include:

- Is the coalition a nonprofit organization with a governing board?
- Is the coalition hosted within a larger agency or organization?
- How large and varied is the coalition staff and what are the experiences and specific duties of other staff?
- Does the coalition require a director to assume executive or senior management and other required duties on day one, or can the director acquire needed skills through a professional development plan—including support offered by DOE, host, or coalition?
- What programs, activities, administrative duties, and capacity building are significant areas of focus for the coalition?

Compensation and Status

It is a best practice for coalitions to hire a full-time coalition director and to align salary with the local labor market for positions with comparable executive or senior management duties and include a competitive benefits package.

Coalition	 Centralina Clean Fuels Coalition (CCFC)
Designated	Oct. 15, 2004
Director	Megan Upchurch
Employer	CCFC is hosted by Centralina Regional Council located in Charlotte, North Carolina
Funding	• U.S. DOE Clean Cities and Communities Cooperative Agreement • Project management • Competitive grant funds • Event/program sponsorship
Funding/SEO Relationship	CCFC receives no general support from the North Carolina State Energy Office. CCFC has historically worked with the NCSEO for specific projects.
Coalition Organization	Council of governments
Stakeholders	100+
Stakeholder Meetings	Quarterly stakeholder committee meetings
Outreach Events/ Workshops	CCFC hosts multiple educational webinars, workshops, and events highlighting alternative fuels, advanced technology vehicles, and fuel efficiency strategies. Examples include: • Alternative fuels ride and drive events • E-micromobility events and webinars • Earth Day events • National Drive Electric Month events • Charlotte Auto Show (New Tech and Sustainability Zone) • EV first responder trainings and EV technician training • Alternative fuels and technologies presentations at local, regional, state, and national events • Regular one-on-one engagement with community groups, public and private fleets, local governments, higher-education institutions, and other stakeholders
Newsletters	• Monthly newsletter • Active website • Social media engagement
Other Coalitions Working With	• Land of Sky Clean Vehicles Coalition • Triangle Clean Cities Coalition • Piedmont and Coastal North Carolina Clean Communities • Palmetto Clean Fuels Coalition • Southeast Region Clean Cities and Communities Coalitions
Primary Alt Fuels	Electric, natural gas (CNG/RNG), propane currently but promote use of all alternative fuels
Projects	• TEST Real World Project • Affordable Mobility Platform • Clean Fuel Advanced Technology Project • EPA's Climate Pollution Reduction Grant • Drive Electric USA–Plug-in NC

Coalition	Empire Clean Cities	**Empire Clean Cities (ECC)**
Designated	April 22, 2003	
Executive Director	Joy Gardner	
Employer	Empire Clean Cities	
Funding	• U.S. DOE Clean Cities and Communities Cooperative Agreement • Competitive grant funds (DOE, NLR, EPA, NYSERDA, Con Edison, etc.) • Corporate partner contracts • Event/program sponsorship • Membership dues • Individual donations	
Funding/SEO Relationship	ECC works closely with our state energy office (NYSERDA) and currently has direct awards and subawards with NYSERDA	
Coalition Organization	Standalone 501(c)3 nonprofit	
Stakeholders	500+	
Stakeholder Meetings	• Quarterly meetings with executive board • Bi-weekly newsletters • Annual stakeholder meeting • Quarterly Multi-Agency Fleet Council meetings (public agency fleets)	
Outreach Events/ Workshops	ECC hosts multiple educational webinars, workshops, and events highlighting alternative fuels, advanced technology vehicles, and fuel efficiency strategies. Examples include: • Annual Empire Clean Vehicle Festival • NYC Climate Week events • EV technical trainings • Community engagement tabling events • Vehicle ride and drives • Earth Day events • Participation in New York International Auto Show • Webinars	
Newsletters	• Biweekly newsletter • Active website (www.empirecleancities.org) • Social media engagement (LinkedIn, Instagram, Facebook)	
Other Coalitions Working With	• New York State coalitions (Clean Transportation Alliance of NY) • New Jersey Clean Cities (Multi-Agency Fleet Council, and other projects) • Louisiana Clean Fuels (GUMBO) • Many others!	
Primary Alt Fuel	Electric, renewable diesel, biodiesel blends, micromobility/mode shifts, natural gas, hydrogen	
Projects	• Mission Electric • Bronx is Breathing • Sustainable Last Mile Delivery in Dense Metros • Bronx Hydrogen Fuel Cell Bus Project • DOE Empowering Hydrogen Futures—Advancing Permitting, Safety, and Deployment Strategies for Sustainable Hydrogen Infrastructure in New York State • Consumer Electric Vehicle Education Campaign • GUMBO • Drive Electric USA—2 • Rockaway and Southeast Queens Transportation Alliance • The E-Mobility Project • Multi-Agency Fleet Council	

Coalition	Pittsburgh Region Clean Cities (PRCC)
Designated	Sept. 13, 1993
Executive Director	Lisa Iadicicco; Co-director Kristen Sabol
Employer	PRCC operates as an independent 501(c)3 nonprofit organization with a board of directors
Funding	• U.S. DOE Clean Cities and Communities Cooperative Agreement • Project management • Competitive grant funds • Corporate partners • Community partners • Event/program sponsorship • Membership
Funding/SEO Relationship	PRCC has an open seat for a Pennsylvania Department of Environmental Protection Energy Office person on our board of directors
Coalition Organization	Standalone 501(c)3 nonprofit
Stakeholders	292
Stakeholder Meetings	• Bi-monthly meetings with executive board • Bi-monthly meetings with full board • Annual stakeholder meeting • Quarterly committee meetings
Outreach Events/ Workshops	PRCC hosts multiple educational webinars, workshops, and events highlighting alternative fuels, advanced technology vehicles, and fuel efficiency strategies. Examples include: • Drive Electric Pennsylvania quarterly meetings • Annual Odyssey Day Event • PRCC EV Committee quarterly meetings • Infrastructure workshops • Fuel and technology listening sessions • Three Rivers Electric Vehicle Association monthly meetings/events • Vehicle ride and drives • Earth Day events • National Drive Electric Week events
Newsletters	• Monthly newsletter • Active website • Social media engagement
Other Coalitions Working With	• EP-ACT • West Virgina Clean Cities • Clean Fuels Ohio • DRIVE Electric USA partners • Virgina Clean Cities • East Tennessee Clean Cities
Primary Alt Fuel	Electric, RNG/CNG, propane, E85
Projects	• Drive Electric USA/Drive Electric Pennsylvania • IREC Charging Smart EV Readiness Designation Program • Mid-Atlantic Clean Cities Expansion Project • PennDOT Electric Construction Equipment Demonstration and Deployment • Plug-In America Consumer EV Educational Campaign • National Lab of the Rockies Coalition Technical Cohort–Building Workforce Capacity • CCAC (workforce development)

Clean Cities and Communities 101 Resource Guide

Quick Reference List

Outreach and Messaging

Online Document Order Form: Use this form to request print copies of Clean Cities and Communities (CC&C) publications, education, and outreach materials. For questions about orders, contact Mollie Putzig. **Please allow 10 business days for delivery.**

CC&C Messaging Guidance and Style Guide: This document is an internal resource for staff at the U.S. Department of Energy (DOE), national labs, contractors, and coalitions involved with the CC&C partnership. It provides guidance for consistency in messaging, definitions, and style across the partnership and includes key talking points, helpful definitions, and information on how to describe CC&C.

CC&C Messaging One-Pager: This document complements the messaging guidance and provides a quick snapshot of what to do and not do when talking about CC&C.

CC&C Logo Use Guidelines: This document provides guidance on how to appropriately use the CC&C logo.

CC&C Logo Placement Recommendations: This document provides best practices on where to place your coalition logo and the national logo on materials.

CC&C Coalition Logo Design Recommendations: This document provides tips for creating a coalition logo, if your coalition is updating or creating a new logo.

Partnership Guidelines, Requirements, and Frameworks

Expectations and Resources for Meeting A&E Requirements: This resource explains a draft plan for how the A&E Requirements will be verified through an abbreviated re-designation process in 2027. It also provides training and best practices to help coalitions meet A&E Requirements, as well as an explanation of the changes made to the A&E Requirements between 2024 and 2026.

Framework for Success: This document serves as a foundation for implementing locally driven strategies for growing CC&C mission impact through four core elements of plan, connect, inform, and deploy.

CC&C Partnership Structure: The CC&C Partnership Structure describes processes, guidelines, benefits, and requirements for DOE-designated coalitions in the CC&C partnership. It describes the re-designation process, annual partnership renewal process, coalition name change, coalition territory change, and more. It also provides information on how to achieve designation status for groups of stakeholders interested in forming a coalition.

Acronyms

ACT	Advanced Clean Transportation conference and expo
AEO	Annual Energy Outlook (DOE/EIA publication)
AFDC	Alternative Fuels Data Center
AFLEET	Alternative Fuel Life-Cycle Environmental and Economic Transportation
AFFO	Alternative Fuels and Feedstocks Office (DOE)
AFV	Alternative fuel vehicle
AHJ	Authority having jurisdiction
AMD	Automated mobility district
ANL	Argonne National Laboratory
AOP	Annual operating plan
APA	American Planning Association
API	American Petroleum Institute
API	Application programming interface
APTA	American Public Transportation Association
APU	Auxiliary power unit
AQMD	Air quality management district
ARB	Air resources board
ARRA	American Recovery and Reinvestment Act of 2009 (a.k.a. Recovery Act)
ASTM	ASTM International (formerly American Society for Testing and Materials)
B100	100% (neat) biodiesel
B20	Blend of 20% biodiesel and 80% petroleum-based diesel
BEV	Battery electric vehicle
BRT	Bus rapid transit
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CARB	California Air Resources Board
CAV	Connected and automated vehicle
CFI	Charging and Fueling Infrastructure Discretionary Grant Program
CEC	California Energy Commission
CC&C	Clean Cities and Communities
CMAQ	Congestion Mitigation and Air Quality Improvement Program (FHWA and FTA)
CMEI	Office of Critical Minerals and Energy Innovation (DOE)
CNG	Compressed natural gas
COG	Council of governments
CFAA	Clean Fuels Alliance America (formerly National Biodiesel Board [NBB])
DEQ	Department of environmental quality

Acronyms

DERA	Diesel Emissions Reduction Act
DGE	Diesel gallon equivalent
DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
E10	Blend of 10% ethanol and 90% unleaded gasoline
E85	Gasoline-ethanol blend containing 51% to 83% ethanol
EEMS	Energy Efficient Mobility Systems Program (DOE)
EIA	Energy Information Administration (DOE)
EPA	U.S. Environmental Protection Agency
EPACT, EPAct	Energy Policy Act
EPRI	Electric Power Research Institute
EV	Electric vehicle
EVSE	Electric vehicle supply equipment
FCEV	Fuel cell electric vehicle
FEG	Fuel Economy Guide
FEMP	Federal Energy Management Program (DOE)
FFV	Flexible fuel vehicle
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GGE, gge	Gasoline gallon equivalent
GREET Model	Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model
GVWR	Gross vehicle weight rating
HDV	Heavy-duty vehicle
HEV	Hybrid electric vehicle
HOV	High occupancy vehicle
ICE	Internal combustion engine
IRA	Inflation Reduction Act
JO	Joint Office of Energy and Transportation
LDV	Light-duty vehicle
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas (propane)
MaaS	Mobility as a Service
MEP	Mobility Energy Productivity metric
MDV	Medium-duty vehicle
MOU	Memorandum of understanding
MPG, mpg	Miles per gallon

Acronyms

MPO	Metropolitan planning organization
MUD	Multi-unit dwelling (multifamily housing is preferred)
NAAQS	National Ambient Air Quality Standards
NAFA	NAFA Fleet Management Association (formerly National Association of Fleet Administrators)
NAFTC	National Alternative Fuels Training Consortium
NAPT	National Association for Pupil Transportation
NARC	National Association of Regional Councils
NASEO	National Association of State Energy Officials
NETL	National Energy Technology Laboratory
NEV	Neighborhood electric vehicle
NFPA	National Fire Protection Association
NGV	Natural gas vehicle
NGVTF	Natural Gas Vehicle Technology Forum
NHTSA	National Highway Traffic Safety Administration
NLC	National League of Cities
NLR	National Laboratory of the Rockies
NO_x	Nitrogen oxides
NPS	National Park Service
NSTA	National School Transportation Association
NTEA	National Truck Equipment Association
NYSERDA	New York State Energy Research and Development Authority
OEM	Original equipment manufacturer
ORNL	Oak Ridge National Laboratory
PERC	Propane Education & Research Council
PHEV	Plug-in hybrid electric vehicle
PM	Particulate matter
ppm	parts per million
RD	Renewable diesel
RDD&D	Research, development, demonstration, and deployment
RD&D	Research, development, and deployment
R&D	Research and development
RFA	Renewable Fuels Association
RFS	Renewable Fuel Standard
RIN	Renewable Identification Number
RNG	Renewable natural gas

Acronyms

ROI	Return on investment
RTA	Regional transportation authority
SAE	Society of Automotive Engineers
SEO	State energy office
SEP	State energy program
SMART	Systems and Modeling for Accelerated Research in Transportation
SIP	State Implementation Plan
TEDB	Transportation Energy Data Book
TEP	Transportation Energy Partners
TIP	Transportation improvement plan
TNC	Transportation network company
TRB	Transportation Research Board
TRS	Technical Response Service
TSE	Truck stop electrification
TTO	Transportation Technologies Office (DOE)
TTP	The Transport Project (formerly known as Natural Gas Vehicles for America)
ULSD	Ultra-low-sulfur diesel
USCAR	U.S. Council for Automotive Research
V2B	Vehicle-to-building
V2G	Vehicle-to-grid
V2I	Vehicle-to-infrastructure
V2V	Vehicle-to-vehicle
V2X	Vehicle-to-external environment connectivity, including vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I), vehicle-to-grid (V2G), and vehicle-to-building (V2B)
VMT	Vehicle miles traveled
VOC	Volatile organic compounds

Active and Effective (A&E) Requirements

Coalitions go through a rigorous voluntary process seeking U.S. Department of Energy (DOE) designation in the Clean Cities and Communities (CC&C) partnership. Coalitions must meet Active and Effective (A&E) Requirements to maintain DOE-designation status. More information is available in the Coalition Designation section of the Coalition Toolbox.

1. **CC&C Mission Impact**: The coalition must be actively working to achieve meaningful impact toward the CC&C mission to enhance the nation's energy security, support economic prosperity, and improve air quality by fostering locally driven transportation energy choices that leverage domestic energy resources and innovative mobility technologies through collaborative partnerships with public and private stakeholders.

2. **Planning Documentation**: The coalition (staff and stakeholder group) must develop and maintain planning documentation including the transportation energy landscape; strategies for how the coalition will achieve mission impact; and annual coalition goals, activities, and milestones.

3. **Stakeholder Engagement**: Coalition leadership must regularly engage with and facilitate interaction among its stakeholders that work collaboratively to advance a shared mission. Coalition staff must maintain an up-to-date stakeholder list, including name, organization, phone, and email. The coalition must organize a minimum of two stakeholder gatherings (in-person or virtual) per year.

4. **Stakeholder Group**: The coalition must maintain a group of stakeholders (e.g., governing board, advisory committee, or similar) within the broader coalition that convenes regularly to review coalition activities and provide strategic guidance on future activities.

5. **Host-Coalition Relationship**: This is applicable when a coalition operates with oversight and management of a host organization. A host organization representative, at least one management level above the coalition director, must meet at least once each year with the coalition's stakeholder group to discuss priorities and perspectives of stakeholders and host regarding coalition plans and activities.

6. **Communication**: The coalition must communicate through verbal and/or written methods with stakeholders, and other audiences, at least quarterly on the vision, plans, activities, and accomplishments of the coalition.

7. **Website**: The coalition must maintain and update, at least quarterly, a website or webpage that provides information on coalition contacts, programs, activities, accomplishments, and stakeholder group leadership.

8. **Administration Files**: The coalition must maintain critical coalition administration files including information needed to ensure operational continuity in the event of staff transitions or organizational change. These files must be made available to the stakeholder group and host organization management (if the coalition is hosted) and they must be updated at least once per year. Administration files must contain at a minimum: stakeholder list, current and past funders, current funding agreements, programs and activities, and procedures for how to perform key coalition activities.

9. **Partnership Convenings**: The coalition director or a coalition representative must attend in-person CC&C convenings each year such as the national training workshop or regional meetings, unless there are extenuating circumstances.

Alternative Fuels Data Center
Fuel Properties Comparison

Clean Cities and Communities

	C_4 to C_{12} and Ethanol ≤ to 10%	C_8 to C_{25}	Methyl esters of C_{12} to C_{22} fatty acids	C_8 to C_{25}	C_3H_8 (majority) and C_4H_{10} (minority)	CH_4 (majority), C_2H_6 and inert gases	CH_4 same as CNG with inert gasses <0.5% (a)	CH_3CH_2OH	CH_3OH	H_2	N/A
	Crude Oil	Crude Oil	Fats and oils from sources such as soybeans, waste cooking oil, animal fats, and rapeseed	Fats, oils, and greases (including used cooking oil)	A by-product of petroleum refining or natural gas processing	Underground reserves and renewable biogas	Underground reserves and renewable biogas	Corn, grains, or agricultural waste (cellulose)	Natural gas, coal, or woody biomass	Natural gas, methanol, and electrolysis of water	Natural gas, coal, nuclear, wind, hydro, solar, and small percentages of geothermal and biomass
	1 gal = 1.00 GGE 1 gal = 0.88 DGE	1 gal = 1.12 GGE 1 gal = 1.00 DGE	*B100* 1 gal = 1.05 GGE 1 gal = 0.93 DGE *B20* 1 gal = 1.11 GGE 1 gal = 0.99 DGE	RD 100 1 gal = 1.08 GGE 1 gal = 0.96 DGE	1 gal = 0.74 GGE 1 gal = 0.66 DGE	1 lb. = 0.18 GGE 1 lb. = 0.16 DGE	1 lb. = 0.19 GGE 1 lb. = 0.17 DGE	1 gal = 0.67 GGE 1 gal = 0.59 DGE	1 gal = 0.50 GGE 1 gal = 0.45 DGE	1 lb. = 0.45 GGE 1 lb. = 0.40 DGE 1 kg = 1 GGE 1 kg = 0.9 DGE	1 kWh = 0.030 GGE 1 kWh = 0.027 DGE
	1 gallon of gasoline has 97%–100% of the energy in 1 GGE. Standard fuel is 90% gasoline, 10% ethanol.	1 gallon of diesel has 113% of the energy in 1 GGE due to the higher energy density of diesel fuel.	1 gallon of B100 has 93% of the energy in 1 DGE, and 1 gallon of B20 has 99% of the energy in 1 DGE due to a lower energy density in biodiesel.	1 gallon of RD100 has 96% of the energy of 1 DGE due to slightly lower energy density in renewable diesel.	1 gallon of propane has 73% of the energy in 1 GGE due to the lower energy density of propane.	5.66 lb., or 123.57 ft^3, of CNG has the same energy as 1 GGE, and 6.37 lb., or 139.30 ft^3, of CNG has the same energy as 1 DGE. [3][4](b)	5.37 lb. of LNG has the same energy as 1 GGE, and 6.06 lb. of LNG has the same energy as 1 DGE. (a)	1 gallon of E85 contains 73%–83% of the energy in 1 GGE. 1 gallon of E100 has 67% of the energy in 1 GGE. Ethanol is blended with blendstock for oxygenate blending (gasoline component). [5]	1 gallon of methanol contains 50% of the energy as 1 GGE.	2.2 lbs. (1 kg) of H_2 has the same energy as 1 GGE.	A typical battery that is the same size as a gallon of gas (0.134 ft^3), when used for transportation, can store 15.3% of the energy in 1 GGE. [6][7]
	112,114–116,090 Btu/gal (c)	128,488 Btu/gal (c)	*B100* 119,550 Btu/gal *B20* 126,700 Btu/gal (c)	123,710 Btu/gal	84,250 Btu/gal (c)	20,160 Btu/lb [3](b)	21,240 Btu/lb (a)	76,330 Btu/gal for E100 (c)	57,250 Btu/gal (c)	51,585 Btu/lb (c) 33.3 kWh/kg	3,414 Btu/kWh

Alternative Fuels Data Center
Fuel Properties Comparison

	120,388–124,340 Btu/gal (c)	138,490 Btu/gal (c)	127,960 Btu/gal for B100 (c)	N/A	91,420 Btu/gal (c)	22,453 Btu/lb [1](c)	23,726 Btu/lb (c)	84,530 Btu/gal for E100 (c)	65,200 Btu/gal (c)	61,013 Btu/lb (c)	3,414 Btu/kWh
	Liquid	Liquid	Liquid	Liquid	Pressurized liquid (heavier than air as a gas)	Compressed gas (lighter than air)	Cryogenic liquid (lighter than air as a gas)	Liquid	Liquid	Compressed gas (lighter than air) or liquid	Electricity
	N/A	40–55 (d)	45–65 (d)	70–85	N/A	N/A	N/A	0–54 (e)	N/A	N/A	N/A
	84–93 (f)	N/A	N/A	N/A	105 (g)	120+ (h)	120+ (h)	110 (i)	112 (i)	130+ (g)	N/A
	-45°F (j)	165°F (j)	266° to 338°F (d)	>125.6°F	-100° to -150°F (j)	-300°F (j)	-306°F (k)	55°F (j)	52°F (j)	N/A	N/A
	495°F (j)	~600°F (j)	N/A	N/A	850° to 950°F (j)	1,004°F (j)	1,004°F (k)	793°F (j)	897°F (j)	1,050° to 1,080°F (j)	N/A
			Lubricity is improved over that of conventional low sulfur diesel fuel. For more maintenance information, see the Biodiesel Handling and Use Guidelines—Sixth Edition. (d)	Requires lubricity additive, like ultra-low-sulfur diesel		High-pressure tanks require periodic inspection and certification.	LNG is stored in cryogenic tanks with a specific hold time before the pressure build is relieved. The vehicle should be operated on a schedule to maintain a lower pressure in the tank.	Special lubricants may be required. Practices are very similar, if not identical, to those for conventionally fueled operations.	Special lubricants must be used as directed by the supplier as well as M85-compatible replacement parts. Can cause serious damage to organs in the body if swallowed, breathed in, or gotten on skin.	When hydrogen is used in fuel cell applications, maintenance should be very minimal. High-pressure tanks require periodic inspection and certification.	
Energy Security Impacts	Manufactured using oil. Transportation accounts for approximately 30% of total	Manufactured using oil. Transportation accounts for approximately 30% of total	Biodiesel is domestically produced, renewable, and reduces petroleum use	Renewable diesel is domestically produced, renewable, and reduces	Approximately half of U.S. LPG is derived from oil, but no oil is imported specifically for	CNG is domestically produced from natural gas and renewable	LNG is domestically produced from natural gas and renewable biogas. The United States	Ethanol is domestically produced. E85 reduces lifecycle petroleum use by 70%, and E10	Methanol is domestically produced, sometimes from renewable resources.	Hydrogen is domestically produced and can be produced from	Electricity is domestically produced from a wide range of sources, including

Alternative Fuels Data Center
Fuel Properties Comparison

	U.S. energy needs and 70% of petroleum consumption. (l)	U.S. energy needs and 70% of petroleum consumption. (l)	95% throughout its lifecycle. (m)	petroleum use 95% throughout its lifecycle.	LPG production.	biogas. The United States has vast natural gas reserves.	has vast natural gas reserves.	reduces petroleum use by 6.3%. (n)		renewable sources.	through coal-fired power plants and renewable sources, making it a versatile fuel.

Notes

[1] Standard chemical formulas represent idealized fuels. Some table values are expressed in ranges to represent typical fuel variations that are encountered in the field.
[2] GGE table values reflect Btu range for common gasoline baseline references (E0, E10, and indolene certification fuel).
[3] The type of meter or dispensing equipment being used to fuel vehicles must be taken into consideration. For fast-fill stations that dispense CNG with Coriolis flow meters, which measure fuel mass and report fuel dispensed on a GGE basis, the lbs./GGE factor should be used. For time-fill stations or other applications that use traditional residential and commercial gas meters that measure/register in units of cubic feet, the CF/GGE factor should be used.
[4] See Compressed Natural Gas Gasoline & Diesel Gallon Equivalency Methodology at http://afdc.energy.gov/fuels/equivalency_methodology.html.
[5] E85 is a high-level gasoline-ethanol blend containing 51% to 83% ethanol, depending on geography and season. Ethanol content is lower in the winter months in cold climates to ensure a vehicle starts. Based on composition, E85's lower heating value varies from 83,950 to 95,450 Btu/gal.
[6] Lithium-ion battery density of 400 Wh/l from Linden and Reddy, Handbook of Batteries, 3rd ed., McGraw-Hill, New York, 2002.
[7] Lithium-ion energy densities increased by a factor of 3.4, when used for transportation, to account for the increased efficiencies of electric vehicle drivetrains relative to the internal combustion engine.

Sources

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Clean Cities and Communities

Using CleanCities.energy.gov, AFDC.energy.gov, and FuelEconomy.gov Websites

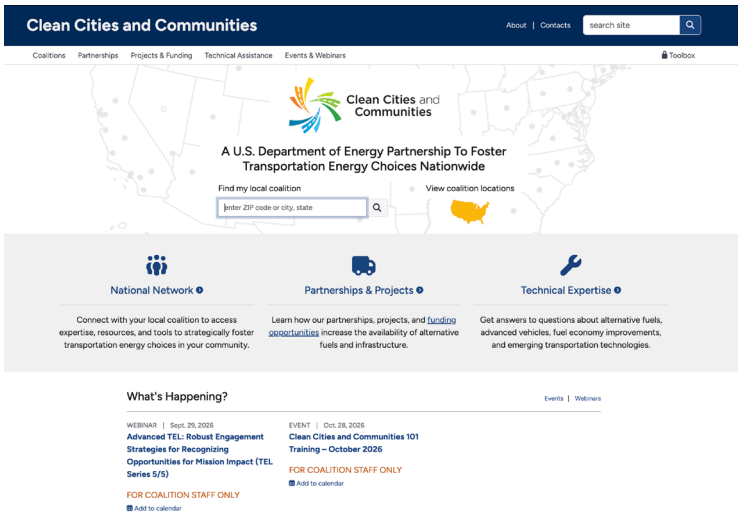
The network of Clean Cities and Communities (CC&C) coalitions is a core part of the Technology Integration (TI) Program, hosted within the U.S. Department of Energy's (DOE) Transportation Technologies Office (TTO). TTO supports three online resources to help you do your job: CleanCities.energy.gov, AFDC.energy.gov, and FuelEconomy.gov.

Together, these websites represent a comprehensive partnership to educate and empower coalition directors. These websites were developed to provide objective information about TTO technologies and areas of interest. From learning about how to build partnerships in the Coalition Toolbox to comparing the energy impact scores of alternative fuel vehicles on FuelEconomy.gov, these websites will be valuable resources for you and your stakeholders.

To access the information and tools on these sites, start with CleanCities.energy.gov.

CleanCities.energy.gov

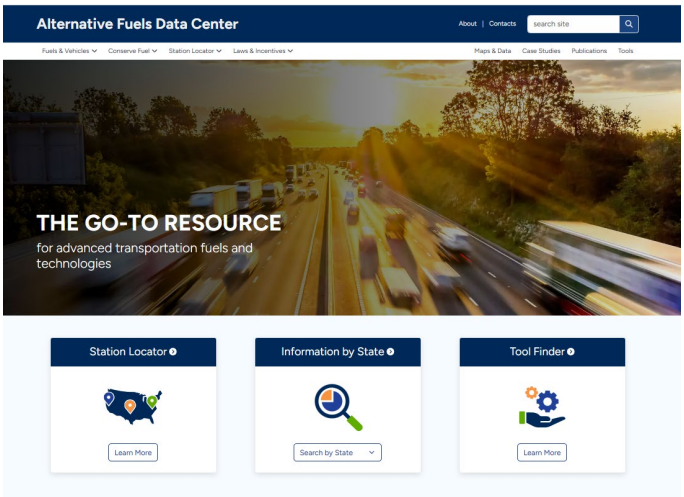
CleanCities.energy.gov provides you with information about CC&C, including coalition locations, coalition director contacts, information on coalition efforts and projects, and related events and webinars.



It also features the Coalition Toolbox, which offers coalition-specific resources for developing strong coalitions, building partnerships, facilitating activities, interacting with the media, and much more. Using the tools featured on this site helps ease the complexity of tasks, improve communications with stakeholders, and keep you informed with CC&C events and webinars. The Coalition Toolbox is also your portal to all your reporting requirements and free online training through CC&C eLearning.

AFDC.energy.gov

The Alternative Fuels Data Center (AFDC) website (AFDC.energy.gov) provides a wealth of information and data on alternative fuels, advanced vehicles, and emerging transportation technologies. The site features interactive tools, calculators, and mapping applications to aid in the evaluation of these fuels, vehicles, and strategies.



Using CleanCities.energy.gov, AFDC.energy.gov, and FuelEconomy.gov Websites

Information within the AFDC comes in several forms—specific alternative fuel content, downloadable publications, web and video case studies, maps and data downloads, and interactive tools. Each format is designed to educate coalitions and stakeholders about transportation energy options. The AFDC is designed to give you the tools and information you need to strengthen your coalition and help stakeholders make informed decisions. One of the most popular components of the AFDC website is the Tools page. The resources on this page give users the ability to make informed decisions about using alternative fuels, advanced technology vehicles, and cost saving strategies. There are multiple tools to help you in your position as a coalition director, including:

	Name	Description
Calculators	Electric Vehicle Infrastructure Projection Tool (EVI-Pro) Lite	Estimate a city or state's need for vehicle charging and the effect on electric load.
	Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool	Calculate a fleet's fuel use, cost of ownership, and emissions.
	Vehicle Cost Calculator	Compare cost of ownership and emissions for most vehicle models.
	Vehicle and Infrastructure Cash-Flow Evaluation (VICE) Model	Evaluate the financial case for natural gas vehicles and battery electric buses.
	JOBS Model	Estimate economic impacts of deploying alternative fuel and charging infrastructure.
	Heavy-Duty Vehicle Emissions Calculator	Calculate the emissions of alternative fuel medium- and heavy-duty vehicles.
	EVolution: E-Drive Vehicle Education	Understand the costs and benefits of electric vehicles based on location.
	Charging Hub Economic & Costing Tool	Estimate levelized charging costs ($/kwh) for various electric vehicle charging scenarios.
	Heavy-Duty Battery Electric Vehicle Infrastructure Scenario Analysis Model	Estimate levelized charging costs ($/kWh) for electric truck fleets.
Interactive Maps	Alternative Fueling Station Locator	Locate alternative fueling stations, map a route, and analyze station trends.
	Alternative Fuel Corridors	Find maps and station data to help with nominating alternative fuel corridors.
	TransAtlas	Explore light-duty vehicle registration counts over time by state and fuel type.
	Coalition Locations	Find CC&C coalitions and contact information for coalition directors.
	Geospatial Energy Mapper	Explore data and use analysis tools to plan energy infrastructure geographically.
	ATRAVEL Tool	Estimate costs, travel time, and emissions for private vehicles and other travel modes.
Data Searches	Vehicle Search	Compare medium- and heavy-duty alternative fuel vehicles, engines, and power sources.
	Laws and Incentives Search	Search for laws and incentives related to alternative fuels and advanced vehicles.
	U-Finder	Search for local utility partners and incentives for EV infrastructure installation.
	Battery Policies and Incentives	Find policies and incentives for batteries developed for electric vehicles and energy storage.
	Fuel Properties Comparison	Compare alternative fuel properties and characteristics.
	Find a Car	Compare fuel efficiency, costs, and emissions.
	State Information	Find state information about alternative fuels and advanced vehicles.
	Electricity Sources and Emissions	Learn how your state's energy mix affects electric vehicle emissions.

FuelEconomy.gov



FuelEconomy.gov was created through a partnership between DOE and the U.S. Environmental Protection Agency. This consumer site compares gas mileage, emissions, air pollution ratings, and safety data for new and used vehicles.

Coalition directors can use FuelEconomy.gov to educate stakeholders and the public about the most fuel-efficient vehicle technologies. This website will also help you build your knowledge of alternative fuel vehicles.

Biodiesel/Renewable Diesel/Sustainable Aviation Fuel

Clean Fuels Alliance America (CFAA) is the national trade association representing the biodiesel, renewable diesel, and sustainable aviation fuels industries in the United States. CFAA works to create sustainable industry growth through education, communication, governmental affairs, and technical and quality assurance programs. Their organization includes state, national, and international feedstock organizations, biodiesel suppliers, marketers and distributors, and technology providers.

- Website: http://www.cleanfuels.org/
- Contacts:
  - Tom Verry, director of outreach and development, tverry@biodiesel.org
  - Heather Buechter, director of communications, hbuechter@biodiesel.org

Electricity

Electric Drive Transportation Association (EDTA) is the trade association promoting battery, hybrid, plug-in hybrid, and fuel cell electric drive technologies and infrastructure. EDTA conducts public policy advocacy; education; industry networking; and conferences that engage industry, academia, policymakers, and the public. Its membership includes a wide representation of vehicle and equipment manufacturers, energy providers, smart grid and infrastructure developers, component suppliers, and end users.

- Website: http://www.electricdrive.org/ and http://www.goelectricdrive.org/
- Contact: Christine Spann, communications director, CSpann@electricdrive.org

Plug In America is a nonprofit, supporter-driven advocacy group. Its mission is to drive change to accelerate the shift to plug-in electric vehicles powered by clean, affordable, domestic electricity to reduce our nation's dependence on petroleum, improve air quality, and reduce greenhouse gas emissions. It helps consumers, policymakers, auto manufacturers, and others to understand the benefits of driving electric. Plug In America founded National Drive Electric Week.

- Website: http://pluginamerica.org/

The University of California-Davis Institute of Transportation Studies Electric Vehicle Research Center collaborates closely with California utilities, automakers, regulators, and other research institutions such as the Electric Power Research Institute and Argonne National Laboratory on research aimed at developing a sustainable market for plug-in electric vehicles. Its research is focused on measuring, monitoring, and understanding multiple aspects of the quickly evolving market for plug-in vehicles internationally.

- Website: http://ev.ucdavis.edu/
- Contact: Dahlia Garas, program manager, dmgaras@ucdavis.edu

Ethanol

As the leading trade association for the U.S. ethanol industry, the Renewable Fuels Association (RFA) works to drive expanded demand for renewable fuels and bioproducts worldwide. Through advocacy, outreach and education, and research and analysis, RFA helps America become cleaner, safer, and more efficient. RFA helps Americans have more affordable, efficient, and environmentally friendly fuel for their cars, trucks, motorcycles, and engines.

- Website: http://www.ethanolrfa.org/
- Contact: Robert White, vice president of industry relations, rwhite@ethanolrfa.org

Fuel Cells/Hydrogen

The Fuel Cell and Hydrogen Energy Association (FCHEA) represents the leading companies and organizations that are advancing innovative, clean, safe, and reliable energy technologies. FCHEA leads national advocacy to encourage all levels of government to support fuel cell and hydrogen technology research, development, and deployment; provides the industry a voice in shaping regulations, codes, and standards to enable commercial growth, while ensuring the highest levels of consumer safety and satisfaction; and educates the public and key opinion and policy leaders on the economic and environmental benefits of fuel cell and hydrogen technologies.

- Website: http://www.fchea.org/
- Contacts:
    - Jennifer Gangi, director of communications and outreach, jgangi@fchea.org
    - Connor Dolan, director of external affairs, cdolan@fchea.org

The Hydrogen Fuel Cell Partnership is a collaboration of organizations, including auto manufacturers, energy providers, government agencies, and fuel cell technology companies that work together to expand the market for fuel cell electric vehicles and hydrogen fuel. Member organizations participate on standing committees and project teams to help ensure vehicles, stations, regulations, and people are in step with each other as the market grows.

- Website: https://h2fcp.org/
- Contact: Keith Malone, government relations, communications, kmalone@h2fcp.org

The U.S. Department of Energy's Alternative Fuels and Feedstocks Office offers a portal to information about the department's research and development activities in hydrogen production, delivery, infrastructure, storage, and fuel cells, as well as cross-cutting activities such as systems analysis and integration, safety codes and standards, and education.

- Website: https://www.energy.gov/cmei/fuels/alternative-fuels-and-feedstocks-office
- Contact: Kim Cierpik-Gold, Kim.Cierpik-Gold@doe.gov

The Center for Hydrogen Safety (CHS) is a global nonprofit dedicated to promoting hydrogen safety and best practices worldwide. CHS supports and promotes the safe handling and use of hydrogen and ensures safety information, guidance, and expertise is available to all stakeholders.

- Website: http://www.aiche.org/chs
- Contact: Nick Barilo, Executive Director, chs@aiche.org

Natural Gas

The Transport Project (TTP), previously known as Natural Gas Vehicles for America (NGVAmerica), is a national organization dedicated to the development of a growing, profitable, and sustainable market for vehicles powered by natural gas or biomethane. TTP represents more than 200 companies, environmental groups, and government organizations interested in the promotion and use of natural gas and biomethane as transportation fuels. Its member companies produce, distribute, and market natural gas and biomethane across the country; manufacture and service natural gas vehicles, engines, and equipment; and operate fleets powered by clean-burning gaseous fuels.

- Website: https://transportproject.org/
- Contact: Daniel Gage, President, dgage@transportproject.org

The Coalition for Renewable Natural Gas advocates for sustainable development, deployment, and utilization of renewable natural gas so present and future generations will have access to domestic, renewable, clean fuel and energy.

- Website: https://www.rngcoalition.com/
- Contact: Nina Kapoor Oliveira, director of state government affairs, nina@rngcoalition.com

American Biogas Council is the only national trade association representing the entire U.S. biogas industry. The council represents over 240 companies and 2,700 individuals throughout the biogas supply chain that are dedicated to maximizing the production and use of biogas from organic waste.

- Website: https://americanbiogascouncil.org/
- Contact: Patrick Serfass, executive director, pserfass@ttcorp.com

Propane

The Propane Education & Research Council (PERC) provides leading propane safety and training programs and invests in research and development of new propane-powered technologies. PERC programs benefit a variety of markets including transportation, agriculture, commercial landscaping, residential, and commercial building.

- Website: http://propane.com/

- Contact: Joel Stutheit, senior manager, autogas business development, joel.stutheit@propane.com

Retrofits, Conversions, and Repowers

The U.S. Environmental Protection Agency's (EPA) Vehicle and Engine Alternative Fuel Conversions website provides links to information about alternative fuel conversions, which are vehicles that are modified to run on a different fuel than the one for which they were designed. This website also lists EPA-compliant alternative fuel conversion systems for new, intermediate-age, and outside useful life vehicles or engines. Most conversions involve switching gasoline or diesel vehicles to operate instead on a gaseous fuel such as natural gas or propane, ethanol, or electricity.

- Website: http://www.epa.gov/ve-certification/vehicle-and-engine-alternative-fuel-conversions
- Contact: https://www.epa.gov/ve-certification/forms/contact-us-about-vehicle-and-engine-certification

The California Air Resources Board (CARB) evaluates and certifies the conversion of emission-controlled vehicles with retrofit systems to operate on an alternative fuel, such as natural gas, propane, or ethanol, in lieu of the original gasoline or diesel fuel. Certification is issued by CARB once the manufacturer demonstrates compliance with the emission, warranty, and durability requirements.

- Website: http://ww2.arb.ca.gov/alternative-fuel-retrofit-systems-aftermarket
- Contact: Jackie Lourenco, chief of new vehicles and engine programs branch, jackie.lourenco@arb.ca.gov

Station Locator Frequently Asked Questions for Clean Cities and Communities Coalitions

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Submitting Updates

How can I add a new station to the Station Locator?

To add new stations to the AFDC database (**including private stations** and stations that are in the advanced planning stages (i.e., permitted or under construction), follow these steps:

1. Perform a quick search of the database using the Station Locator (https://afdc.energy.gov/stations) to ensure the station isn't already in the database. The "Public Stations" tab allows users to search for stations by address, ZIP code, and state. Users can also filter by fuel type, electric vehicle (EV) charging station power level, and propane and hydrogen station classification. Under the "Advanced Filters" tab, there are additional location-, station-, and fuel- specific search options.
    a. Note: Private stations and planned stations will not come up unless you conduct a search in the "Advanced Filters" tab.
2. If you are submitting one or two stations, use the online submission form by selecting "Submit New Station" on the Station Locator map, or by visiting the following link: https://afdc.energy.gov/stations/#/station/new. After submittal, you will receive an email confirmation. Alternatively, you may send the station information via email to the TRS at technicalresponse@icf.com.
3. If you are submitting multiple stations, email the TRS at technicalresponse@icf.com with the information in an Excel spreadsheet, Word document, or email text. An Excel template can be found in the Toolbox (https://cleancities.energy.gov/toolbox/alternative-fuel-station-report) or by emailing the TRS.
4. At a minimum, include the fuel type(s), station name, street address, city, state, ZIP code, station phone number, and/or a point of contact. Refer to the online submission form for other data fields. Note:
    a. Only biodiesel and (beginning in 2022) renewable diesel stations that sell blends of B20 or RD20 and above for at least part of the year are included for those fuel types.

b. The Station Locator does not track single-family residential EV charging stations, but the TRS is interested in multi-family housing charging station information.
c. The Station Locator does track private fleet and workplace fueling stations, including workplace charging, transit bus charging, and other medium- and heavy-duty fueling and charging infrastructure.

The TRS will follow up with the station directly to confirm the information and gather additional details, such as hours of operation. All stations will be verified before they are added to the database.

How do I update or remove existing station information?

To update a station that is already listed in the AFDC database, you may do one of the following:

- Search the database using the Station Locator. On the map, select the icon for the station of interest and select "Report a change" in the lower left corner or in the upper right corner of the individual station details page. Make your updates within the form and select "Submit." After submittal, you will receive an email confirmation.
- Send an email to the TRS at technicalresponse@icf.com and provide the specific information to be updated.

To request that a station be removed, use the "Report a change" function or send an email to the TRS at technicalresponse@icf.com and provide the specific station that needs to be deleted. Please include information about why the station was closed or why a fuel type was discontinued (if known). The TRS will follow up with the station or point of contact directly to confirm the status.

Note: Please note that many charging networks import their public station data into the AFDC database on a daily basis – see the AFDC's EV Charging Networks page for a comprehensive list (Import Type = API). The TRS is not able to edit the network station information directly. Coalitions are encouraged to contact networks directly with changes or questions on specific stations. Please reach out to the TRS for network contact information.

How long before the information is updated online?

Station information is updated on an ongoing basis. As noted above, the TRS must verify station details before they are added or updated in the Station Locator. The turnaround time for updates will depend on the completeness of the information provided, as well as the responsiveness of the station point of contact.

About the Data

How is station data collected and verified for the Alternative Fuels Data Center's Alternative Fueling Station Locator?

The Station Locator team has established a data collection methodology to ensure that the database contains reliable and accurate data. Data sources for new stations include Clean Cities and Communities directors, industry groups, fuel and charging providers, original equipment manufacturers (OEMs), and trade media. Additionally, anyone visiting the Station Locator can

submit an online webform with new station information that is then verified by the team before being added to the database.

Most existing stations in the Station Locator are contacted at least once a year on an established schedule to verify they are still operational and providing the fuel specified. The database is updated regularly based on an established data collection schedule. Stations that are no longer operational or no longer provide alternative fuel are removed from the database as they are identified.

The majority of public EV charging stations in the Station Locator are automatically imported from EV charging networks on a daily basis. You may refer to the EV Charging Networks page for a full list of networks that are updated via an application programming interface (API). Any new stations imported via API are added to the Station Locator the next day. Similarly, any out of service stations are removed the next day.

Additionally, public and private non-networked EV charging stations are proactively verified every other year, with half of the EV charging stations verified each year. All private EV charging stations at multi-family housing are verified every other year. This difference in the update schedule for non-networked and multi-family housing EV charging stations accommodates the growing number of EV charging stations in the Station Locator. The Station Locator team will continue to make updates to any station record if changes are reported.

For a full overview of the data collection methodology and inclusion criteria, please visit the About the Alternative Fueling Station Data page.

What is the difference between a public and a private station?

Fueling stations are classified as public or private based on who is allowed to access them.

A public station is accessible to the general public, meaning anyone can fuel or charge their vehicle during the station's available hours.

A private station is restricted to a specific group of users, such as employees of a business, residents of a multi-family housing property, or fleet drivers. This includes workplace charging and fleet-only fueling stations.

Some public stations, such as those located at hotels and car dealerships, are accessible to customers only. These station records are labeled in the Station Locator with notes indicating restricted access (e.g., "customer use only"). Users are able to exclude these stations using Advanced Filters.

Are residential locations included in the Station Locator?

Residential alternative fueling locations and "wall outlets" not designated for EV charging are not included in the Station Locator.

However, the Station Locator does include data on private charging stations at multi-family housing. Note this information is maintained in the back end of the database and is not publicly visible, but it is available upon request.

Why are private stations included in the Station Locator?

Private stations are included in the Station Locator to accurately represent the full scope of alternative fueling infrastructure in the United States and to support infrastructure planning, research, and investment decisions.

To respect privacy preferences, private stations are only visible when users choose to filter for them and when station hosts agreed to make their information publicly visible. As a result, only a subset of private stations appears on the map or in downloadable data sets.

Other private station data is not publicly displayed at the station level and is instead only used in aggregated analyses to help inform trends and reporting. Detailed information for these non-visible stations is securely maintained in the database.

Including both visible and non-visible private stations, especially fleet locations, in aggregated analyses helps ensure that infrastructure trends are more accurately reflected, supporting data-driven decision-making across industry, government, and research communities.

Is historical station data available?

Yes, historical station data is available. The AFDC provides several ways to access historical fueling station data:

- AFDC Data Downloads: Download fueling station data starting in 2014, with filters for fuel type, station status (e.g., open, planned, temporarily unavailable), access type (e.g., public, private, all), geography (e.g., country, state/province), and historical views (e.g., single date or date range for a single station).
- Maps and Data: View national historical trends, including the *U.S. Alternative Fueling Stations by Fuel Type* chart, which shows station growth by fuel type from 1992 to 2025.
    - Note: You may unselect all unwanted fuels on the right side of the chart in order to see the changes over time for a specific fuel. Hovering over each bar will give you the fuel-specific totals by year. Note that these totals include both public and private stations.
- Alternative Fueling Station Counts by State: View current and historical station counts by state back to 2014, with options to include private stations and temporarily unavailable stations (i.e., temporarily out of service or offline due to maintenance and plans to open again in the future). Historical state counts (2007-2023) are also downloadable via the “historical counts” link.

What is the “Open Date” field and is it populated for all stations?

The Open Date field indicates when a station first became available, and it is populated for all stations in the Station Locator.

The open date reflects the date the station opened, as reported by the station operator, site host, or charging network. If a station contact does not know the exact date of opening, the open date is the date that the station first appeared in the Station Locator.

This field can be accessed via the AFDC Data Download page, the Station Locator Advanced Filters' Download Results button, and the developer's application programming interface (API).

How can I find a station in the Station Locator?

You can find alternative fueling stations by using the Station Locator to search by location or browse the map.

Using the Public Stations tab, you can view all public alternative fueling stations on a map, filter by fuel type, and zoom to your area of interest. You can also enter an address or general location in search to see nearby stations listed by proximity in the results pane. Selecting a station provides details such as address, fueling information, and contact information.

The Advanced Filters tab allows you to further refine results by location, fuel type, station access (e.g., public, private), fuel status (e.g., available, plan, temporarily unavailable), owner type, and payment type. Results can be viewed on the map or downloaded as a CSV file.

Drivers are strongly encouraged to verify that a station is open, publicly accessible, and offers the desired fuel before traveling to the site.

EV Charging

Why was there a spike in EV charging station counts in the Station Locator in January 2021?

The spike in January 2021 occurred because the EV charging networks, Greenlots and ChargePoint, were integrated into the Station Locator using Open Charge Point Interface (OCPI) protocol-based application programming interfaces (APIs) which changed how stations were defined and counted.

In 2020, NLR began transitioning EV charging counting logic to align with the hierarchy defined in the OCPI hierarchy, which distinguishes between stations, EV charging ports, and connectors. Under this protocol, a single site may be represented as multiple stations if charging ports are located in different physical areas at the same address.

When Greenlots and ChargePoint's OCPI APIs were integrated in January 2021, many existing charging locations were restructured into multiple stations with distinct coordinates, resulting in noticeable increase in station counts. Additional increases were also due to new charging installations being added through these APIs. During this transition, Greenlots EV charging ports decreased while the ChargePoint port count increased.

The majority of public EV charging stations in the Station Locator are automatically imported from EV charging networks on a daily basis. You may refer to the EV Charging Networks page for a full list of networks that are updated via an API. Additionally, note that all non-networked

charging data in the Station Locator follows the OCPI protocol as well. For additional context, see NLR's *Evolution of Plug-In EV Charging Infrastructure in the United States* report.

Why does PlugShare have higher EV charging station counts than the Station Locator? Why does PlugShare have some stations that the Station Locator does not have, and vice versa?

PlugShare often reports higher EV charging station counts because it relies on crowdsourced data from users, while the Station Locator uses a verified, standardized data collection methodology with specific inclusion criteria. These differences in how data are collected, confirmed, and maintained can result in discrepancies between two platforms.

The Station Locator compiles data from Clean Cities and Communities directors, industry groups, original equipment manufacturers (OEMs), trade media, and verified user submissions. While anyone can submit new station information via webform, all submissions are reviewed and confirmed with a station contact before being published.

In addition, most public EV charging stations in the Station Locator are automatically imported from EV charging networks and update daily, ensuring that additions, removals, and status changes are reflected on an ongoing basis (see the EV Charging Networks page for participating networks). Networked EV charging stations requiring manual updates are verified at least once per year, while non-networked EV charging stations are reviewed every other year on a rolling basis, with stations that are no longer operational removed from the database.

Because of these differences, PlugShare and the Station Locator may not always show the same stations. For example:

- PlugShare relies on users to report station availability and outages, while Station Locator data is verified before publication.
- The Station Locator regularly removes stations that are no longer in service; PlugShare may not systematically remove these stations.
- PlugShare may include residential charging locations, whereas the Station Locator does not for safety and liability reasons.
- The Station Locator excludes locations that are not intended for on-road vehicles. For example, standard 120 V plugs not dedicated to vehicle chargers – sometimes found in PlugShare data – are not included in the Station Locator.

For a full overview of the data collection methodology and inclusion criteria, please refer to the About the Alternative Fueling Station Data page.

Why doesn't the Station Locator have as many private EV charging stations as networks say that they operate?

The Station Locator shows fewer private EV charging stations because many networks do not share private station data through their APIs, often due to security, privacy, or customer permission requirements.

NLR imports networked EV charging data from many networks' APIs. While some networks share private station data, the majority of stations that the Station Locator receives via a

network API are public stations. As a result, these private stations may be counted by the network but are not included in the Station Locator. The Station Locator team continues to work with charging networks to expand the availability of private station data; however, sharing this information may require explicit permission from station owners or network customers.

You may refer to the EV Charging Networks page for a full list of networks that are updated via API.

Does the number of EV charging stations and EV charging ports regularly update as new stations become available?

Yes. The number of EV charging stations and EV charging ports regularly update as new facilities become available.

The majority of public EV charging stations are automatically imported from EV charging networks on a daily basis via the network's API. As such, there are daily fluctuations in the number of EV charging stations and EV charging ports listed in the Station Locator as they are added or removed from various networks.

In addition, the Station Locator team receives semi-regular updates directly from some networks. After these updates are uploaded into the Station Locator, you may see noticeable spikes in EV charging station and ports counts on these networks.

The Station Locator team also receives frequent updates from partners that include both non-networked and networked charging stations, which can result changes to the number of EV charging ports over time.

Please refer to the EV Charging Networks page for a full list of networks that are updated via an API or semi-regularly via a CSV file.

When filtering DC fast charging stations by connector type, the number of stations that results from selecting all connector types is smaller than when adding up the stations resulting from selecting each connector type individually. Why is this?

When you filter by each individual connector type and add the resulting number of stations, you are double counting stations that have multiple connector types, for example, stations offering both CCS and CHAdeMO.

The lower number of stations shown when filtering for all connector types at once represents the actual number of unique DC fast charging stations in the Station Locator.

What is the difference between an EV charging network, an EV service provider (EVSP), and a charge point operator (CPO)?

An EV charging network, EVSP, and CPO serve different roles in the EV charging ecosystem.

A **station operator or CPO** owns, installs, and operates one or more EV charging stations. The CPO may be responsible for station uptime, maintenance, and physical operation of the equipment.

A **network service provider** provides software platforms and services that enable CPOs and drivers to use EV charging stations. EVSP software allows operators to manage access, pricing, and station performance, and allows drivers to locate stations, view real-time status, initiate charging sessions, and pay for charging.

An **EV charging network** is the group of EV charging stations made accessible to drivers through an EVSP's platform (mobile app or website). A single network may include charging stations operated by one or multiple CPOs. The EV charging network may be responsible for station uptime, maintenance, and physical operation of the equipment.

In short, CPOs operate stations, EVSPs provide the software and services, and charging networks describe how stations are grouped and presented to drivers.

Propane

Why might a public propane station not be visible in the Station Locator?

A public propane station may not be visible because the Station Locator defaults to showing only primary public propane stations.

Many public propane stations serve a wide range of customers, not just vehicle fueling. To reflect these differences, the Station Locator designates public propane stations as either primary or secondary, and only primary stations are shown by default in the Public Stations tab.

Users can view all public propane stations, including secondary stations, by selecting the "include stations with limited vehicle fueling" checkbox when searching for propane stations.

Both primary and secondary stations can fuel propane vehicles. However, primary stations must:

- Be staffed during regular business hours
- Not require drivers to call ahead
- Fuel vehicles at 8–12 gallons per minute or faster
- Accept credit cards or fleet cards

The service designation for each station is shown on the station's detail page.

What criteria are used to determine whether a propane station is primary or secondary in the Station Locator?

A propane station is designated as primary or secondary based on whether it meets specific service and accessibility criteria.

In 2019, the Station Locator team updated the criteria used to designate a propane station as primary based on feedback from the propane industry. To be designated as primary, a propane station must meet the following requirements:

- Can fill vehicles at a rate of 8-12 gallons per minute or faster, or at a rate similar to filling a gasoline vehicle
- Be staffed during regular business hours (i.e., 8am-5pm)
- Not require drivers to call ahead in order to fuel
- Accepts credit cards or fleet cards as a payment type

What is renewable propane and is it included in the Station Locator?

Renewable propane stations are included in the Station Locator, but they are not identified separately from conventional propane. Rather, the Station Locator tracks whether propane stations in the database also offer renewable propane.

Renewable propane is an alternative fuel made from non-petroleum feedstocks such as natural fats, vegetable oils, and various types of grease. It is chemically identical to conventional propane and can be used as a drop-in replacement fuel in all propane applications.

Nearly all renewable propane in the United States is used in California, Washington, and Oregon due to incentives from the California Low Carbon Fuel Standard and Washington and Oregon's Clean Fuel Standard. For more information about production, benefits, and research and development see the AFDC Renewable Propane page.

While the AFDC and DOE do not necessarily recommend or endorse the following organizations, you may learn more about renewable propane from the Propane Education & Research Council and the Western Propane Gas Association.

E85, Biodiesel, and Renewable Diesel

Does the Station Locator track low-level biodiesel blends or E15?

No, the Station Locator does not track low-level biodiesel blends or E15 as standalone fuels.

Biodiesel:
The Station Locator does not include low-level biodiesel blends (i.e., blends under 20% biodiesel content). This is based on the Energy Policy Act (EPAct) definition of alternative fuels, which the National Laboratory of the Rockies (NLR) uses to determine which stations are included in the Station Locator. As a result, only stations selling biodiesel at concentrations at 20% or above are included in the database. Stations that sell B20 seasonally are eligible for inclusion regardless of when B20 is offered during the year. However, the Station Locator tracks whether B20 stations offer low-level biodiesel blends.

Ethanol:
The Station Locator includes stations offering high-level ethanol-gasoline blends (E85). The Station Locator does not track E15-only stations; however, stations that sell E85 and also offer mid-level ethanol blends (such as E15) are included. Users can filter for E85 stations that offer

mid-level blends by selecting “Include only stations offering mid-level blends” under the Ethanol (E85) fuel filter.

For data on E15 fueling stations, we recommend visiting Growth Energy’s Ethanol Data Hub or Get Biofuel.

When did renewable diesel become available on the Station Locator?

The Station Locator team began tracking renewable diesel stations in 2022 and published these stations in the Station Locator in early 2023.

The Station Locator only includes stations offering renewable diesel blends of 20% (R20) and above for a certain period of time during the year. Available blends are displayed on each station’s detail page.

Hydrogen

Does the Station Locator include both retail and non-retail hydrogen stations?

Yes. The Station Locator includes both retail and non-retail hydrogen fueling stations; however, only retail stations are shown by default. Non-retail stations—such as fleet stations or stations requiring an access card, PIN, or training—can be displayed by selecting the “Include non-retail stations” option in the Station Locator filters. Access designations are shown on each station’s detail page.

For the purposes of the Station Locator, retail hydrogen stations are defined as stations that meet all of the following criteria:

- Access: Public (open to all users without special authorization)
- Availability: No known access restrictions (e.g., no PIN, card key, or training required)
- Payment Types: Accept at least one credit card or fleet card
- Pressure: 700 bar fueling capability
- Standards Compliance: Meets SAE J2601 or J2601-2 fueling protocols

Stations that do not meet all of these criteria are categorized as non-retail.

Why do hydrogen fueling stations primarily appear in California on the Station Locator?

Hydrogen fueling stations appear primarily in California because most retail hydrogen stations in the United States are currently located there. Hydrogen fueling infrastructure outside California remains limited, though additional stations are planned and under development.

Why don’t hydrogen stations outside California appear on the Station Locator by default?

Many hydrogen stations outside California are non-retail or fleet-only stations that are only available to a specific group of users (for example, stations requiring an access card, PIN, or

training). The Station Locator defaults to showing retail stations only, so these non-retail stations are hidden unless users select the "Include non-retail stations" option. Each station's access designation is displayed on its detail page.

Natural Gas (Compressed and Liquefied)

Why is the number of compressed and liquefied natural gas fueling stations decreasing in the Station Locator?

The number of compressed (CNG) and liquefied (LNG) natural gas fueling stations in the Station Locator has declined in recent years following a peak around 2016.

CNG stations expanded steadily starting in the mid-2000s and reached a peak around 2016, after which station counts began to decrease. This decline is largely attributed to high operating and maintenance costs, closures of smaller or outdated stations and replacement with fewer larger stations, and fleets transitioning to other fuel technologies.

LNG stations also grew between 2007 and 2016 but have declined more significantly since then due to several factors. LNG infrastructure has proven costly to build and operate, and improvements in CNG storage and fueling capabilities have made CNG a more economical option for many fleets. In addition, the number of LNG vehicles available has decreased significantly during this time, meaning less demand for the fuel.

As noted in the National Laboratory of the Rockies' 2024 Assessment of Alternative Fueling Infrastructure in the United States, natural gas infrastructure continues to evolve with changing fleet demand, technology advancements, and broader shifts toward other fueling technologies, contributing to consolidation and reductions in total station counts.

What is renewable natural gas (RNG), and is it included in the Station Locator?

RNG, also known as biomethane, is a domestically produced fuel made from organic waste sources such as landfills, wastewater treatment facilities, agricultural operations, and food waste. After processing and upgrading, RNG is chemically equivalent to fossil natural gas and can be used in natural gas vehicles without any modifications.

RNG stations are included in the Station Locator, but they are not listed as a separate fuel type from compressed natural gas (CNG) or liquefied natural gas (LNG). Stations that supply RNG appear as CNG or LNG stations in the map and station listings.

Users may identify stations that sell RNG by selecting the "Include only stations that sell renewable natural gas (RNG)" option under the Natural Gas fuel filters. This allows users to find CNG and LNG stations that offer RNG for transportation use.

Availability of RNG varies by region, and many RNG stations serve fleets or other dedicated customers. Some RNG stations may be designated as non-retail and may require users to adjust

access filters to view them. Access details and fuel information are available on each station's detail page.

For more information about RNG production, use cases, and benefits, see the AFDC's Renewable Natural Gas resources.

What is the difference between a fast-fill and time-fill CNG fueling station and how are they represented in the Station Locator?

CNG vehicles can be fueled using time-fill, fast-fill, or combination-fill station configurations. These station types differ primarily in fueling speed and typical use cases.

Time-fill stations fuel vehicles slowly over an extended period, typically several hours. Vehicles are connected directly to a compressor and are often filled overnight. Time-fill stations are best suited for fleet operations where vehicles return to a central location and remain parked for long periods, such as transit buses, refuse trucks, or delivery fleets.

Fast-fill stations provide fuel at a rate similar to conventional gasoline or diesel stations. Natural gas is compressed on site and stored in high-pressure tanks, allowing vehicles to refuel quickly during the day. Fast-fill stations are commonly used at public retail locations or fleet depots where quick turnaround is required.

Combination-fill stations incorporate both time-fill and fast-fill equipment. These stations allow fleets to time-fill vehicles overnight while also providing fast-fill dispensers for daytime use or public access.

Representation in the Station Locator:

- All public CNG stations listed in the Station Locator offer fast-fill capability.
- Time-fill-only stations are typically private or fleet-only and may not appear by default.
- Station detail pages indicate access type and fueling configuration when this information is available.

FAQs for Vehicle Registration and Demographic Data

What is Experian data?

Experian Automotive is a company that provides automotive industry data; it maintains databases on credit, vehicle, consumer marketing, and digital identity. The vehicle registration records are sourced from all 51 state departments of motor vehicles (including the District of Columbia). Experian complies with all federal and state privacy laws for restricting personal information.

What data are available?

Experian has registration data for all vehicles in operation for model years from 1967 to the present. These data are categorized into over 80 primary data attributes where specific queries are created for detailed analysis. The National Laboratory of the Rockies (NLR) has had the same or similar 14 data attributes for analysis since 2014. Plug-in hybrid electric vehicles (PHEVs) and all-electric vehicles (EVs) were not categorized separately in the Experian data until 2016. Please use data starting in 2016 for PHEV information. Note that EV data for 2014 and 2015 include PHEVs.

Vehicles In Operation (VIO) Data by Year

VIO data attributes available by year	
Geographic level	**Data attribute**
Geographic Area	State County ZIP Code City
Vehicle Attributes	Vehicle Make Vehicle Model Vehicle Model Year Vehicle Segment Vehicle Fuel Type (more detail below) Vehicle Fuel Type Group Vehicle Engine Liters Vehicle Weight Fleet Flag* Individual/Organization Flag** Fuel Economy
Years Available	2014–2025

* Flag indicating whether the vehicle is assigned to a known fleet or not

** Flag indicating whether the vehicle is owned by an individual or organization

By Quarter

Quarterly data have a limited number of vehicle attributes compared to the yearly VIO data. The data cannot be accessed retroactively. Quarterly data become available around the following dates (please use as general guidance):

- Q1–June 7
- Q2–September 7
- Q3–December 7
- Q4–March 7

Datasets with VIO Attributes Available by Quarter	
Geographic level	**Data attribute**
Geographic Area	State County ZIP Code City
Vehicle Attributes	Vehicle Make Vehicle Model Vehicle Model Year Vehicle Fuel Type

Note: If you are requesting datasets with demographic attributes, the only available vehicle attribute is vehicle fuel type.

Datasets with Both VIO and Demographic Attributes Available by Quarter	
Geographic level	**Data attribute**
Geographic Area	State County ZIP Code City
Vehicle Attributes	Vehicle Fuel Type
Demographic Attributes	Dwelling Type Ethnicity Household Income

How can Clean Cities and Communities coalitions use the data?

NLR purchases approximately 14 various data attributes from the light-duty vehicle data (National Vehicle Population Profile) for gross vehicle weight classes 1-3 on an annual basis. These data are useful in understanding registration trends, population growth, geographic densities, infrastructure opportunities, fleet evaluation, and much more.

What fuel types are available?

- Electric vehicles (includes plug-in hybrid electric vehicles in data prior to 2016)
- Plug-in hybrid electric vehicles (available starting with 2016 data set)
- Hybrid electric vehicles
- Biodiesel (starting in 2021)
- Ethanol/flex
- Compressed natural gas*
- Propane*
- Bi-fuel
- Hydrogen
- Methanol (not available after 2020)
- Convertible
- Gasoline
- Diesel

Some propane and compressed natural gas vehicles may not be accounted for in these data because they are upfitted with aftermarket retrofits on vehicles that were originally gasoline or diesel. This new fuel type cannot be discerned using the VIN decoder.

How can I access the data?

Complete the Experian data request form found in the Coalition Toolbox. Most requests are completed in the order they are received and normally require up to 3 weeks to complete. However, when a new year's dataset arrives, requests may take longer to complete due to an increased quantity of requests.

Why can't I receive the raw data purchased from Experian?

Per the licensing agreement with Experian, granular data cannot be distributed or published outside of the purchaser's use. NLR will rarely deliver granular data to avoid potential infringement of the agreement. Therefore, most requests are summarized (using Excel) to be used at an aggregated level. This allows data sharing with third parties, such as utilities and other stakeholders or public parties. If granular data are needed, NLR will connect you with Experian for pricing on the data required.

What can I publish from the data analysis results?

All derived and aggregated Experian data can be published. This is normally what is distributed when data are requested. *Granular data cannot be published or publicly distributed.* There are potential exceptions, but all requests must be submitted directly to Experian for permission via NLR. Eddie Rose is the Experian connection for all Clean Cities and Communities coalition directors, and publishing requests must be submitted to him at the time of the initial data request.

What is the difference between IHS Markit (formerly Polk) data and Experian data?

Both IHS Markit (Polk) and Experian purchase vehicle registration data from each state's department of motor vehicles. Each organization interprets and organizes the data before they are available for analysis as there are variations in how each state collects and categorizes the data. This leads to minor differences in how data are interpreted and organized, which accounts for slight variations between the two sources. While Experian data are comparable to IHS Markit (Polk), it's important to note that to evaluate trends, you need apples-to-apples numbers. If you're working with registration trends, you need to request Experian data from previous years to show this accurately. To support this, NLR has data from 2014–2025.

Clean Cities and Communities

Recommended Courses for New Coalition Directors

To set up a Clean Cities and Communities eLearning account, request access here: https://ccu.litmos.com/account/Login.

To start your eLearning journey, select Content Library > Learning Paths > Clean Cities and Communities Introduction for recommended courses. To continue learning about alternative fuels, vehicle technologies, and Clean Cities and Communities tools and resources, select the Clean Cities and Communities Advanced learning path. Most courses take around 30 minutes.

Clean Cities and Communities Introduction Learning Path

- Clean Cities and Communities Overview
- Using the Alternative Fuels Data Center (AFDC)
- Alternative Fueling Station Locator
- Understanding Emissions
- Saving Fuel and Money
- Vehicle Basics I: Engines
- Vehicle Basics II: Air/Fuel Systems
- Electric Vehicles and Infrastructure: Basics
- Natural Gas I: Introduction
- Ethanol I: Basics
- Biodiesel Basics
- Propane Basics
- Heavy-Duty Vehicle Idle Reduction

To focus on specific areas of interest, eLearning offers electives—small batches of courses that cover:

- Coalition Management
- Communications
- Emissions and Economy
- Legislation
- Vehicle Basics
- Biofuels
- Electric Vehicles
- Natural Gas
- Propane

These are just some of the options available. For a complete list of courses, be sure to visit https://ccu.litmos.com/home/dashboard. CC&C eLearning is also available for stakeholders; simply let interested stakeholders know they can request an account by visiting https://ccu.litmos.com/account/Login. If you need assistance with your eLearning account or any of your courses, please contact the eLearning administrator at ccu@nlr.gov

Clean Cities and Communities Coalition Council Charter

Background

The national network of Clean Cities and Communities coalition directors works to support one another, especially new coalition directors, in pursuit of a common mission: fostering 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.

The Clean Cities and Communities Coalition Council (Council) was created in 2006 to enhance communication among coalition directors and between coalition directors and the U.S. Department of Energy. The Council is a working group comprised of one coalition director from each of the U.S. Department of Energy (DOE) Clean Cities and Communities regions. Each Council member actively contributes to the Council's functionality and initiatives.

Mission Statement

The Council serves as a collaborative leadership body elected from coalitions to advocate for their needs, strengthen partnerships, and facilitate resources. Through regular engagement, strategic communication, and shared initiatives, the Council empowers coalitions to thrive, innovate, and expand their impact.

Council Role

- Council members serve as "advocates for" or "voices of" coalitions in their regions.
- Council is an elected body from ranks of regional coalitions.
- Council Members serve to support fellow directors.

Clean Cities and Communities Coalition Goals

Clean Cities and Communities coalition directors support the nation's energy and economic security by building partnerships to improve transportation energy efficiency and advance affordable, domestic transportation fuels and technologies. As a means of pursuing these goals, the Council works to ensure that coalitions, individually and as a whole, are fiscally and functionally sustainable.

Council Membership

- The table in Attachment 1 lists current members.
- The Coalition Council shall be a working group comprised of one coalition director from each of the DOE Clean Cities and Communities regions.
- Coalition Council members serve two-year terms and may serve up to two terms, which need not be consecutive. Upon completing two terms (four years of service), members are not eligible to serve again until four years have elapsed since the end of their most recent term.

- New Council members and former Council members will collaborate regarding transition based on term completion.
- Council members must actively contribute to Coalition Council and regional calls
- Council resignations and elections are facilitated by dialogue with regional managers and regional coalitions

Responsibilities

Some Council responsibilities will be shared by all Council members and others will be assigned, by the Council, to specific individual members.

Shared Responsibilities

- **Proactive Communicators and Facilitators**
  - Hold regular office hours, open to all Directors. These will be voluntary and limited to Directors and Coalition staff. These may often be scheduled 1-1 sessions.
  - Participate in monthly Council calls.
  - Seek feedback from Directors to inform Council meeting agendas and priorities when appropriate.
  - Work with DOE to identify and deliver special topic presentations, discussions, or other resources to Directors.
  - Plan in-person or annual meetings with Directors as appropriate.
  - Check in with extra attention to vulnerable coalitions to support stability across network

- **Informed Collaborators with DOE**
  - Identify and address ways to deepen partnership, collaboration, and cooperation between coalitions and DOE, and empower collaboration and strategic partnerships, ensuring coalitions have a seat at the table.
  - Provide feedback to DOE to empower strategic planning and help set partnership directions. Collaboration with Regional Manager on regional calls (agenda, co-leading, etc.).
  - Participate in one-on-one conversations with regional managers to discuss regional needs/priorities.

- **Resource for Directors/Coalitions**
  - Participate in monthly regional calls.
  - Maintain Subject Matter Expert (SME) and other resource lists as appropriate.
  - Facilitate connections with other Directors experiencing similar challenges.
  - Assist new directors and new coalitions.
  - Serve as an advisor for the New Director Support (NDS) program, assisting new coalition directors with the transition during their first few months in the role.

- **Facilitator of Collaboration and High Impact Programs**
  - Track data on interest, needs, and funding.
  - Compare notes on collaboration.
  - Track special skills and needs.
  - Track success stories/best practices/lessons learned.
  - Recognize Coalition successes

Responsibilities Assigned to Specific Council Members

Each Council member will take on a role to ensure that Council functions effectively. The specific roles may vary based on the Council's goals, needs, and priorities. At the beginning of each cooperative agreement term, the Council will establish its goals for that term and assign individual lead roles to achieve those goals.

Conduct of the Council's Business

- Most of the Council's business will be conducted via conference calls.
- The Council may convene at one or more annual meetings.
- Agendas will be forwarded to all Council members by the Chair or Vice-Chair before the monthly calls.
- Council members will approve the meeting minutes, which will be posted on the Forum page. All coalition directors will be notified when the minutes are available.
- Each Council member will report on Council call activities to their respective regional directors through monthly regional meetings or other venues as appropriate.

Decision-Making Process

- A simple majority (4 of 7 members) quorum must be present to conduct official Council business.
- The Council will strive for consensus. If consensus cannot be achieved, a super-majority (66%) based decision approach of those present will be accepted.
- No one member of Council represents the entire Council.
- The Council will vote to approve updates to this charter, with the exception of the Clean Cities and Communities Council Member Roster contained in Attachment 1. It is recognized that this table is periodically updated to reflect current membership, and this update does not require a vote of approval.

Compensation

Coalition directors may be compensated through participation in the Coalition Council task of their Cooperative Agreement.

Note: This charter was amended and adopted by Council vote on August 24, 2026

ATTACHMENT 1: Clean Cities and Communities Coalition Council Member Roster

Period: 2026/2027 Cooperative Agreement Period

Clean Cities Coalition Council 2025					
Region	**Name**	**Coalition**	**Email**	**Phone**	**Role**
Northeast	Daphne Dixon	Clean Transportation Coalition – Western Connecticut	Daphne@livegreenct.org	203-536-4695	Partnership Development Lead
Mid-Atlantic	Alleyn Harned	Virginia Clean Cities	aharned@vacleancities.org	804-539-9425	Strategic Leadership Coordinator
South Central	David Frick	Central Oklahoma Clean Cities	dfrick@acogok.org	405-245-4511	Coalition Feedback Coordinator
North Central	Heather Betts	North Dakota Clean Cities	heather.betts@lung.org	701-299-4136	Coalition Recognition Lead
Southeast	Casey Foster	Alabama Clean Fuels Coalition	casey@alabamacleanfuels.org	205-706-4687	Coalition Mentorship Coordinator
Northwest	Randi Walkins	Treasure Valley Clean Cities	rwalkins@cityofboise.org	208-608-7554	Coalition Resource Liaison
California	Taylor York	Western Riverside County Clean Cities	tyork@wrcog.us	951-675-0446	Council Communications Liaison