



Deployment and Technical Assistance

Our Expertise

Technical Assistance | Industry-Informed Research Prioritization and Resource Development | Coalition Support | Educational and Technical Outreach | End-User-Focused R&D and Training | Industry and Government Guidance | Stakeholder Consensus-Building | Fleet Problem-Solving | Transportation Tools and Data Development | Best Practices Sharing

The Need

Accelerating Transportation Decarbonization

The transportation sector is responsible for producing more greenhouse gas (GHG) emissions than any other sector of our economy. Minimizing transportation-related GHG emissions is important to limiting global warming and avoiding many of the worst impacts of climate change.

Widespread electrification combined with the adoption of alternative fuels can help reduce these emissions and significantly reduce air pollution that harms the health of our communities.

The Solution

Drive Real-World Sustainable Transportation Deployment

NREL works to deploy clean transportation technologies in urban, suburban, and rural communities through Clean Cities and Communities, a network of more than 75 coalitions across the United States designated by the U.S. Department of Energy. Through technical assistance, information resources, online training, and an array of data and analysis tools, NREL works with Clean Cities and Communities coalitions to advance the deployment of affordable, efficient, and clean transportation fuels and technologies.

In partnership with the Joint Office of Energy and Transportation (Joint Office), NREL is advancing the deployment of a national electric vehicle (EV) charging network with a focus on corridors and communities, filling gaps in underserved locations. The lab offers technical assistance for electrified transportation systems

to expand EV charging infrastructure, while improving charger reliability and the driver experience. NREL is leading efforts to expand zero-emission fueling infrastructure, including offering expertise for zero-emission transit and school buses.

Additionally, NREL identifies research needs, provides technical assistance, and shares best practices about energy technologies to support the advancement of the transportation energy transition. NREL provides primary technical assistance to the Communities Local Energy Action Program (LEAP), which fosters communitywide clean energy deployment in low-income, energy-burdened communities. Further, Clean Energy to Communities (C2C) is an NREL-managed program that provides local governments, utilities, and community organizations with resources to achieve their clean energy goals.

The Impact

Strengthened Communities & Climate-Focused Clean Transportation Solutions

Clean Cities and Communities coalitions cover nearly every state and 85% of the U.S. population. Over the past 30 years, coalition activities have reduced 67 million tons of GHG emissions and helped deploy nearly 1.3 million alternative fuel vehicles.

Joint Office analysis provides a framework for developing nationwide EV charging infrastructure that is convenient, accessible, and equitable. NREL is part of the Joint Office-funded National

Charging Experience (ChargeX) Consortium, a cross-laboratory effort to provide drivers with solutions for reliable and frictionless EV charging.

NREL is providing technical assistance to 24 communities served through Communities LEAP and another 30 communities through C2C peer-learning cohorts focused on EV charging infrastructure deployment.

Partners

Clean Cities and Communities Coalitions | Joint Office of Energy and Transportation | National Park Service | U.S. Department of Energy | U.S. Department of Transportation