NREL helps communities assess their readiness for electric vehicles

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The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) has launched a new tool to help local and regional leaders assess the readiness of their communities for the arrival of plug-in electric vehicles (PEVs).

The Plug-In Electric Vehicle Community Readiness Scorecard (PEV Scorecard), developed by NREL for DOE's Clean Cities initiative, is a detailed, interactive online assessment tool that collects information about a community's PEV readiness, provides feedback on its progress, and offers guidance for improvement. Municipalities, counties and states can use the PEV Scorecard to ensure they're prepared to facilitate the electrification of transportation and reap the environmental, economic and energy security benefits that come with it.

"The nationwide deployment of electric vehicles is a revolution in transportation," said NREL engineer Mike Simpson, who led the tool's development. "There's a significant amount of thought and effort involved in shepherding these new technologies into our communities, and the Energy Department saw a real need to provide local and regional leaders with some interactive blueprints."

PEV readiness is a community-wide effort that requires charging infrastructure, planning, regulations and support services. And it demands coordination and collaboration among dozens of stakeholders, including utilities, charging equipment manufacturers, vehicle dealerships, metropolitan planning departments, electrical contractors

and community organizations. The PEV Scorecard helps communities make sense of the necessary steps and track their progress along the way.

Available online at DOE's Alternative Fuels Data Center (www.afdc.energy.gov/pev-readiness), the PEV Scorecard walks users through a variety of PEV readiness topics, including permitting and inspection processes for charging equipment installations, incentives and promotions, education and outreach, coordination with utilities, likely PEV adoption rates, and long-range infrastructure planning.

Within each topic, community representatives answer a series of multiple-choice questions related to their level of preparation. Communities receive scores for each topic, ranging from "Needs Improvement" to "Excellent." The tool then provides customized recommendations, resources, and case studies to help communities raise their scores within each topic. A community's scores and recommendations are private and cannot be viewed by other users of the tool.

"The PEV Scorecard helps communities see the forest and the trees in terms of PEV deployment," NREL's Simpson said. "They can get a big-picture assessment of how ready they are, and then drill down to the finer points to find out how to improve."

Once a community begins its assessment, multiple representatives can return as often as needed to make updates and track progress. DOE encourages each community to designate a central point of contact who collaborates with local and regional stakeholders to coordinate their input when using the tool.

"The Energy Department is excited to provide this tool to help make it easier for communities across the country to access more transportation energy options," Clean Cities Co-Director Linda Bluestein said. "Not

only will it allow them to identify new opportunities for deployment, but it will also provide them with access to a large collection of expert tools and resources."

Provided by National Renewable Energy Laboratory