



EV PREPAREDNESS FOR ELECTRIC UTILITIES

Electric vehicles (EVs) are growing in popularity in Kentucky and across the nation. Kentucky is also rapidly becoming the leader in EV battery manufacturing with \$7 billion in new investment coming to the state over the next few years. With these changes underway, now is the time for electric utilities to prepare for the transition to EVs and the deployment of EV infrastructure.

EDUCATE UTILITY LEADERSHIP AND STAFF ABOUT EVs AND EV CHARGING INFRASTRUCTURE.

- + **Websites/Webinars** – Learn about EVs and EV funding at websites hosted by USDOT, USDOE, non-profits, or others.
 - **USDOE:** afdc.energy.gov/fuels/electricity.html; **USDOT:** transportation.gov/rural/ev; **USDOT and USDOE Joint Office:** driveelectric.gov
- + **EV Infrastructure** – Understand uses and costs for Level 2 and Level 3 (DCFC) charging.

COLLABORATE WITH PEER AGENCIES AND OTHERS INVOLVED WITH EV INFRASTRUCTURE IN YOUR AREA.

- + **Local and State Agencies** – Talk with your local agencies about their EV planning efforts. Work with state agencies on their efforts.
- + **Other Utilities** – Find out what other electric utilities are doing.
- + **Other Organizations** – Reach out to groups like the KY Clean Fuels Coalition, TVA, and Evolve KY.

PLAN FOR EVs AND EV INFRASTRUCTURE IN YOUR COMMUNITY.

- + **EV Infrastructure Planning** – Investigate the power demand and distribution infrastructure needed to support EV charging at home, work, and elsewhere.
 - Assess EV infrastructure impacts on grid load and the needed upgrades, evaluate distribution system and capacity limitations; identify transformer needs, identify where EV chargers can be integrated into a smart grid network, develop a distribution resource plan with station and solar hosting capacity maps
- + **Rate Considerations** – Examine your rate structure. Explore changes to support affordable vehicle charging for customers. Work with the Public Service Commission (PSC).

FUND AND INCENTIVIZE NEW EV INFRASTRUCTURE IN YOUR COMMUNITY.

- + **Private Sources** – Most EV infrastructure to date has been installed using private funds and this trend is expected to continue. Talk to private firms, utilities, and non-profits (like those listed above) about how you can collaborate.
- + **Volkswagen Settlement Funds** – EEC Rebate program. Requires 50% match. EEC to announce details later in 2022.
- + **NEVI Formula Funding Program** – Federal program. Limited to direct current fast charging (DCFC) stations along Interstates and Parkways until FHWA approves build-out. KYTC will provide program implementation details in late 2022.
- + **NEVI Competitive Grant Program** – Federal program. Notice of funding opportunity in late 2022/early 2023. A total of \$2.5 billion available over 5 years.

SUPPORT AND DEPLOY EV INFRASTRUCTURE, GUIDELINES, AND STANDARDS.

- + **Public EV Infrastructure** – Implement the plan. Facilitate, support, or fund charging stations in your community. Determine if there are partners you could support.
 - Consider making “behind the meter” investments to ensure charging adequacy, identify a “make ready” approach for residential and commercial consumers.
- + **Policies and Rates** – Implement new policies or rates in coordination with PSC.
- + **Publicity and Support** – Promote EV awareness to businesses and the public.

Notes: USDOT = U.S. Department of Transportation; USDOE = U.S. Department of Energy; DCFC = Direct Current Fast Charging; TVA = Tennessee Valley Authority; EEC = Energy and Environment Cabinet; NEVI = National Electric Vehicle Infrastructure; KYTC = Kentucky Transportation Cabinet; FHWA = Federal Highway Administration