

Electric Vehicles

Electricity is considered an alternative fuel under the Energy Policy Act of 1992. Electricity can be produced from a variety of energy sources, including oil, coal, nuclear energy, hydropower, natural gas, wind energy, solar energy, and stored hydrogen

Hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), and all-electric vehicles (EVs)—also called electric-drive vehicles collectively—use electricity either as their primary fuel or to improve the efficiency of conventional vehicle designs.

Hybrid Electric Vehicles

HEVs are primarily powered by an internal combustion engine that runs on conventional or alternative fuel and an electric motor that uses energy stored in a battery. The battery is charged through regenerative braking and by the internal combustion engine and is not plugged in to charge.

Plug-In Hybrid Electric Vehicles

PHEVs are powered by an internal combustion engine that can run on conventional or alternative fuel and an electric motor that uses energy stored in a battery. The vehicle can be plugged in to an electric power source to charge the battery. Some can travel more than 70 miles on electricity alone, and all can operate solely on gasoline (similar to a conventional hybrid).

All-Electric Vehicles

EVs use a battery to store the electric energy that powers the motor. EV batteries are charged by plugging the vehicle into an electric power source.

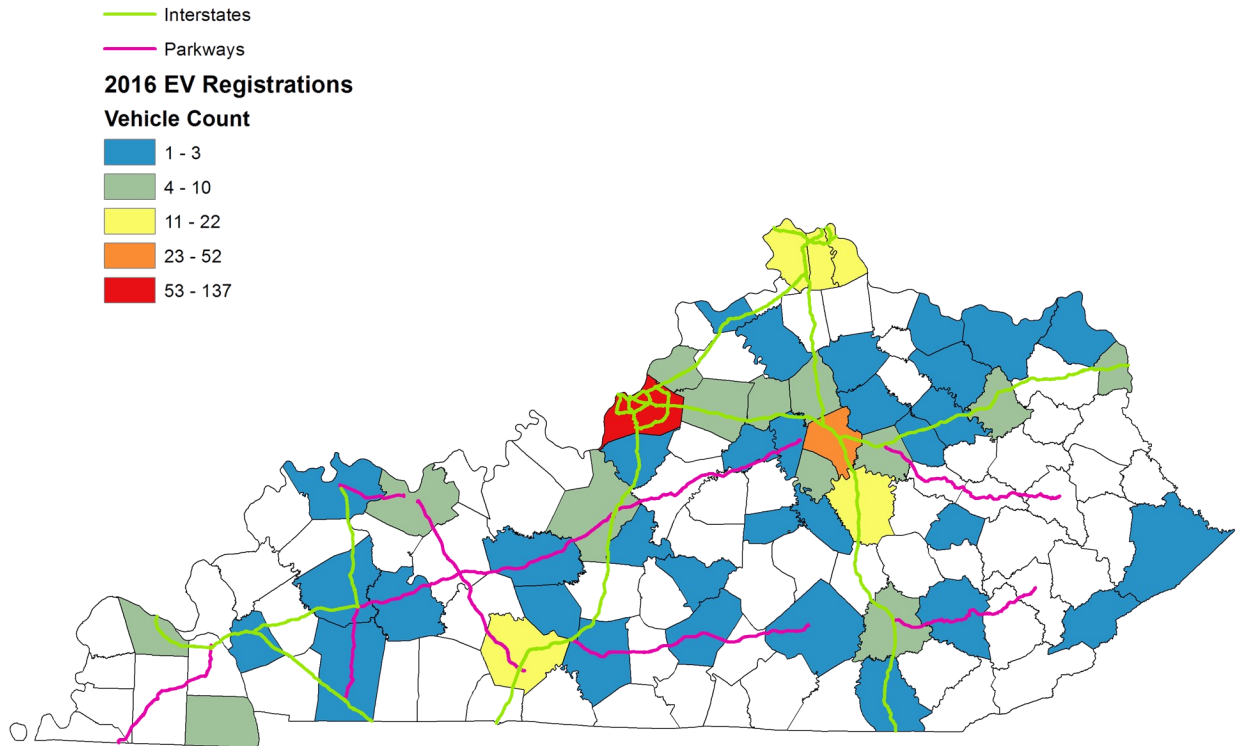
Electric Vehicle Grid Integration

Automakers, charging station manufacturers, utilities, fleet operators, and national laboratories are working to enable plug-in electric vehicle communication with the smart grid and to create opportunities for vehicles to play an active role in building and grid management.

Electric Charging Stations

Many plug-in electric vehicle owners choose to do the majority of their charging at home (or at fleet facilities, in the case of fleets). Some employers offer access to charging at the workplace. In many states, plug-in electric vehicle drivers also have access to [public charging stations](#) at libraries, shopping centers, hospitals, and businesses. Charging [infrastructure is rapidly expanding](#), providing drivers with the convenience, range, and confidence to meet more of their transportation needs with plug-in electric vehicles.

Electric Vehicles in Kentucky



Find an Electric Vehicle

Find and compare alternative fuel vehicles (AFVs), engines, and hybrid systems.

<https://www.afdc.energy.gov/vehicles/search/>

Incentives

The Alternative Fuels Data Center provides information on [Kentucky Laws and Incentives](#).

The [Kentucky Clean Cities Partnership](#) can provide you with information about grants and other opportunities.