Plug In Kentucky
Plug-in electric vehicles (PEVs) may provide Kentucky residents, businesses, and municipalities the opportunity to reduce transportation fuel costs, improve ambient air quality, and reduce atmospheric emissions while also taking advantage of domestically produced energy for vehicles.

Plug-in Kentucky is a Kentucky Clean Fuels Coalition program with a leadership team made up of diverse stakeholders working to provide strategic recommendations and projects to expand PEVs throughout Kentucky.

Visit For More Information:
www.kentuckycleanfuels.org

The Kentucky Clean Fuels Coalition was established in 1993 to provide the first alternative fuels resource for Kentucky educators, consumers and providers of alternative fuels/vehicles. KCFC continues to be a successful non-profit 501C3 self-supporting organization and a national leader in the clean fuels market.

Visit For More Information:
www.kentuckycleanfuels.org/
www.facebook.com/kycleanfuels
https://twitter.com/kycleanfuels

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### Benefits of Electric Vehicles

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Hybrid Electric Vehicles</th>
<th>Plug-In Hybrid Electric Vehicles</th>
<th>All-Electric Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Economy</td>
<td>Better than similar conventional</td>
<td>Better than similar HEVs and conventional</td>
<td>No liquid fuels used</td>
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<tr>
<td></td>
<td>Estimated fuel savings of driving a hybrid can be over 35% city and 20% highway mpg</td>
<td>PHEVs use approximately 50% less petroleum than conventional vehicles</td>
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<tr>
<td>Emissions Reductions</td>
<td>Lower emissions than similar conventional vehicles</td>
<td>Lower emissions than similar HEVs and conventional vehicles</td>
<td>Zero emissions</td>
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<td></td>
<td>HEV emissions vary by vehicle type, but are overall lower than similar conventional vehicles</td>
<td>PHEV emissions are lower than both conventional vehicles and HEVs for tailpipe emissions. There are emissions from electricity production (power plants)</td>
<td>EVs do not have any tailpipe emissions. There are emissions in electricity production (power plants). However, overall emissions from power plant generation is lower than from vehicles running on gasoline or diesel.</td>
</tr>
<tr>
<td>Fuel Cost Savings</td>
<td>Less expensive to operate than a conventional vehicle</td>
<td>Less expensive to operate than an HEV or conventional vehicle</td>
<td>Less expensive to operate than conventional vehicles</td>
</tr>
<tr>
<td></td>
<td>Improved fuel economy over conventional vehicles saves estimated $0.05 to $0.08 per mile.</td>
<td>When driving in electric mode, in Kentucky a PHEV cost per mile is approximately $0.03/mile. When driving on gasoline, can cost $0.05 to $0.07/mile. Both are significantly less than a conventional vehicle which cost $0.10 to $0.15/mile.</td>
<td>EVs use electricity only, so they operate in Kentucky at about $0.08/mile. This is very low compared to a conventional vehicle which cost $0.10 to $0.15/mile.</td>
</tr>
<tr>
<td>Fueling Flexibility</td>
<td>Same as conventional vehicles</td>
<td>Flexibility of being able to fuel at gas station, charge at home, or charge at a public charging station</td>
<td>Ability to charge at home or at a public charging station</td>
</tr>
</tbody>
</table>

### Charging At Home

- An average electric powered vehicle has a range between 40 miles to 100 miles. Average American drives 37 miles per day.

- Multiple charging models are available for at-home charging units with two different levels (AC Level 1 & AC Level 2).

- AC Level 1: Requires no additional cost or installation. Charging level gives 2 to 5 miles of range per 1 hour of charging, eight hours of charging to fully charge to 40 miles of electric range.

- AC Level 2: Installation contractor can consult with a family to determine if the necessary 240 volt service available. One hour of charging can provide 10 to 20 miles of electric range.

### Public Charging

- Charging time depends on type of charger - fully charging a vehicle can take 4-8 hours, but a "fast charge" to 80% can take 20-30 minutes.

- Fast charge options use Direct Current (DC). They are often used for public charging stations.

- Some workplaces have installed charging stations for employee use. A map of these workplaces can be found on the U.S. Department of Energy’s EV Everywhere Workplace Charging Challenge webpage.

- There are approximately 30 public charging stations in Kentucky. Locations can be found on KCFC website.

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**Fleets in Kentucky with Plug-In & All-Electric Vehicles**

- Kentucky Department of Environmental Protection
- Kentucky Division of Fleet Management
- LG&E/KU
- Louisville Metro Government
- Lexington Fayette Urban County Government
- LexTran
- Mammoth Cave National Park
- Mercer Transportation
- Murray State University
- Transit Authority of River City (TARC)
- University of Louisville

**Updated: 06/18/2016**