

# Shaping the Future of Electricity ONE MILE AT A TIME

## Facts about the Chevy Volt

- The Chevy Volt is a Plug-in Electric Vehicle (PEV) built in Detroit, Michigan, at the Hamtramck Assembly Plant.
- Volt operates two ways – in EV mode (battery powered) and extended-range (gasoline powered) mode. Depending on driving conditions and habits, the Volt offers an initial electric range of 35 miles without using a drop of gas or producing carbon emissions.
- Volt plugs into any standard 120 V or 240 V outlet and has been designed to be the most efficient when it's plugged in daily. However, the Volt will still operate without being plugged in for days, weeks or even months. If you don't have a chance to charge it, all you have to do is fill it up.
- In Ohio, the Chevy Volt costs approximately \$1 in energy for a 35-40-mile drive vs. \$5-\$10 in gasoline that would be consumed using a conventional vehicle.
- The Volt is designed to travel longer distances and at all speeds. When the Volt's battery has been depleted, it uses the gas-powered generator to drive up to 375 miles (extended-range mode) until you can plug it in or fill it up again.
- The Volt costs approximately \$35,000. However, U.S. residents can save on the purchase by taking advantage of a federal tax credit up to \$7,500.

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## About EPRI

The Electric Power Research Institute, Inc. (EPRI) conducts research and development relating to the generation, delivery and use of electricity for the benefit of the public. An independent, nonprofit organization, EPRI brings together scientists, engineers and other experts to help address challenges in electricity, including reliability, efficiency, health, safety and the environment. EPRI also provides technology, policy and economic analyses to drive long-range research and development planning, and supports studies in emerging technologies. EPRI's members represent more than 90 percent of the electricity generated and delivered in the United States, and international participation extends to 40 countries.

## Energizing the Future

FirstEnergy Corp. and its operating companies, have a long history of supporting research through the Electric Power Research Institute (EPRI) and auto manufacturers. In fact, FirstEnergy Corp. is part of a 60-member national collaborative dedicated to increasing energy efficiency technologies of Plug-in Electric Vehicles (PEVs) and their relationship to the grid.

Plug-in Electric Vehicles offer the potential for new manufacturing jobs, improved air quality and greater energy security by reducing our dependence on foreign oil. While PEV technology holds significant promise, additional research is needed to ensure effective management of the grid when charging these vehicles in peak demand and in homes during overnight hours. This research can help identify practical ways to reduce the potential impact of widespread PEV usage, its compatibility with our grid infrastructure and support the company's ability to provide reliable service.

Since 2008, FirstEnergy has been part of a national GM-EPRI-Utility collaborative to ensure the Chevy Volt, a PEV, is compatible with utility grid requirements. As part of this research, FirstEnergy is conducting a two-vehicle demonstration — one in Ohio and one in New Jersey — to identify practical approaches to PEV-charging and assess customer usage behaviors.



### Helpful Links

[www.chevrolet.com/volt-electric-car](http://www.chevrolet.com/volt-electric-car)

[www.epri.com](http://www.epri.com)

[www.firstenergycorp.com/content/fecorp/environmental/sustainability.html](http://www.firstenergycorp.com/content/fecorp/environmental/sustainability.html)

[www.goelectricdrive.com](http://www.goelectricdrive.com)