

## Sample Employee Newsletter Articles: Plug-In Electric Vehicle Calculators, Maps and Tools

DOE offers a collection of helpful calculators, interactive maps, and data searches that can assist your employees in determining if driving a plug-in electric vehicle (PEV) is right for them. Here are three articles that can be used to highlight these resources.

- [Vehicle Cost Calculator Helps You Add Up the Savings](#)  
This article helps your employees understand the costs and benefits of buying a PEV as compared to an internal combustion engine.
- [The eGallon: How Much Cheaper Is It to Drive on Electricity?](#)  
With fluctuating gas prices, your employees will want to know how to compare cost of fuels. This section provides an overview of the Energy Department's eGallon tool.
- [Understanding Charging Networks and Locating Public Charging Stations](#)  
Charging stations extend the range of PEVs – use this article to inform your employees about the basics of charging networks and how they can find public charging stations in their area.

### [Vehicle Cost Calculator Helps You Add Up the Savings](#)

When most people go to the car dealership, they take a hard look at the vehicle's window sticker. But that initial price doesn't tell the whole story. By showing only the up-front cost, the sticker price leaves out operating costs such as fuel and maintenance, which can add up over time. To help consumers sort through their options, the Energy Department developed the [Vehicle Cost Calculator](#) and its [accompanying widget](#).

The cost calculator provides consumers an opportunity to take the long view by providing both a vehicle's lifetime cost and cost-per-mile. Users can compare different technologies, including conventional, alternative fuel, and electric drive vehicles. The results aren't just limited to new vehicles; in fact, the database has data on models all the way back to 1996. To personalize their results, users enter their driving habits, local price of fuel, and available tax credits. By seeing beyond the dealership sticker, consumers can choose the vehicles that best meet their needs today and in the future.

The calculator also provides a vehicle's annual energy use and greenhouse gas emissions, helping buyers better understand a vehicle's social and environmental benefits. The energy use encompasses both annual fuel use – such as gasoline, diesel or biofuel – and if applicable, annual electricity use. Using domestic alternative fuels instead of gasoline improves the country's economic and national security. The lifecycle greenhouse gas emissions calculation includes emissions from both the vehicle's tailpipe and fuel production. For example, the lifecycle emissions of an all-electric vehicle vary significantly depending on its electricity source. If a vehicle is charged with electricity derived from burning coal, its lifecycle GHG emissions will be much higher than those of a vehicle charged with electricity from renewable sources like wind. To determine their individualized result, users enter their ZIP code to determine their local electricity mix and emissions.

### [The eGallon: How Much Cheaper Is It to Drive on Electricity?](#)

How much does it cost to commute to work or drive across town? The price of gasoline is posted at every corner gas station, but what about the cost of driving on electricity? The Department of Energy's [eGallon](#)

[tool](#) provides a quick and simple answer to this question and allows drivers to see how much they can save on fuel by using electricity instead of gasoline.

The price of an eGallon tells consumers how much it costs to drive a plug-in electric vehicle (PEV) the same distance you could go on a gallon of unleaded gasoline in a similar car. DOE takes the average distance that a gasoline-powered vehicle can drive on a gallon of gas (28.2 miles for comparable 2012 model year cars), and then calculates how much it would cost to drive the average PEV that same distance. Because electricity prices are a little different state to state, the eGallon tool shows how much an eGallon costs in our state, and compares it to the cost of gasoline. As you can see, on average, it costs about half as much to fuel your car with electricity as gasoline.

If you [chart the price](#) of gasoline and the eGallon price over time, you'll notice something else. Gasoline prices often spike up and down erratically because they're linked to international oil markets. Events half a world away can drive up the price we pay at the pump. High prices and uncertainty are a heavy burden for American consumers. On the other hand, the cost of electricity is regional and much more stable, so you generally don't have to worry about the wild gyrations seen in gas prices.

The eGallon price arms consumers with a little bit more information to compare the costs of driving an electric car to the cost of gasoline, but it doesn't measure some of the other benefits of driving on electricity. There are significant environmental benefits -- particularly as the share of electricity that comes from clean and renewable energy increases -- as well as benefits for America's energy security. Instead of spending nearly \$1 billion a day on foreign oil, with PEVs and other technologies we can power our cars, homes and businesses with American energy.

As PEV technology continues to improve and the cost of the vehicles continues to fall, more and more Americans are making the switch to electric. If you're curious about how much you could save, be sure to check out [energy.gov/eGallon](http://energy.gov/eGallon) for the latest eGallon price in our area.

#### [Understanding Charging Networks and Locating Public Charging Stations](#)

While most plug-in electric vehicle (PEV) charging occurs at home, and employees at our organization can charge at work, sometimes there will be a need to charge at a public location. In those cases it's important to understand available charging networks. While charging networks and charging infrastructure are frequently evolving, a sampling of the major networks currently includes AeroVironment, Blink, ChargePoint, Greenlots SKY, NRG eVgo, SemaConnect, and Tesla. Each network has a unique model, with the most common approaches being monthly subscriptions, pay-as-you-go (i.e., pay per charge), and free (free to charge and no subscription fee required).

Today there are over 10,000 charging stations and over 26,000 charging outlets publicly available across the country. To determine which charging networks have stations along your regular routes and close to your frequent destinations, use the U.S. Department of Energy's [Alternative Fuels Data Center Station Locator](#) and the [Plan a Route](#) function. Select a station, click "more details," and refer to the "electric charging network" field. Please note that many public charging stations are not networked and do not require specific access cards.

For more information on a this range of charging networks and their access fees and use policies, visit the [Clean Cities blog](#).