

Opinion

Sustainable Marblehead: The Future is Here for Electric Vehicles

By Stephen J. Saltzman, M.D. Posted Dec 18, 2017 at 5:01 PM

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According to a study in 2014 by the Massachusetts Department of Environmental Protection, between 1990 and 2011, 39 percent of energy in the Commonwealth was consumed by transportation. The amount used for heat was only 30 percent and general electricity about 20 percent. So by all means we should change to more efficient light bulbs, insulate our homes and turn down the thermostat, and install solar panels. But the biggest impact would come from walking or riding a bike when possible, taking fewer business and pleasure trips by plane, and buying electric cars. Of all these measures one of the easiest is having at least one electric vehicle per family. This would satisfy most people's' transportation needs with zero emissions at the tailpipe.

So why have people been so slow to adopt electric vehicles? Basically there are three reasons, none of which stand up to analysis. Let's examine them. The most common are "range anxiety" and concern about charging availability and time. Well, public charging stations are rapidly becoming more available and convenient. And the Nissan Leaf, which is the most basic and cheapest vehicle, can be purchased for less than \$20,000 with incentives and includes a free charger, and will allow a 100 mile round trip commute to work with zero emissions after an overnight charge. How many people need more than that? So by all means buy that Denali or Range Rover for the occasional trip upcountry, but most of the time it will probably remain parked.

How about the common excuse that technology is getting better so fast that it's better to wait. Again not a convincing reason. Laying aside the obvious point that technology is always evolving and that hasn't stopped most people from buying new phones and TV's, electric cars are already quite adequate and the infrastructure for charging them is better than you might think.

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Currently there are 14 fully electric battery powered cars available. They all have zero emissions at the tailpipe and all get greater than 100 miles per gallon equivalent (of course some energy is consumed producing the electricity but it is that much less and even that amount of "gas equivalent" is increasingly coming from renewable sources). They require no oil changes and have minimal maintenance costs. Eleven of them are less than \$35,000 with rebates and eight are less than \$25,000. The significantly upgraded 2018 Nissan Leaf has a 150 mile range and is still less than \$20,000. The Chevy Bolt is Motor Trend's Car of the Year. They loved it, and you will too. It is fast, spacious, has every safety feature you can imagine, and has a range of 238 miles on a charge. Level 2 chargers are now readily available for under \$1000 and will reduce that overnight charge to four to six hours. Oh, and there is zero maintenance for the first 150,000 miles. Compare that to the cost of regular 10,000 mile maintenance recommended for your average gas powered car, and then multiply by fifteen.

So the technology is here and more than adequate. If you still have concerns that it will be better in the future, of course it will, so lease rather than buy. You will be glad you did now and so will your children and Mother Earth in the future.

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