

Policy on Electric Vehicles

Electric vehicles are designed to run on battery power that is recharged using electricity. Some electric vehicles have a back-up gasoline engine.

Recharging the battery is more energy efficient than burning gasoline. Since electric vehicles emit little or no tailpipe emissions, including carbon dioxide, it makes sense to encourage their use throughout the state. Some of the pollution emitted in tailpipes from gasoline engines exacerbates cardio-vascular illnesses, including asthma. It only makes sense to promote transportation technologies that will result in cleaner air.

Recharging electric vehicles can be done with wind or solar technology. Electric vehicle technology is compatible with increased use of using wind energy to generate electricity. The wind blows the strongest at night, when people are most likely to recharge the battery. Likewise electric vehicle technology is compatible with solar technology. A homeowner or business can use solar panels that are installed on their homes or businesses to recharge the batteries during the day.



Photo by National Renewable Energy Laboratory

The public benefits from increasing the number of electric vehicles on the road:

- They are energy efficient, going farther on a gallon of gas or use no gas at all
- Consequently they are a huge step in reducing greenhouse emissions. If the car is charged with the sun – solar panels or wind turbines – it uses no fossil fuels.
- Clean cars reduce tailpipe emissions, including smog and particulate matter which exacerbate cardiovascular illnesses and asthma.
- Because they run with batteries, they are quiet to operate.
- Reducing the fossil fuels consumed by vehicles will make the United States more energy independent.

The Iowa Chapter supports programs that encourage the transition to electric vehicles, vehicles getting high miles-per-gallon and hybrid vehicles.

“Pew Research reports that roughly 40 percent of Americans say they are somewhat likely to seriously consider buying an electric car. Consumer Reports puts that number as high as 71 percent.”¹ That compares to a 2017 survey by the Automobile Association of America (AAA) which found that 15 percent of Americans say they are likely to purchase an electric vehicle the next time they buy a new car,² which translates to more than 30 million Americans.³

¹ Bloomberg News, “Dealers learning how to sell EVs”, Cedar Rapids Gazette, November 7, 2021

² Erin Stepp, “Consumer Appetite for Electric Vehicles Rivals Pickups”, AAA NewsRoom, April 18, 2017

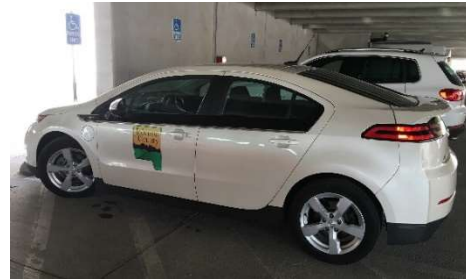
³ Robert Ferris, “Demand for electric vehicles bucks low gas prices, says AAA”, CNBC.com, April 18, 2017

What's more, according to the study, the demand among millennials reaches one in five who are likely to select an electric vehicle for their next new car.⁴ The expansion of charging stations would encourage millennials to visit Iowa, to build businesses in Iowa, and to move to Iowa – all of which would expand Iowa's economy. Iowa Workforce Development reported in April of this year that the unemployment rate was 3.1 percent. By bringing new businesses to the state along with new jobs, Iowa's economy will grow.

The same AAA survey showed that "Americans who are unlikely to buy an electric vehicle or are undecided are worried about the availability of charging stations and fear running out of battery power."⁵ Expanding the charging stations in Iowa would help reduce the range anxiety, particularly among those who have to travel long distances on Iowa's major roadways.

The following policies support the use of electric vehicles:

- The Chapter supports government entities purchasing electric vehicles and charging stations for government fleets. As an example, Johnson County has begun purchasing electric vehicles to use on official business. The county has several solar photovoltaic arrays that supply power to recharge the vehicles.
- The Chapter encourages school districts to purchase electric or hybrid school buses. Given how long some students ride a school bus, being on a bus that has less diesel exhaust will reduce less exposure to tailpipe pollution and less risk of exacerbating asthma. It is estimated that 5.8% of Iowa youth are afflicted with asthma.⁶ Reducing children's exposure to diesel exhaust emissions would help ease the breathing problems faced by those children. Hybrid school buses would have significantly lower emissions, but would not be emission-free. However, given the distance that school buses and students must travel in some rural Iowa school districts, a hybrid option is better than an electric bus.
- The Chapter encourages cities to purchase electric transit vehicles. The American Lung Association estimates 7.9% of adult Iowans and 5.8% of Iowa youth are afflicted with asthma.⁷ By reducing exposure to diesel exhaust, people riding the buses and living and working around bus routes will be able to experience cleaner air.
- The Iowa Chapter opposes applying a surcharge to new registration fees, the fees charged for the sale of used vehicles or to the annual license fee for electric vehicles, vehicles getting high miles-per-gallon and hybrid vehicles. As the public transitions to vehicles that use significantly less gas, encourage – not penalize with higher fees and taxes – those who lead the transition. Furthermore, electric vehicles are more expensive than similar traditional gas vehicles, resulting in higher sales taxes being paid when customers purchase electric vehicles.⁸



Chevrolet Volt owned by Johnson County.
Photo by Mike Carberry.

⁴ Erin Stepp, "Consumer Appetite for Electric Vehicles Rivals Pickups", AAA NewsRoom, April 18, 2017

⁵ Robert Ferris, "Demand for electric vehicles bucks low gas prices, says AAA", CNBC.com, April 18, 2017

⁶ "Current Asthma by State, 2018", American Lung Association, www.lung.org/research/trends-in-lung-disease/asthma-trends-brief/data-tables/asthma-current-state

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⁸ The Iowa Department of Transportation, "2018 Report on the Impact of Electric Vehicles to the Road Use Tax Fund", December 31, 2018

- The Chapter supports setting vehicle registration fees and license fees consistent with similar vehicles, treating SUVs as though they are cars and not as though they are trucks, eliminating the business-trade trucks and farm vehicle discount and removing all other discounts, waivers and exemptions.⁹

- The Chapter supports the electric utilities offering customers an option of time-of-day metering and special rates for off-peak usage which encourages off-peak recharging. Since the electric utilities see a peak usage of electricity during the day and smaller amounts used during the evenings, it is reasonable to shift the recharging of vehicles to off-peak hours. Generally, utilities incur greater costs to supply power during peak time periods while off-peak periods are much less costly; it is least costly to generate power during the night. With time-of-day metering, the customer would be billed less for nighttime power use.



Charging station at Kirkwood Community College. Photo by Pam Mackey Taylor

- The Chapter supports migrating from the gas tax to other revenue sources for all vehicle types, regardless of whether they are trucks, buses, vans or car; and regardless of how fuel-efficient the vehicles are. The Iowa Department of Transportation (DOT) receives the state taxes on each gallon of gas, including ethanol that is sold in Iowa. The DOT uses that money to fund transportation projects – to build and repair Iowa’s roads, to construct and maintain bike trails and to support public transit and rail. In the case of electric vehicles, vehicles getting high miles-per-gallon and hybrid vehicles, less gas is used per mile driven. That results in less tax collected for road construction and repair. The collection of lower amounts of gas tax is not only restricted to electric vehicles. As the technology for vehicles moves away from gas-guzzling to more fuel-efficient vehicles, as people drive less and as people use more public transportation, gas tax revenue declines. Consequently, another funding stream needs to be found to support transportation projects. It should be noted that owners of electric vehicles pay sales tax on the electricity that is used to charge the vehicle.
- The Iowa Chapter opposes the use of GPS devices to track the number of miles a person drives or how many miles are driven within Iowa versus outside of Iowa. Likewise, the number of miles a vehicle is driven should not be a measure for assessing taxes and fees. The Chapter believes that car-owners are entitled to a right to privacy with respect to the number of miles driven each year and where the miles are driven.
- The Chapter supports adding requirements to economic development grants requiring the installation of electric vehicle charging stations. This includes RISE grants given by the Iowa Department of Transportation as well as tax-increment financing grants.
- In many Iowa Cities, and also some counties, builders of apartments and condominiums are eligible for tax-increment financing (TIF). As part of the TIF grant, the builder should be required to include outlets in garages or next to the house units so that residents can charge their electric vehicles. The general procedure for TIF is for a city or county to borrow money from the bond market, giving the money to the building on the condition that the property tax generated on

⁹ Ben Jervey, “Who Wants to Kill the Electric Car This Time? The Koch Brothers Hope It Will be Them”, *Sierra*, July/August, 2019

the building is used to repay the bond loan. For the gift of money to help pay for the construction of the apartments or condominiums, it only makes sense that the public-at-large should get a benefit such as the reduced carbon dioxide pollution that comes from expanded electric vehicle use.

Implementing these policies will mean less money sent out of state for petroleum, more in-state jobs, better vehicles for Iowans, less carbon pollution, and cleaner, healthier air.