



## Foundation awards 2020 fourth quarter grants

The Macon Electric Foundation was happy to award the 2020 fourth quarter grants to three deserving organizations in December.

Friends of Macon County Missouri Animals was awarded \$750 for supplies for homeless pets in the area.

The Clarence United Methodist Church was awarded \$1000 to assist in a project to expand their outdoor youth activities area.

Finally, the Food Bank for Central and Northeast Missouri was awarded a \$1000 grant to assist in serving families and individuals in Macon county who are in need of food assistance.



Foundation Secretary/Treasurer, Carol Burstert, presents a grant to a member of the Friends of Macon County Missouri Animals.

“The Macon Electric Foundation board strives to make a difference in the communities that we serve,” stated Michele Collins, Macon Electric Foundation Vice President. “The Foundation is excited to be able to provide these grants to our local

non-profit organizations and we hope that each grant is beneficial to the communities as a whole.”



Foundation President, Mike Nelson, presents a grant to a representative of the Food Bank for Central and Northeast Missouri.

Organizations can apply for a Macon Electric Foundation grant by submitting an application to the MEC office prior to the due date for each quarter. The 2021 first quarter applications are due on March 26. Interested organizations can visit MEC’s website for more information: [www.maconelectric.com/macon-electric-foundation](http://www.maconelectric.com/macon-electric-foundation).

“These grant opportunities would not be possible without the generosity of the MEC members and PWSD customers who have signed up to participate in Operation Round Up,” stated Collins.

You can sign up for ORU online at [www.maconelectric.com/operation-round-up](http://www.maconelectric.com/operation-round-up), or by calling the MEC office at (660) 385-3157.

## 2021 Right of Way Maintenance

Macon Electric Cooperative has established a five-year tree cutting/trimming program. This year, Bynumville, Huntsville and Cairo substations will all be part of the trimming program. To find the map with the roation area details, please visit our website, [www.maconelectric.com](http://www.maconelectric.com). The contractors have been instructed to clear cut and remove all trees within power lines and will also be trimming yard trees when necessary.

This program has been implemented to help the cooperative remain in compliance with the Right of Way Law of 2008 (also known as Senate Bill 958), as well as help the cooperative stay ahead of potential brush problems.





## Hybrids and Electric and Plug-In, Oh My! Unpacking the Different Types of Electric Cars

Electric cars offer many benefits to both their owners and the environment! Driving an electric car emits 54% fewer carbon dioxide emissions per mile than the average new gasoline car. Moreover, the cost of ‘fueling’ an electric vehicle averages \$1.20 per gallon, much less than the average cost of a gallon of regular gasoline (\$2.21 in September 2020; see “egallon” calculator at [energy.gov](http://energy.gov)).

With more than 1.5 million electric cars currently operating in the United States, electric car sales are forecasted to surpass 3.5 million PER YEAR by 2030. The electric car movement is gaining speed!

Not all electric cars operate the same way. Four main types of electric cars exist on the roads today.

- Hybrid Electric Vehicles (HEVs) are the type of electric car that has been on the market the longest. HEVs include a small battery pack that is not charged by plugging in, but rather the batteries in hybrids are charged by the internal combustion engine and/or the braking process. HEVs function as battery-assisted vehicles and are not powered solely by batteries at any given time. Many modern HEVs are touted to make around 50 mpg for both city and highway.
- Battery Electric Vehicles (BEVs) (also known as EVs) do not rely on any gasoline to power the vehicle and have zero tailpipe emissions. EV operators simply plug their vehicles into their home electric grid or a public charging station to charge. BEVs also generate electricity from braking, similar to HEVs, and use this as a secondary energy source. Unfortunately, EVs are somewhat limited in how far they can drive on a single charge. Most EVs have all-electric ranges of 80 to 100 miles, while a few have ranges up to 250 miles. On longer road trips, these gas-free vehicles rely on the availability of charging stations to continue the



trip, which are sometimes difficult to find. Depending on the model, it may take anywhere from 30 minutes to several hours to recharge a vehicle, much longer than the average stop at a gas station.

- Plug-in Hybrid EVs run on both battery power and gasoline, and have much smaller battery packs than BEVs. The all-battery range in these vehicles is typically between five and 30 miles, and then the internal combustion engine is responsible for anything beyond that. Plug-in hybrids effectively reduce operator emissions for short trips around town; longer trips are powered by gasoline.
- Range Extender Hybrid EVs (REHs) function the same as plug-in hybrids, but have higher battery ranges due to design differences. Examples include the BMWi3 and the discontinued Chevrolet Volt. Some REHs drive more than 50 miles on a single charge. In addition to battery power, they also feature a traditional internal combustion engine, with some models making more than 40 miles per gallon once the battery is drained.



It is worth noting that EV battery ranges can vary depending on weather conditions; for example, cars have to work harder to run in colder temperatures; also, using the defrost or heat is more likely, decreasing range. Also, at-home charging times depend on how you charge at home (120 volts versus 240 volts). These are caveats you will want to consider when shopping for an electric vehicle.

With technology constantly improving, vehicle manufacturers plan to debut electric pick-up trucks in 2021 and many cities are moving toward electric public transportation. The electric car industry does not seem to be slowing down anytime soon!