Poca man juiced on electricity

GM <u>wvgazettemail.com/news/kanawha_valley/poca-man-juiced-on-electricity/article_46116184-82b4-5a30-89b2-9732325def47.html</u>

POCA — Larry Harris is not a fan of the internal combustion engine or unsustainable energy.

Parked in the garage of his Poca home are a pair of electric cars — his 2018 Tesla Model 3 and his daughter's second generation Chevy Volt.

His home's roof supports 38 solar panels, each rated for 325 watts, which on a clear, sunny day, can produce up to 53 kWh, or 53,000 watts, of electricity. That's enough juice to recharge his Tesla, along with the batteries that power his Ryobi electric riding mower and Cricket golf cart, along with a walk-behind mower, e-bike, chain saw, string trimmer, hedge clippers, leaf blower, reciprocating saws and other power tools.

"That's only if it's cool enough that the air conditioner isn't kicking in," he said. "It uses a lot of power."

He is awaiting the installation of a new power meter that will credit him for the electricity his solar array returns to the power grid.

But even if no solar power was being produced, Harris has calculated that it costs him about three cents per mile to operate his Tesla and a bit more than 12 cents a day to cut his grass with electricity supplied by the power company.

That said, his interest in all things all-electric goes beyond saving money on operating costs for cars and power tools.

"I like keeping up with the technology," said the 74-year-old retired electrical engineer and West Virginia Tech grad, who spent his working career running the power plant at FMC's South Charleston chemical works. "And I like doing something for the environment."

In 2007, a year after retiring, Harris bought his first all-electric car, a Miles Electrical Vehicle. It was a far cry from the Tesla he drives today.

"They had to deliver it to me from someplace in North Carolina," Harris recalled. "It was a low-speed community vehicle" designed for urban fleet use, he said.

Miles Electrical Vehicles were America's first street-legal Chinese-made cars, named for Miles Rubin, the California entrepreneur/philanthropist who founded the now-bankrupt company that produced them.

"Almost no one in the state had an electric car at the time," said Harris. "Then I met two guys in Huntington, Mike Beahm and Tony Wheeler, who were doing conversions. Mike was converting a Ford Festiva to run on batteries and Tony was doing the same with a Goldwing motorcycle."

The three co-founded the Appalachian Alternative Energy Association, which later morphed into the West Virginia Electric Auto Association, of which Harris is a past president and the current president emeritus.

A major mission of the West Virginia Electric Auto Association is to promote electric car ownership, a chore made difficult by the state charging, along with Georgia, the nation's highest electric vehicle owners fee — \$200 a year — to offset lost gasoline taxes, and a legislative ban on Tesla dealerships in the state.

According to Plug-in America, an organization supporting electric car owners, there were only 419 electric car owners in West Virginia in 2017, although sales of electric cars to West Virginians nearly doubled between 2017 and 2018.

"I'm convinced electric cars are the wave of the future," Harris said. "They are still fairly rare in West Virginia, and the Association is trying to get more people to consider buying them. I've got three of my nieces driving Chevy Volts and two driving Teslas, and I don't know how many test drives I've given people interested in the cars. The legacy automakers have made some great electric cars, but they didn't advertise them and the dealers didn't want to sell them."

Harris drove his Tesla to Austin, Texas, and back in February, and has made multiple round trips to South Carolina and to his home place at Grassy Meadows, in Greenbrier County, in the electric car. On trips back to Poca from Grassy Meadows, Harris said he takes advantage of the Tesla's self-driving capabilities, only taking full control of the wheel while driving through toll plazas between the I-64 on-ramp at Dawson and off-ramp near Nitro.

Aside from rotating tires and refilling the wiper fluid reservoir, the electric vehicle is virtually maintenance-free, he said. "You don't have to deal with the mess and smell of gasoline, the drive is so much more quiet than being in a conventional car, and I really like how the Tesla performs and responds."

After opening the hood of the Tesla, he pointed out the storage areas arranged beneath.

"When you don't have to design around an engine and an exhaust system, you can be really creative," Harris said.

From his hillside driveway, Harris has a sweeping view of the John Amos power plant, just across the Kanawha River from Poca.

"I would like to think that there will be enough solar units and wind turbines going into operation that, before long, plants like that won't be needed any more," he said.

"Eventually, we've got to stop using fossil fuels. It's just not right for them to all be burned up in the next 200 years or so, and leave all the problems to be solved by future generations."