

## **Teslas and Bolts and Leafs and Volts, Oh My!**

By William M. Brown, Bob Bresnahan, and Daniel A. Prichard for Renewable Taos

Mark your calendar and plan to attend the Taos Electric Vehicle Expo on September 8 at Bataan Hall, down the street from Michael Hearn's Big Barn Dance. It's a great opportunity to learn about Electric Vehicles (EVs), see new EVs from dealerships, and talk to EV drivers to learn the "ins and outs" of ownership. Imagine little or no need for gasoline! If you live in or near Taos, you can charge your EV with electricity from the Kit Carson Electric Cooperative (KCEC) grid that is adding more solar and wind energy every year.

Altogether, households in the KCEC service area spend about fifty million dollars (about \$3,200 per household) each year on fossil fuels (gasoline and diesel) for our vehicles. These dollars largely go to oil companies and their investors. And these burned fuels account for more than half our greenhouse gases emissions from all sources.

We can do something about this. We can satisfy our energy demands with cleaner energy. This means supplying our homes with solar and wind energy to replace coal, natural gas and propane, and electrifying our transportation using clean energy.

Electric vehicles (EVs) are no longer a prospect for a distant future. All-electric and plug-in hybrid-electric vehicles (PHEVs) like the Nissan Leaf and the Chevrolet Volt have been available for several years. Sales of EVs and new model introductions are growing rapidly. As more EVs enter the market, the prices of these vehicles decline. There are now new and used EVs and PHEVs available at great savings. Some of the vehicles at our EV Expo were purchased for less than \$10,000. They are especially well suited for local transportation.

Whereas some EVs may be expensive to purchase new, they are much cheaper to operate than internal-combustion engine (ICE) vehicles. EVs today operate at a cost equivalent to about \$1.00 per gallon of gasoline. EVs have uncomplicated motors with very few moving parts and require little maintenance over their lifetimes.

Owners will tell you that driving an EV is a lot of fun. They have excellent acceleration and do well in all weather conditions. Several models can travel 200 to 300 miles between charges. Charging EVs at home or with a public charging station is safe and easy.

Charging EVs with clean energy from the KCEC grid will actually benefit our regional economy. Those multi-millions of fossil-fuel dollars now sent outside New Mexico can circulate locally in Taos, Colfax and Rio Arriba Counties.

Renewable Taos has analyzed the economic and environmental costs of ICE and EV transportation. There are many benefits of a rapid transition to EVs locally. Many people in our community drive EVs and PHEVs and charge them with local solar power. Several businesses in our area use EVs and have charging stations to accommodate the growing demands of visitors

who drive them. More charging stations are coming. KCEC soon will be installing new EV charging stations throughout its service area.

This free Taos EV Expo will be at the UNM-Taos Bataan Hall at 121 Civic Plaza Drive from noon to 6 PM. Exhibitors inside Bataan Hall will have materials about EVs, PHEVs, charging stations, solar and wind energy, energy storage, and energy in general. Other forms of EV transportation will be on display including electric bicycles, electric motorcycles, ATVs and scooters. Invited speakers will talk about the EV revolution, and what it means to our local citizens and New Mexico.

Several major auto dealerships will exhibit new cars. We invite owners of electric cars, bicycles, motorcycles, skateboards and scooters to exhibit their transportation and answer all your questions. What is it like to drive an EV? How far can an EV or electric bicycle go? Where are the charging stations in our town, state and region? How much do EVs cost? Where can I buy a new or used EV? Which new EVs will be on the market in the future? What does it take to maintain an EV? What does EV electricity cost compared with gasoline? Does driving an EV reduce my carbon emissions?

Come check it out and see the future of transportation. Find out more by visiting [TaosEVExpo.org](http://TaosEVExpo.org)

*The authors are members of Renewable Taos, Inc., a Taos-based non-profit that advocates for a full transition to renewable energy.*

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