

Town of Superior Begins Transition to Electric Fleet

Overview

As a first step in transitioning the Town's fleet to electric vehicles, the Town purchased two Tesla Long Range Model Y's in late September as their latest Administration vehicles. The new Teslas have been outfitted with the Town's logos and will be used for Code Enforcement and other Town-related activities.

The purchase of these vehicles is consistent with the <u>Town's sustainability goals</u> to reduce greenhouse gas emissions by at least 25% compared to a 2005 baseline by 2025 and to reduce ozone pollution below the EPA National Ambient Air Quality Standard (NAAQS) level. The Town Board recently approved the Town's participation in the <u>Local Governments for Sustainability (ICLEI) Race to Zero initiative</u>, which includes a pledge to reduce greenhouse gas emissions as soon as possible.

Because of the lack of moving parts, the Teslas are expected to have a longer service life than their internal combustion engine counterparts. The Long-Range Model Y can travel an EPA-estimated 326 miles on a single charge. It's estimated that the Town will save \$4,750 in fuel costs over 5 years compared to the average new vehicle (estimate based on EPA methods beginning with 2017 models). The Model Y has an overall vehicle safety rating score of 5 stars, with 5 being the highest, from the National Highway Traffic Safety Administration.

Additional Information

Consistent with Town Board sustainability goals, staff direction is to purchase equipment and vehicles that will contribute to improving air quality and reducing greenhouse gas emissions from Town operations. Efforts this year toward reaching this goal include utilizing a landscape contractor with one of their crews using all electric equipment to maintain landscape here, replacing the two small gas-powered machines used for both painting street markings and for staff to ride throughout our community to complete monthly water meter-reading with battery-operated machines, and replacing the two administrative vehicles used by Town staff for code enforcement work and general tasks around Town with electric vehicles.

The two administrative vehicles purchased last month are the Tesla Long Range Model Y. Although more costly up front than a two-wheel drive electric vehicles, the need for all wheel drive in our climate limited our search to two comparable vehicles – the Tesla (\$49,900) and Ford's Mach-E AWD (\$47,980) – which are similarly-priced and cost substantially less than other all-wheel drive models from brands including Audi and Volvo. The Ford uses more electricity, so with its smaller emissions footprint and proven track

record in the market, the Town determined the Tesla was the best choice for this purchase. And with a Tesla center in our community, this choice supports our local economy.

The upfront cost of the new vehicles will be partially offset by the sale of the two vehicles to be replaced. Annual fuel/electricity cost of the electric vehicles is expected to be approximately \$420 annually per vehicle, while the operating cost averages approximately \$2,500 per year. With fewer moving parts to repair and simpler design, the electric vehicles are expected to last considerably longer than internal combustion engine vehicles. The batteries from the electric vehicles will be recycled at the end of their useful life, with over 90% of the battery components saved from the waste stream.

The Town's fleet conversion to electric vehicles is starting with this step to help meet the Town's sustainability goals and exemplifies the forwarding-thinking direction of our community.

The new Teslas will replace a 2015 Jeep Cherokee 4WD and a 2017 Dodge Durango AW. See comparisons below.

