Electric Vehicles Ownership part 2
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Another follow-up a few weeks into ownership of our Volkswagen ID4 EV. We have driven to the airport and back once without charging, and recently took a road trip to Keystone for an AIA conference. We charged the EV to 90% prior to leaving for the conference. It is recommended not to charge to 100% under normal use. To do so would cause the battery to hold less of a charge over time. As we have pointed out in previous discussions of EVs the batteries continue to be a weak link in the transition to EVs from fossil fuel vehicles. We knew we had enough juice to get there. But we got a late start and left at 6 pm, arriving at 8:30. The car has a display that tells us what the charge level is, and how many miles it calculates we have left on that charge, which is very handy.

It was cold and dark. Driving with the lights on Thomas wondered how that affected the mileage? Driving up I-70 towards the tunnel was fantastic! We zoomed past cars struggling with the hill but at the same time one realizes that, too, drains the battery. When we got to the tunnel we were at 40%, down from our initial charge of 90%. So, we knew we would have to charge somewhere to get back home. Laura looked at our charging apps and there are four fast charging stations, free to us on our VW 3-year plan, at the Walmart in Frisco. Thomas was thinking we would have to spend a couple hours there Friday afternoon or early evening before going home.

Because of the EV's regenerative braking, descending downhill from the tunnel we gained 3% then drove through Dillion and up to Keystone arriving at the lodge with 40% still remaining. Probably enough to get home but we were not going to risk it. It was very chilly, and snow was in the forecast for the two days we spent at the conference.

When we checked in we asked if they had any charging stations. They did not but suggested that the Valet parking crew might be able to provide a standard electrical outlet. The EV came with a 110-120v (Level 1) charging cable. However, we knew it was really slow, about 12 miles for each hour of charging. We were allowed to plug it in at the hotel with the help of the valets and 24 hours later it had charged from 40% to 59%. In comparison a fast, Level 2 charger would "charge a BEV [Battery Electric Vehicle] from empty in 4-10 hours". (https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds)

On Friday, following our second night, after 12 hours of additional charging when we checked out it was at 75% which we knew was enough to get us home. All it cost us was two tips to the Valets. Mostly downhill on the way home was more efficient than going uphill to Keystone so we arrived home with 30% power still in reserve.

It is a fun all-wheel drive SUV to drive, and we are still learning some of the things it can do. The network of charging stations is rapidly improving. If we were to drive it to Grand Junction, our online maps say it is a 5-hour, 290-mile trip. Our ID4 has an estimated range of up to 275 miles on a full charge. Of course weather, night driving with lights, and other factors will affect this. According to the Electrify America app we have 4 opportunities to "DC Fast Charge" our EV enroute using the 3 years of free charging included with our VW purchase. (https://www.electrifyamerica.com/locate-charger/). Meaning that we should be able to travel across the state and have a meal somewhere while waiting for our EV to fast charge for 20 minutes to an hour. And should we decide we needed to use the array of other chargers not included in our plan that expands our options greatly.

As mentioned in our first article after purchase of the EV (https://www.eptrail.com/2022/10/19/together-we-build-electric-vehicles-2-ownership/) we are a two

vehicle family, and one is a traditional fossil fuel Honda CRV for longer range driving trips during which we do not wish to stop every 250 miles or so. We are happy with our decision and now we have decreased our gas consumption by two thirds, since Thomas does most of the local driving for work and errands. It is cool not having to buy gas or electricity and travel to Fort Collins, or Denver, or the airport and back home!

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