Leading this study session has moved me forward regarding EVs. With the benefit of including the thoughts of a wider range of people. And now some notes to leave you with.

If you drive in Champaign's cold winter weather, top things you want in a EV. First heated steering wheel. Honest ! I was shocked when I discovered how warm I am holding a warm steering wheel. Heated steering wheel does better than heated seats. And heated seats does better than trying to turn the cars cabin into a sauna. Since your should be wearing some kind of coat anyway, hot steering warm seat and the cabin set for 65 - you will be comfortable and leave more of your battery for getting to your destination. (Ps a higher fan speed does almost nothing to make you warmer but uses a lot more battery.)

Other notes - Shopping for an EV. I mentioned charging speed is probably more important than range. The easy spec to ask about is 800 volt battery system, all 800v systems have good charging times - if the EV is 400v battery ask about peak charging speed in kilowatts (at least 100 kw but more is better). Next the EV really should have a heat pump. Heat pump is FOUR times more efficient than resistant heat for the passengers and actually helps cold weather charging speeds and battery efficiency. The current VW ID4 has a heat pump but my 2021 version does not.

Things I want in my next EV. Vehicle to Grid. If the power goes out at my house, the car will keep me warm for 2 or 3 days. I expect more and more EVs to have that even in the lower cost range because it is a perk that will sell cars. (One more advantage over gas)

So for now, I wait for my VW to get the software update. (I expect better efficiency for longer range). The VW with its balanced weight does very well in the snow. But if I can get that V2G, a heat punp, and AWD with a good range for under $40K. I will be soooo tempted to sell one of my current EVs.

If your household has two cars - a townie EV will reward you. The convenience of home charging and the cost savings for energy and maintenance will reward you. I still feel that a lot of people only need a level one charger. But if you start to use the EV a lot, don't hesitate to get a level 2 charger for home. (a 32 amp or lower). If you would still plan to use the gas car on the road, a Chevy Bolt or Nissan Leaf would be excellent.

When I mentioned in the last session that I was going to make the Tax credit and rebate PowerPoint into a PDF, Norm asked if I would do that for the other sessions. And so I have, I edited a little, attempting to make them stand alone better.

A nice variety of three articles:

Lessons after 100 million electric miles
https://insideevs.com/news/625666/lessons-10000-electric-cars-100-million-miles/

The Psychology of Placing EV Chargers Along Roads Less Traveled
https://www.wired.com/story/psychology-placing-ev-chargers-roads-less-traveled/

Are Electric Cars Lowering Energy Bills
https://cleantechnica.com/2022/12/23/are-electric-cars-lowering-energy-bills-in-california/

Thanks - preparing for this group taught me more than I thought it would, by getting me to think how different groups of people would use EVs.

Best Wishes and email if you have a question.

Robert O'Daniell. rodaniell@att.net