

EV Nomenclature Needs Simplicity and Legends

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By Thomas Beck, AIA, NCARB

How exactly do you say CHAdeMO? We recently had conversations with Laura's brother in law and sister, fellow EV owners and enthusiasts, also deeply involved in civic action aimed toward a sustainable future. They own a Tesla, we own a VW ID4 AWD, and we just recently charged at a public charging port for the first time. As those of you who follow this column know, we bought the VW last fall, and have a charging system at home. We have taken a couple of longer range road trips using the fossil fuel Honda CRV, partially due to the lack of time to carve out for charging, and partially due to the lack of enough charging options available in the areas we were traveling through.

Our recent inaugural experience charging at a public port occurred in Grand Lake, where the chargers located just off the Town Park are said to be free to use, with a 10 minute grace period following the full charge, after which it will charge the credit card that one must enter upon starting the process. The vehicle was at 62% and it only took 14 minutes for us to charge to the recommended 80%, using the combined charging system (CCS) direct-current (DC) option. It almost took us longer to figure out how to make the charger work for us newbies than it did to charge it. Another EV owning friend commiserated with us that it would be helpful for these systems to have a "luddite" option, like a keep-it-simple-stupid (KISS) button that would lead us step by step through the process. The screen kept telling us to "tap the phone" which we now know is an option offered by ChargePoint as an app for your phone. (<https://www.chargepoint.com/blog/charge-your-ev-your-phone-discover-tap-charge>)

I am sure the fly on the wall was having a great time watching as these boomers tried to figure out how to make this charging port work. Since we already had two apps for the EV on the phone, Electrify America (a network of chargers which are free-to-us VW owners for the first 3 years of ownership) and PlugShare, which shows us virtually all of the charging stations available, we were unaware that we needed or might want a third app to tap the phone to pay (or your Apple watch, it turns out.) We finally entered our credit card info into the PlugShare app, started over, and voila! Success.

Referring back to said conversations with our brother-in-law, none of us could easily talk about the charging systems because the names are such a mouthful. There's your Level 1 Alternating Current (AC) J1772 connector, your Level 2 AC J1772 connector or NACS (Tesla) connector, or your DC Fast Charging CCS, CHAdeMO or NACS connectors. Some very good information about these systems is available via the US Department of Energy webpage https://afdc.energy.gov/fuels/electricity_infrastructure.html. Our communication about how great we think our EVs are is hampered by this obtuse lingo. We found a good YouTube video program, "C as CHAdeMO Explained on the ABC...EV," produced in May 2021, (<https://youtu.be/44yCppl4TKg?si=iY1a1toHboHRlsap>) about how to pronounce it and where the term originates. But our point here is that these systems are not going to become super popular if the terms we have to use for them are undecipherable tongue twisters.

Making complex systems easy to use and understand is historically difficult. Wayfinding is notorious for being bad at telling one where to go and how to get there. Although the idea of images replacing words as a universal form of communication is well meaning, without a legend these icons can be inscrutable. System designers, please make a legend easy to find! EV marketers, let's create some fun terms that make talking about our EVs fun and easy to comprehend!

Thomas Beck, AIA, NCARB, is an architect based in Estes Park, Colorado, who has been deeply involved in sustainable building practices since he was a student at CU Boulder in the 1970's.

www.twbeckarchitects.com

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