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SUBJ: EV CHARGING AND 2030 SCOPING PLAN CONCEPT PAPER

We the undersigned are Electric Vehicle (EV) owners active in California EV policy development. To sum up our comment, EV charging must be front and center in the policy discussion if California is ever going to begin to reach the levels called for in the Scoping Plan Concept Paper.

We recently authored a recommendation to the CEC for much needed EV Charging development in major transportation corridors in California. We are proud that we were the first to call attention to the Environmental Justice (EJ) issues raised by the lack of EV charging infrastructure in EJ communities especially in the high pollution areas such as the California's large Central Valley, also known as the San Joaquin Valley, with its central highway corridor of California State Route 99. They tend to have a demographic of lower income households that are ill suited to afford new cars, and instead must rely on older, lower cost and higher polluting vehicles. These EJ households would greatly benefit from the shift to electrified transportation. We are pleased that the CEC acted on our proposal and has awarded the grants to correct this need. We also submitted a letter and suggestions for consideration in the VW settlement and we are pleased that a substantial component of the announced settlement includes EV infrastructure in California.

As noted in the Scoping Plan, 36% of California's GHG emissions come from transportation, the largest single sector, and a large segment of this is privately owned personal transportation vehicles. Much attention has been given to ambitious goals to move personal vehicles towards EVs. The Scoping Plan's alternatives propose up to 4.5 million EVs by 2030. Internationally several countries have actually announced bold moves to prohibit the sale of fossil-fuel powered vehicles next mid-decade. Recognizing the price barriers of EVs, ARB is proposing programs to provide assistance to low-income households to purchase used EVs recognizing the much lower cost of this market. It is abundantly clear that central to California's GHG goals, and the 2030 reduction goal, is a mass conversion of personal autos to EVs.

EVs are powered by electricity stored in batteries. Those batteries need to be "refueled" by charging, generally overnight while at home, or while at work, or at thousands of public charging locations. This is accomplished with equipment that is recognized and used by all auto manufacturers in North America called "J1772", or "Level 1" or "Level 2" (Tesla requires a simple adaptor that is supplied with every car) An alternative method are the three types of "DC fast charging", where a typical EV can be charged in 30 minutes to an hour.

As fundamental and as basic that charging is to the functioning of EVs the word "charging" occurs only once in the Concept Paper on page 14:

Local actions are critical for implementation of California's ambitious climate agenda. Local municipal code changes, zoning changes, or policy directions that apply broadly to the community within the general plan or climate action plan area can help promote the deployment of renewable, zero-emission, and lowcarbon technologies such as zero net energy buildings, renewable fuel production facilities, and zero emission charging stations.

Thus, the only reference to "fueling" up to 4.5 million EVs in the entire concept paper is a note that it is a local action.

We respectfully disagree. EV charging must be front and center in the policy discussion if California is ever going to begin to reach the levels called for in the paper. Even with the next generation of EVs of 200+ miles there is still the need for a robust charging network. Moreover, the cost both in money and resources for every EV to be of this mileage class is simply not needed. Most people can do with the current EV range especially if charging is available. All the extra battery storage represents a questionable use of resources. Moreover, if EVs are to be affordable to lower-income households then smaller batteries may be a necessary tradeoff. In short, public charging infrastructure is a must.

Unfortunately California has no single agency responsible for EV charging. The CEC has worked on it but frankly not at a pace to meet current, let alone future demand. We also have concerns that the CEC is not conducting adequate follow-up on ensuring the proper units are installed in areas like the San Joaquin Valley with its challenging summer heat.

There are no requirements for local developments to install charging. For example in Sacramento a major renewal of the Country Club Plaza shopping center including a multi-screen movie theatre and large grocery store could have been required to install some Level 2 charging. Perfect for the limited range Nissan LEAF that a low-income household might purchase through ARB's program that can be charged while the family enjoys a movie or buys their groceries.

With this leadership background, we believe that ARB must step forward and take the lead. Just as ARB can mandate the type of HVAC system a shopping center installs, why can't ARB using its AB 32 authority mandate public charging for certain types of development? It is no longer acceptable to count on a project applicant "doing the right thing" for charging. We also believe that for workplace charging provision by employers of Level 1 charging can provide an acceptable solution for much lower costs allowing provision of a greater number of plugs. We believe ARB should also take leadership in mandates for workplace charging.

Governor Brown has made clear the enormity of the task, and the absolute importance of the task for the planet's survival. How can we get to a state with 4.5 million EVs when there continues to be no provision for charging support?

We would request that any charging infrastructure policy added to the Scoping Plan be brand neutral and not just serve the SAE-CCS-Combo 1 standard but provide inclusive coverage for all EV drivers. Given the scale of the task ahead we would suggest that the policy be tailored to foster the widest adoption of EVs into California's transportation system. To this end, the NRG Freedom model serves as a standard. All EV drivers should have access to infrastructure if California is to meet Governor's Brown ambitious goals. This includes the thousands of drivers who can now afford used CHAdeMO based EVs that represent a cost effective way to ensure EVs are available to the widest range of incomes and communities such as EJ communities in the San Joaquin Valley. These used vehicles, however, are even more dependent on a robust public charging network.

Any EV charging policy must also include EV charging in public garages, multifamily residential, and workplace charging projects, with priority for low income census tracts and environmental justice areas.

Finally, to ensure that these funds reflect the needs of EV users, we suggest that a public advisory committee be established to provide input into the establishment of a California EV Charging Infrastructure Plan. This is especially critical with the upcoming implementation of charging through the VW settlement as well as work by utilities seeking to enter the charging market. A public advisory committee comprised of EV users, EJ representatives, and others can assure this critical step in development/implementing EV charging infrastructure is done wisely and to the benefit of all.

We would be happy to work with you on this most important issue.

Sincerely

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