

November 1, 2018

California Air Resources Board
Attn: Mark Williams, Mailstop 3E
P.O. Box 2815
Sacramento, CA 95812

Via email: mark.williams@arb.ca.gov

Re: SUPPORT for Electrify America's proposed Cycle 2 Investment Plan

Dear Chair Nichols and Members of the Board:

SemaConnect, a national manufacturer of smart, networked Level 2 electric vehicle (EV) charging stations, respectfully submits these comments in strong support of Electrify America (EA)'s proposed Cycle 2 California ZEV Investment Plan dated October 3, 2018.

This letter makes two main points, as follows:

1. Rapid electrification of the transportation sector is imperative to improve air quality in California; EV charging is essential to do that; and Electrify America is a key resource to deploy and manage EV charging networks at scale.
2. The comments submitted by the Electric Vehicle Charging Association (EVCA) emphatically do not represent the views of SemaConnect. EVCA opposes EA's Investment Plan; SemaConnect strongly supports it.

1. Support for Electrify America's continued investments

Emissions and Air Quality

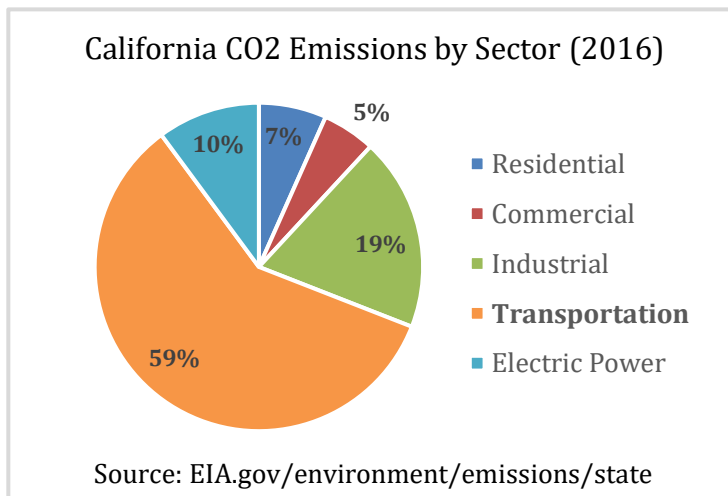
In 2016, transportation dethroned electricity generation to claim the dubious distinction as the highest polluting sector in our nation's economy.¹ In fact, transportation was the only

¹ Energy Information Administration. 2017. *U.S. energy-related CO2 emissions fell 1.7% in 2016*.
<https://www.eia.gov/todayinenergy/detail.php?id=30712>.

consumption sector where carbon emissions increased. It now accounts for more than one-fourth of all U.S. greenhouse gas (GHG) emissions.

In California, the situation is even more severe: transportation accounts for more than half of carbon emissions statewide.² It's not just CO₂; transportation also accounts for the top two NO_x-polluting sectors as well.³

In other words, the data is clear: decarbonizing California's transportation sector is the single most effective way for the state to achieve cleaner and healthier air. And to do that, California needs to electrify transportation for the simple reason that EVs emit far less pollution than gas-powered vehicles. A recent Union of Concerned Scientists (UCS) report confirmed that even after taking into account EVs' more electricity-intensive manufacturing process, battery electric vehicles (BEVs) produce less than half the GHG emissions as comparable gas-fueled cars over their full life cycle.⁴



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What's more, EVs actually get cleaner over time: as a state incorporates more solar, wind and other carbon-free sources into its generation mix, each EV it charges will become cleaner as well. This is especially true in a state like California which is blessed with such strong solar energy and other renewable resources, and with new resources such as offshore wind adding to the mix in the not-too-distant future.

Infrastructure

Charging infrastructure is the *sine qua non*—the essential ingredient—necessary to move EV adoption beyond the early adopters and into the mainstream. Drivers of gas vehicles take for granted their ability to fill up with fuel wherever they go, because gas stations have spread like wildfire since the first “filling station” opened in Pittsburgh in 1905. On the other hand, EV

² Energy Information Administration. 2018. *State carbon dioxide emissions data*. <https://www.eia.gov/environment/emissions/state/>.

³ EPA. 2018. *2014 National Emissions Inventory (NEI) Data*. <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>.

⁴ Union of Concerned Scientists. 2015. *Cleaner cars from cradle to grave*. <https://www.ucsusa.org/sites/default/files/attach/2015/11/Cleaner-Cars-from-Cradle-to-Grave-full-report.pdf>.

charging stations are sparsely distributed and often inaccessible to the public. The International Energy Administration (IEA) reports:⁵

“Charging infrastructure, whether at home, at work or at public locations, is indispensable for operating EVs... the availability of chargers [is] one of the key factors for contributing to the market penetration of EVs.” (emphasis added)

The International Council on Clean Transportation (ICCT) conducts extensive technical and scientific analysis of the often-inter-related factors impacting electric transportation. In a white paper released last year, ICCT examined 350 metropolitan areas globally and found—not surprisingly—that “public charging infrastructure is a key to growing the [global] electric vehicle market” (emphasis added).⁶ ICCT followed up that research by focusing on the U.S.—specifically the 50 most populous U.S. metropolitan areas—and released those results this past summer:⁷

“Electric vehicle adoption and various types of charging infrastructure grow in unison. Public regular, public fast, and workplace charging are each linked with electric vehicle market uptake. These relationships remain complex and multidirectional: Infrastructure increases electric vehicle awareness and driver confidence, and more electric vehicle users increase demand for infrastructure.”

Electrify America’s continued investment is needed

Those of us who work in the EV space tend to live and breathe all things electric, but the reality is that our nation and even California are still firmly in the early adopter stage. Despite the encouraging growth rate of EV sales, gas-powered vehicles still made up more than 80% of new cars sold in California during the first half of 2018. Battery electric vehicles (BEVs) only accounted for 3.1 percent.⁸

We still have a long, long way to go before lack of availability and access to EV charging is no longer a barrier to EV adoption. As anticipated by the Consent Decree, Electrify America will continue to fill a critical role for years to come. For one thing, the business case does not yet exist for private companies to deploy charging stations at scale; even in a relatively high-adoption state like California there aren’t enough EVs on the road yet to provide a return on investment in most locations. Some promising efforts led by large utilities, some of which are

⁵ IEA. 2017. *Global EV Outlook 2017*.

<https://www.iea.org/publications/freepublications/publication/GlobalEVO Outlook2017.pdf#page=31>

⁶ ICCT. 2017. *Emerging best practices for electric vehicle charging infrastructure*.

<https://www.theicct.org/publications/emerging-best-practices-electric-vehicle-charging-infrastructure>.

⁷ ICCT. 2018. *The continued transition to electric vehicles in US cities*.

<https://www.theicct.org/publications/continued-EV-transition-us-cities-2018>.

⁸ Auto Outlook, Inc. on behalf of California New Car Dealers Association. 2018. *California Green Vehicle Report: 2018 Q3*. <https://www.cncda.org/wp-content/uploads/Cal-Alt-Powertrain-Report-3Q-18-Release.pdf>.

being developed or pending review by the CPUC as of this writing, will still only provide a fraction of what's needed.

In short, California urgently needs an all-hands-on-deck approach to solve this chicken-and-egg dilemma which has hindered EV adoption since the industry first began, and Electrify America is a key player.

2. Disagreement with EVCA

The written comments submitted by the Electric Vehicle Charging Association (EVCA) in opposition to the Plan emphatically do not represent SemaConnect's views.⁹ SemaConnect has been a longtime member of EVCA but withdrew its membership earlier today.

SemaConnect appreciates the many areas in which EVCA has advanced the shared goals of the EV charging industry over the years through education, outreach and advocacy, for instance by reducing barriers to charging infrastructure in local zoning codes and addressing COA insurance and liability concerns.

However, SemaConnect and EVCA are diametrically opposed on the fundamental role that Electrify America, electric utilities and similar entities need to fill within the EV industry. SemaConnect strongly supports their role; EVCA strongly opposes it. This is a foundational issue not just for our company, but for our country. If America is to have any hope of coming anywhere close to meeting the IPCC's target to keep global warming within 1.5° C, we need an all-hands-on-deck approach to deploy and operate charging infrastructure. Utilities, public sector agencies and companies such as Electrify America all have a vital role to play.

On this pivotal issue, EVCA neither represents SemaConnect nor can it credibly claim to represent the diversity of companies and approaches within our growing industry. Instead, EVCA is narrowly representing a select few companies and their proprietary business models.

SemaConnect offers three specific counterpoints to EVCA's letter:

1. **Electrify America supports competition in the industry:** Electrify America is neither "damaging competition" nor creating a "disruption in the marketplace," as EVCA's letter contends. To the contrary, EA held a competitive and open solicitation. SemaConnect competed with other providers and earned EA's business fairly and squarely. It is ironic that some companies who competed unsuccessfully for EA's business are now seeking to

⁹ EVCA. 2018. *Comments on Electrify America's proposed Cycle 2 Investment Plan*. <https://www.arb.ca.gov/lists/com-attach/29-vw-zeinvest-c2bd-ws-AWRQIFEzUmAHXgZl.pdf>.

conduct an end run around that very process by appealing to ARB for government intervention.

2. **ARB's current policy framework supports further private investment:** When a market has political and regulatory predictability, private investment follows. When government agencies change course mid-stream and create both short- and long-term uncertainty, as EVCA hopes ARB will do, private capital retreats from the market. Ironically, it is EVCA and its desire for ARB to change course or even prolong approval of EA's Investment Plan that would, if followed, disrupt the marketplace and stifle investment.
3. **Site selection is and should remain a competitive process:** Site selection and qualification is a critical part of the process to deploy charging stations at scale. As companies such as EA move to build out their networks, the identification and leasing process for suitable locations can understandably turn competitive. This is as it should be.

SemaConnect is the leading provider of smart, networked Level 2 charging stations for the office, retail, hospitality and multifamily property sectors. Over time, our account managers have established strong relationships with many of the leading names in real estate throughout California and the nation. These existing relationships enabled SemaConnect to offer Electrify America a turnkey solution for building out EA's Level 2 network and no doubt added to the appeal of our competitive proposal to EA.

In its letter, EVCA once again wants ARB to put its thumb on the scales of competition by imposing arbitrary and unrealistic constraints on the site selection and leasing process. Doing so would undermine our company's—and by extension, Electrify America's—competitive advantage in the marketplace. Moreover, the notion that ARB should prevent EA from leasing sites longer than three months before installation is absurd. Electrify America and its vendors such as SemaConnect have every incentive to move a leased site into permitting, construction and operation as quickly as possible. When there is a delay, it is often related to local permitting issues and is outside of EA's or SemaConnect's direct control.

About SemaConnect

An American success story, SemaConnect is a national provider of smart, networked Level 2 electric vehicle (EV) charging stations. Our company exemplifies the economic promise of vehicle electrification: our founder Mahi Reddy started SemaConnect in 2008 when mass market EVs were still just a dream. In 2011 SemaConnect sold its first charging station as the first EVs were hitting dealer showrooms. Now, just seven years later, SemaConnect has deployed thousands of charging stations across North America.

SemaConnect's flagship product, the Series 6 Smart EV Charging Station, is integrated with our cloud-based network. Our platform is based upon open standards, full interoperability and automated demand response. This approach, combined with our robust back-end functionalities that include data analytics and reporting, make our charging solution ideal for Electrify America, public utilities and other entities that want to manage and operate their own charging networks.

In summary, SemaConnect strongly supports Electrify America's Cycle 2 investment plan as submitted, and respectfully urges ARB to expeditiously move it forward and allow EA's much-needed investment in EV charging infrastructure to continue. Please consider SemaConnect as a resource for you and your staff—we are all navigating this transition together towards an electrified transportation future, and we are all in the same boat. I welcome the opportunity to provide additional information or answer any questions you or your staff may have.

Sincerely,



Josh Cohen

Director of Policy and Utility Programs