



2018 Annual Report to California Air Resources Board

April 30, 2019

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1. Introduction

Electrify America, LLC was created by the Volkswagen Group of America to invest \$2 billion in financially sustainable business opportunities that advance the use of Zero Emission Vehicle (ZEV) technology, \$800 million of which must be spent in California. From its inception early in 2017, Electrify America has moved rapidly to implement the \$2 billion ZEV Investment Commitment.

As detailed below, Electrify America focused in 2018 on securing real estate and initiating construction and operations of Electrify America's ultra-fast electric vehicle charging stations, while overseeing vendors as they deployed a significant number of Level 2 charging stations at workplaces and multiunit dwellings (MUDs). The marketing team deployed a brand-neutral education and awareness campaign, while the Green City Initiative launched its programs. Finally, Electrify America concluded its National Outreach effort as part of its Cycle 2 planning process, and submitted Cycle 2 ZEV Investment Plans for approval.

Electrify America publishes this annual report to share the progress and impact of its Cycle 1 investments in California.

2. A Network of Electric Vehicle Charging Stations

2.1 Introduction

As laid out in the Cycle 1 California ZEV Investment Plan, Electrify America intends to develop a network of electric vehicle charging stations along highly traveled highway corridors and in six carefully selected metropolitan areas during Cycle 1 (see Figure 1). The planned network in California will consist of more than 600 DC fast charging dispensers at approximately 160 charging station sites built or under development. In addition, Electrify America will build charging stations at approximately 235 workplaces and multiunit dwellings in its six target markets. The network will deploy cutting-edge technology to deliver customer-centric charging safely and conveniently, and it will connect California to the Electrify America national network in 42 other states.

Figure 1 - California Charging Infrastructure Map



To launch the network expeditiously, Electrify America initiated two distinct infrastructure strategies:

- First, the company utilized a robust procurement and real estate acquisition process to launch its statewide ultra-fast DC charging network.
- Second, it hired highly qualified and experienced “turnkey” vendors to deploy and maintain charging stations at workplaces and multiunit dwellings.

These strategies allowed Electrify America to move forward quickly in partnership with existing industry leaders. Electrify America anticipates that 35% of its business-driven investments within California will be in disadvantaged or low-income communities.¹

2.2 Electrify America’s DC Fast Charging Network

Electrify America’s internal goal is to build or initiate construction of DC fast charging stations at about 160 distinct sites along high-traffic highways and in six targeted metro areas in California, based on the budgets established in the Cycle 1 California ZEV Investment Plan. This is an ambitious target, based on aggressive station cost estimates, and it is subject to likely revisions as final station costs are realized. Target locations (known as “target zones”) for each station were identified using Electrify America’s

¹ Electrify America uses definitions for low-income and disadvantaged communities established by the State of California, which are published and mapped by CARB on its “Disadvantaged and Low-income Communities Investments” webpage: <https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm>

proprietary station siting methodology, which projected locations where DC fast charging stations will be most needed by 2020.

2.2.1. Acquiring Station Sites in Station Target Zones

Before Electrify America can build a DC fast charging station in any of its carefully selected target zones, it must acquire access to a site to host the station. Therefore, real estate acquisition is a critical component of building a network of DC fast charging stations across California.

Using dedicated internal staff and external real estate experts, Electrify America took steps to secure licenses and leases from site hosts for the 10-year period of the ZEV Investment Commitment in each of its target zones during 2018. In each target zone, Electrify America considers multiple real estate leads, based on their unique attributes, such as availability of three-phase power, site lighting, and access to customer amenities. To acquire high-quality sites, Electrify America has entered into master agreements with 25 large-scale real estate owners that provide access to sites nationwide,² as well as site host agreements with owners of desirable individual properties across California. (In 2018, Electrify America considered an average of more than nine real estate leads per site in California.)

Within each target zone, specific sites are identified for further desktop analysis and then onsite assessments. Electrify America then validates the installation specifics with the local utility and property owner through a site walk and discussion. Throughout the site acquisition process, Electrify America works closely with 18 electric utilities in California to determine efficient locations from a grid perspective with the lowest service connection costs for Electrify America.

The final step in the real estate process is to sign an individual lease or license with the property owner. Although many viable options may exist, ultimately, only one site will be leased or licensed within each target zone. In 2018, Electrify America signed leases or licenses in almost every target zone identified for a Cycle 1 investment. Electrify America’s 2018 progress in real estate acquisition can be seen in Figure 2. Electrify America will continue to secure sites in 2019, although the focus of that activity will shift toward Cycle 2 investments.

Figure 2 - California Site Acquisition Tracker



² Electrify America previously announced real estate partners including Simon Property Group, Walmart, Target Corporation, Brixmor Property Group, Kimco Realty Corporation, Sheetz, Inc., Casey’s General Stores, Inc., DDR Corporation, and Global Partners LP’s Alltown. In April 2019, Electrify America announced its relationships with Kroger, the Save Mart Companies, Federal Realty Investment Trust, Fulcrum Property, ShopCore Properties, ValueRock Realty Partners, The Macerich Company, Washington Prime Group, and Pan-Cal Corporation.

Electrify America strives to ensure that 35% of its business driven investments are in low-income or disadvantaged California communities. In 2018, Electrify America was able to ensure that more than 35% of all identified, qualified, validated, and lease-executed DCFC station sites in California were in low-income or disadvantaged communities.

2.2.2 Constructing a Network of DC Fast Charging Stations

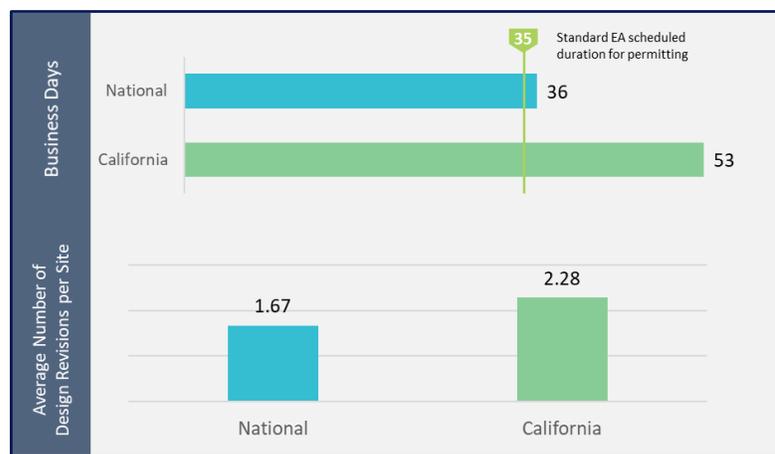
After an extremely thorough and competitive process, Electrify America awarded a contract to Black & Veatch for all DC fast charging station permitting, design and installation work in California. This engineering and construction firm, which maintains a regional office in California for all California sites and provides good paying jobs to thousands of California employees, contractors and subcontractors, has managed the installation of more DC fast chargers than any other engineering and construction company in the United States. In addition, the firm has an exemplary safety record and has an established track record of building complex projects on time and on budget. Electrify America relies on Black & Veatch’s qualifications, training, and reliability to ensure that the work installing Electrify America charging stations in California is of the highest possible quality.

In order to build Electrify America’s stations, Black & Veatch is utilizing a deep and experienced pool of subcontractors throughout California. Furthermore, in order to expand the pool of subcontractors and experienced workers, in 2018 Electrify America worked with Black & Veatch to invite new, qualified local companies to participate in project bids. In Greater Los Angeles, this outreach has enabled new electrical contracting firms, including those who employ unionized electricians, to sub-contract on a significant number of ultra-fast EV charging stations, thereby expanding the pool of local subcontractors qualified to gain future business. As station construction proceeds, Black & Veatch is monitoring the quality and timeliness of the work by its subcontractors in order to ensure that all stations are built on budget and to Electrify America’s extremely high standards. Electrify America anticipates that Black & Veatch will likely consider the performance of its subcontractors when awarding new subcontracts associated with Cycle 1 Electrify America stations.

In 2018, Electrify America and Black & Veatch made progress designing DC fast charging stations in California and continued the permitting process.

Electrify America identified some issues and challenges in deploying the network, particularly with regard to permitting timeframes. Although Electrify America obtained its first 35 permits in California during 2018, the permitting process for DC fast charging station sites in California took an average of 53 business days, which is almost 50% higher than the national average. Permitting

Figure 3 - National and California Permitting Comparison



processes are also requiring station site redesigns much more frequently in California than in the rest of the nation (see Figure 3), which both increases cost and leads to delay. Electrify America obtained more than six times as many permits outside of California as it has obtained within California in 2018.

In July, Electrify America wrote to Governor Brown to raise concern that permitting delays represented the single largest threat to Electrify America meeting commitments made in the Cycle 1 California ZEV Investment Plan. Electrify America in particular drew attention to local level indifference to California statute (A.B. 1236), which requires California cities and counties to expedite EV station permitting, to constrain review to health and safety matters, and to bypass traditional zoning reviews. Since July, Electrify America has worked closely with the Governor’s office on a series of efforts to increase A.B. 1236 compliance, and improved EV station permitting processes were established in some jurisdictions, including Sacramento, Los Angeles County, and Rocklin.

Figure 4 - California Sites and Construction Status



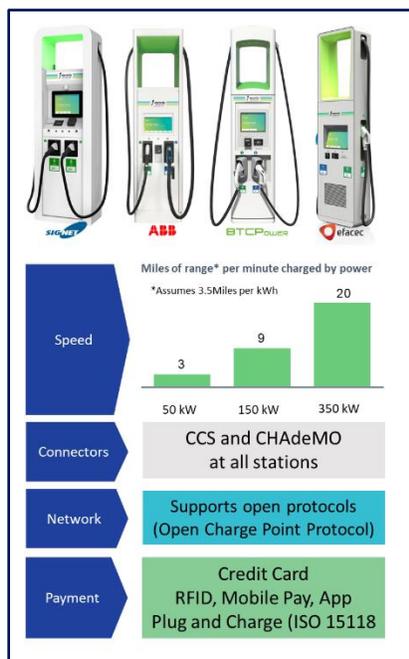
Electrify America greatly appreciates the commitment to improved permitting demonstrated by the Brown Administration in 2018 and strongly supports and encourages continued State-level engagement and oversight of A.B. 1236 compliance during the Newsom Administration. Through guidance documents, staff level engagement with planning and permitting officials, state-level tracking of A.B. 1236 compliance, and legislative or other oversight hearings, the state government has the ability to spread best practices and clearly establish expeditious permitting of EV infrastructure as a statewide priority.

In 2018, Electrify America also dedicating substantial resources to this challenge. Electrify America relocated its National Construction Manager from Virginia to California, shifted project management personnel from other parts of the nation to California, opened a California office, and leveraged Government Affairs staff to meet with jurisdictions all over the state. Electrify America reaches out to jurisdictions to discuss permitting challenges before permit applications have even been submitted, in order to discuss A.B. 1236 requirements and identify areas of local concern in the station site design stage.

Despite these efforts, Electrify America had to cancel planned stations in 2018 in a few jurisdictions due to onerous requirements and lengthy permitting timelines that could not be met within Cycle 1 timeframes and budget requirements, reducing charging services in these communities. Substantially more stations are at risk of cancellation in 2019 as the Cycle 1 completion deadline approaches.

At this time, the cost to build Electrify America’s ultra-fast charging stations average more than 30 percent higher in California than the rest of the nation. While many factors contribute to station costs, the additional burdens imposed by permitting -- including costs to relocate and redesign stations repeatedly, to enclose power cabinets in stone enclosures, to provide accessibility consistent with state guidelines, and to incorporate aesthetic requests of local jurisdictions such as screening and landscaping – appear to be the primary cause of these additional costs, along with higher labor costs. This higher cost per station necessarily means that California will receive fewer stations per dollar invested by Electrify America.

Figure 5 - Transformational DC Fast Charging Technology



As shown in Figure 4, more than 35% of Electrify America’s station sites under development are in disadvantaged and low-income communities. Electrify America moved quickly to initiate construction of DC fast charging stations at the 35 sites with permits, and three station sites opened to the public in 2018.³

2.2.3 Ultra-fast Electric Vehicle Charger Technology

Electrify America’s customer-centric stations use the most advanced technology ever deployed for convenient, fast charging (see Figure 5). Early in 2018, Electrify America’s charging systems became the first 350 kW chargers with state-of-the-art liquid-cooled cables certified to UL standards, and in late 2018, *Popular Science* named Electrify America’s charging system an award winner for its 2018 “Best of What’s New” in the Automotive category.⁴

Highway stations will be equipped with chargers capable of delivering maximum power levels from 150 kW to 350 kW, which are capable of stepping down to lower power levels for vehicles equipped for lower powered DC fast charging. At maximum continuous power, 350 kW chargers are able to deliver

approximately 20 miles of range per minute to a vehicle, vastly improving the customer experience and delivering a high level of power safely and conveniently.⁵

Metro charging stations will feature configurations of either three or six DCFC chargers, reducing queuing times and providing redundancy in high-utilization urban areas. Consistent with Electrify America’s commitment to deploying ultra-fast charging, Electrify America has chosen to upgrade up to 81% of planned 50 kW Cycle 1 metro chargers to 150 kW power. This power increase will offer

³ In 2018, electricity to power Electrify America’s three DCFC station sites was purchased from a utility at commercial rates and reflected the renewable content provided by the utility.

⁴ Neither liquid-cooled cables nor 350 kW charging has ever been deployed commercially in the United States. As a result, Electrify America leased a small space for equipment quality control and validation during 2018.

⁵ Idaho National Lab, DOE, and DOT refer to power levels of 350 kW because the limit of the standard is currently 350 amps multiplied by 1000 volts, or 350 kW. Comments from OEMs and experts during the Outreach Plan process have led Electrify America to believe that the next generation of vehicles will be designed to go up to 920V. As such, the actual range delivered per minute will depend on the vehicle, as vehicles govern the power level accepted. This estimate assumes the vehicle being charged can travel approximately 3.5 miles per kWh.

consumers maximum charging speeds almost three times faster than initially planned. Electrify America DC fast charging sites support both the CCS Combo and CHAdeMO connectors. To maximize the ability of customers to use chargers regardless of which charging network they have joined, Electrify America’s networked public stations accept credit and debit card payment, creating an easy customer experience that is the primary goal of most interoperability efforts. Electrify America is equipping its networked DC fast chargers using the CCS standard with ISO 15118, which enables smart charging functionality and “Plug & Charge” capability.

Finally, all Electrify America DC fast charging stations are networked, using open protocols compliant with Open Charge Point Protocol (OCPP) version 1.6 or higher, and support cellular connectivity.⁶ These capabilities, which are managed for Electrify America by Greenlots after a competitive selection process, help to standardize communication between different chargers and networks. Electrify America also exchanged Open Charge Point Interface (OCPI) based roaming specifications with most US charging networks, and in 2018 Electrify America reached network interoperability agreements with EV Connect, Greenlots and SemaConnect. The collaboration will increase the range confidence of EV drivers, and will feature an interconnected network of approximately 12,500 chargers by mid-2019.⁷

2.2.3.1 Chargers and Equipment Ordered and Delivered

Following an RFP process, Electrify America selected four companies – ABB, BTC Power, Efacec, and Signet – as suppliers of its ultra-fast DC fast chargers during Cycle 1.⁸ Electrify America has ordered all of the more than 600 chargers needed in California for Cycle 1.

These chargers are scheduled to be delivered to station construction sites in 2018 and 2019. In 2018, 51 DC fast chargers were delivered to construction sites.

Electrify America also ordered battery storage capacity in order to mitigate high demand charges, reduce on-peak energy charges, and ease grid loads. In 2018, Electrify America ordered battery storage for approximately 63 station sites, to be delivered and installed in 2019. The destinations of battery

Figure 6 - Electrify America DCFC and User Interface



⁶ The network controls are hosted by Amazon Web Service (AWS), which allows a high security standard. Electrify America undertook intensive testing to approve AWS as a safe and secure environment, as well as security audits of Greenlots as part of the licensing of the network. Also Electrify America selected a vendor to perform architecture reviews and penetration tests to provide data security.

⁷ Electrify America Press Release. “Electrify America Expanding EV Charging Network: Network Interoperability Agreements Announced with EV Network Providers EV Connect, Greenlots, and SemaConnect.” October 18, 2018. <https://www.electrifyamerica.com/sites/default/files/inline-files/ElectrifyAmericaAnnouncesInteroperabilityNetwork.pdf>

⁸ Electrify America Press Release. “Designing and Deploying more than 2,000 Ultra-Fast Electric Vehicle Chargers across the U.S., Electrify America Selects ABB, BTC Power, Efacec and Signet as Charging Equipment Suppliers.” April 17, 2018. <https://www.electrifyamerica.com/sites/default/files/inline-files/Electrify%20America%20Announces%20Charger%20Hardware%20Suppliers%20Update%2004172018.pdf>

systems will continue to be reevaluated in 2019 based on site-specific limitations, ongoing changes in utility rates, and utility grid needs.

2.2.4 Maintenance, Reliability and Backup Systems

The Electrify America Customer Support Center began operations on Wednesday, May 2, 2018. The launch date corresponded with the opening of the first Electrify America charging station site in Chicopee, Massachusetts. In 2018, Charging Specialists on staff were available over the phone seven days a week. Customers are passionate about electric vehicles and excited about the company's plans to build an extensive and convenient charging network. Many callers to the Center asked about Electrify America's new and upcoming charging station locations and expressed interest in all details that can be provided. The Customer Support Center team also provided support for customers that are physically at chargers, whether they needed assistance initiating a charge at an Electrify America charging station or had general questions. In addition, the Center received calls from individuals interested in partnering with or providing services to Electrify America.

The Customer Support Center provides excellent and prompt customer service and aims to help promote ZEV adoption by building lasting relationships with Electrify America customers. The average wait time to speak with a Charging Specialist on staff has been less than 30 seconds. In 2018, the Center received 1,249 calls, with an average call length of just under seven minutes.

As the Electrify America network continues to grow, the scale of the operation and the methods in which customers can engage in conversation with the Center's team will expand.

2.3 Level 2 Workplace and Multiunit Dwelling Charging Stations

Electrify America targeted six metropolitan areas for community charging station investments in Cycle 1. In these communities, Electrify America and its "turnkey" vendors (EV Connect, Greenlots, and SemaConnect) plan to install Level 2 (L2) charging stations at 235 sites, with approximately 75% of the new L2 charging stations at workplaces and the remainder at multiunit dwellings (e.g., apartment buildings, condominiums and row houses). Employees with chargers at their workplace are six times more likely to drive a plug-in electric vehicle than the average worker, according to DOE studies, and chargers located at the workplace can potentially double an electric vehicle owner's daily driving range.

2.3.1. Progress Deploying Workplace and Multiunit Dwelling Charging Stations

Electrify America oversaw the process by which its three vendors secured station sites and deployed L2 charging stations within the boundaries of the targeted metro areas. Vendors used their own proprietary site leads analysis, supplemented by leads suggested by Electrify America, to identify and submit sites for preliminary review by Electrify America. The extensive National Outreach Process (NOP) launched in 2018 to prepare the Cycle 2 ZEV Investment Plans resulted in the submission of over 2,000 site leads from interested stakeholders (e.g., state and local government entities, community organizations, business owners, etc.). These site suggestions were evaluated by Electrify America's real estate team for alignment to the Cycle 1 ZEV Investment Plan. In cases where the leads matched Cycle 1 target zones, Electrify America referred leads to its vendors. Sites that met the team's site selection

criteria then went through a more rigorous qualitative and quantitative review for possible viability as a location for charging investment.

Once sites were reviewed and approved, vendors finalized a standardized site host agreement with potential site hosts (e.g., property developers, office space facility managers, and other real estate site hosts). After reaching an agreement, the vendor will pursue the necessary permits and install and maintain charging stations at no cost to the workplace or MUD, providing a unique benefit to workplace and residential property owners.

At the end of 2018, Electrify America’s vendors had identified 1,377 leads in L2 target zones, and had validated 945 leads as meeting key station site criteria. Vendors had signed site host agreements for 128 station sites in California by the end of the year, as shown in Figure 7. The first 15 stations were operational in California.

Figure 7 - California Workplace/MUD Sites



Electrify America encountered some issues and challenges with regard to progress towards L2 installations; both the timeline to convert leads and the conversion rate did not meet projections during the year. In response, Electrify America reformed the site acquisition process, and the three vendors

Figure 8 - Level 2 Charger Technology

Connector type	J1772
Maximum Power (kW)	6.6-9.6
Estimated charge rate	20-25 mi/hr.
Use case	Workplace/ MUD

leveraged extra sales resources to increase the pace. Electrify America is managing this program closely in order to complete Cycle 1 stations by June 30, 2019.

Each of the vendors is contractually obligated to install 35% of their overall station quota in low-income or disadvantaged community census tracts, and Electrify America must approve every station location to ensure this contractual term is being met. At the end of 2018, more than 35% of qualified leads and contracted sites and a third of operational sites were in a low-income or disadvantaged communities.

2.3.2. Charger Technology

Electrify America-funded workplace and MUD charging stations typically have four to six Level 2 chargers, each with a minimum power level of 6.6 kW (see Figure 8). The chargers will provide 20 to 25 miles of driving range per hour of charging using the non-

proprietary SAE J1772 connector, which can be used with all electric vehicles in the United States.

Electrify America's L2 vendors own, operate, and maintain their own electronic data network in support of L2 chargers installed and operated on behalf of Electrify America, as well as those installed independently of the program's efforts. The chargers installed under this program will be on vendors' networks, and will be able to connect and interoperate with Electrify America's network.

3. Brand-Neutral Education and Awareness

3.1 Brand-Neutral ZEV Education and Awareness Media Campaign

In 2018, Electrify America officially launched its Cycle 1, \$20 million education and awareness campaign in California to educate consumers about the reasons to purchase a ZEV. In order to quickly maximize messaging presence, a coordinated national/local media strategy was developed and executed across multiple media channels to reach consumers at critical touchpoints based on their consumption habits.

Figure 9 - "Plug into the Present" Landing Page



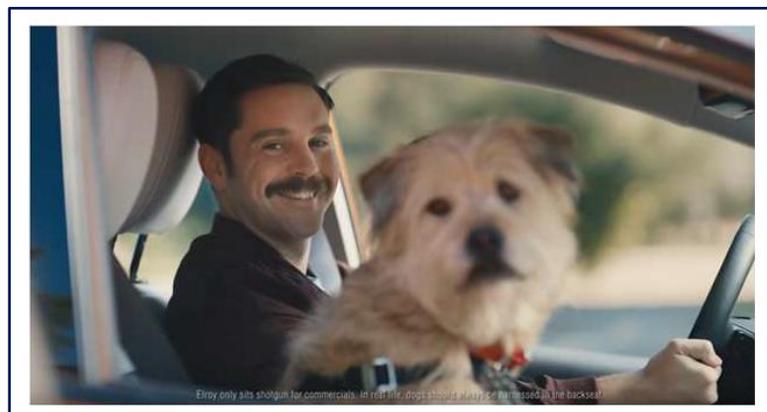
As stated in the Cycle 1 ZEV Investment Plan, Electrify America committed to leverage “media to put ZEVs on the big stage in order to help consumers understand that ZEVs not only meet the majority of their needs today, but even more so as the charging infrastructure network grows.” The education and awareness effort included a brand-neutral TV spot, radio, paid search campaign in all California media markets, and a bilingual landing page (www.plugintothepresent.com) that provides an overview of the benefits of both battery electric and hydrogen fuel cell electric ZEVs, with links to third-party websites containing robust content for users.

3.1.1. JetStones

In early 2018, Electrify America worked closely with Deutsch LA, an advertising agency, and PHD, a communications planning and media buying agency, to design a multi-media campaign (e.g., TV, radio, digital, etc.) for Cycle 1. Electrify America’s brand-neutral advertising spot, titled “JetStones” (Figure 10), aims to broaden consumer awareness of the advantages and availability of zero emission vehicles. Using the theme songs from two popular Warner Bros.’ Hanna-Barbera cartoons, “The Jetsons” and “The Flintstones,” in the television and radio commercials, the campaign is a playful take on the transition of personal transportation from the Stone Age to the reality of electric vehicles available today. The advertising spot, which can be viewed at www.plugintothepresent.com/#tv-spot, features the Chevy Bolt EV and includes zero emission vehicles from six different car manufacturers to showcase a wide variety of EVs available in today’s marketplace.

The six car manufacturers featured in the “JetStones” advertising campaign

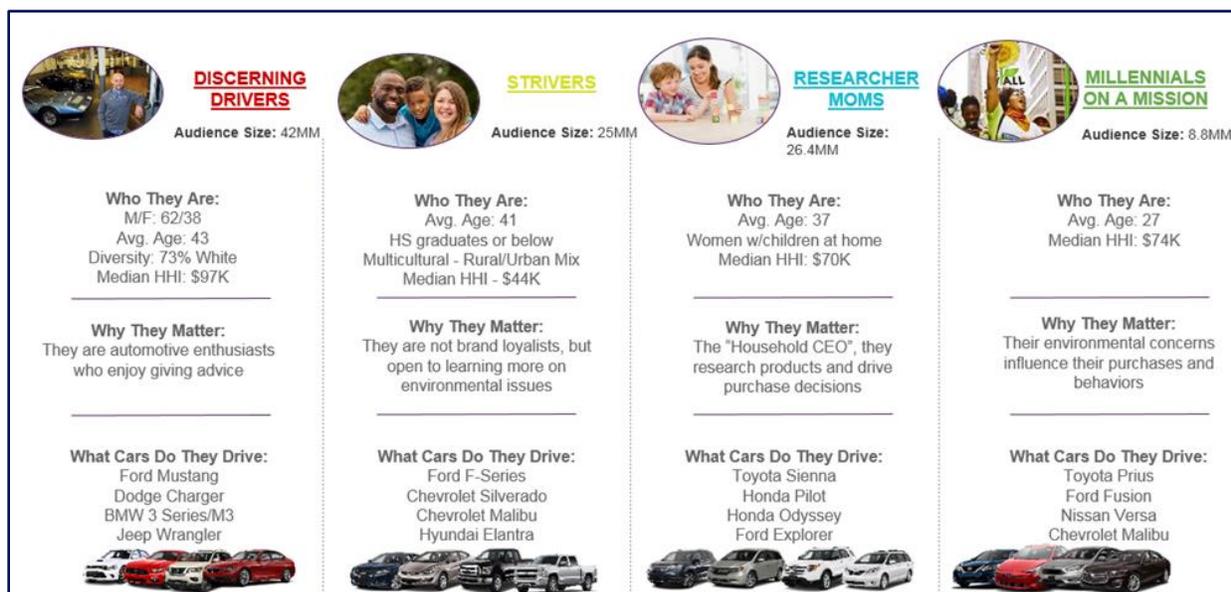
Figure 10 - Scene from “JetStones” Advertising Spot



are Chevrolet, Hyundai, BMW, Volkswagen, Honda, and Nissan. Electrify America offered to numerous other automakers the opportunity to have their vehicles features at no cost.

Electrify America also developed companion radio spots using the same music, themes, and messages, in both English and Spanish. Working with PHD, a media plan was developed based on segmentation analysis and consumer media consumption habits. PHD identified four audience segments to target with the “JetStones” awareness campaign. PHD illustrates its identified audience segments – Discerning Drivers, Strivers, Researcher Moms, and Millennials on a Mission – in Figure 11. The agency tailored its media buys to reach these audiences.

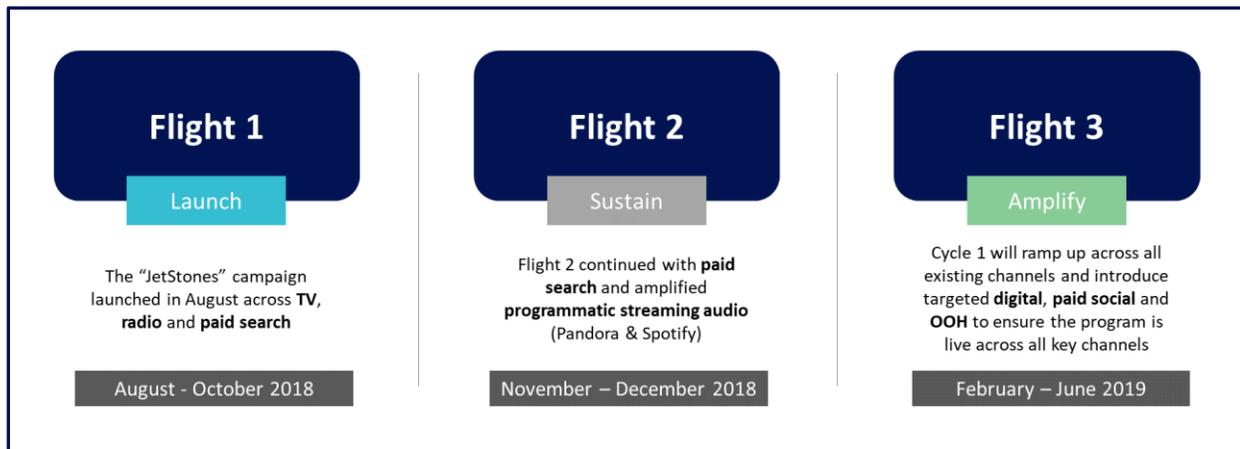
Figure 11 - PHD's Four Identified Audience Segments



Electrify America developed a comprehensive plan to deliver messaging about both ZEV benefits and overcoming barriers to ZEV adoption. The media plan for Cycle 1 has been broken out into three media flights, two of which were completed by the end of 2018 (Figure 12).

Each media flight has a targeted role within the overall campaign objectives to raise awareness of ZEVs and to educate interested audiences by providing third party resources on ZEVs and their benefits. The strategic media plan offered multi-channel messaging, and the messaging and media flights were split across traditional advertising channels like TV, and targeted digital advertising channels, including digital radio, social media, and website. To further support the launch of the campaign, Electrify America produced a toolkit to disseminate the campaign details, including a website link to the 30-second commercial. The campaign toolkit was distributed via email to ZEV community-based organizations, local and state government agencies, utility companies and OEMs. In addition, the campaign toolkit included “Electric Vehicle 101” facts in English and Spanish. (See Appendix 5a.)

Figure 12 - "JetStones" Media Schedule



The advertising campaign included precise targeting and strategic media buys in California to target the campaign messaging. Working with PHD, Electrify America's advertising units ran on "spot tv," whereby the "JetStones" ad aired on national cable networks, but in local markets without having to buy airtime from those networks on a national level. In addition, Electrify America purchased additional advertising in specific zip codes to target low-income and disadvantaged communities, airing both English and Spanish advertising. By these means, Electrify America ensured that more than 35% of all media spending in 2018 occurred in low-income and disadvantaged communities.

Local TV, radio and streaming audio served as the primary mass awareness driving channels. In the second flight, Electrify America shifted to a more digitalized approach, keeping streaming audio live (e.g., Pandora and Spotify), and utilizing this platform for its pertinent data and geo-targeting capabilities to reach the desired low-income and disadvantaged communities and audiences.

Since the launch of the campaign, Electrify America has measured the campaign's success by the following metrics:

- The "JetStones" commercial proved popular and was ranked the 5th most talked about TV ad on social media.⁹
- Awareness:
 - Delivered a total of 146 million impressions (viewers and/or listeners)
 - Streaming audio was particularly effective, with 30 million impressions, exceeding projections by 20%
 - 41% of all plugintothepresent.com sessions originated in California
 - 67% of website traffic accumulated from paid search, indicating targeting has been successful

⁹ Desreumaux, Geoff, "This Week: The 10 Most Talked About TV Ads on Social," Wersm. August 19, 2018. Accessed October 8, 2018. <https://wersm.com/this-week-the-10-most-talked-about-tv-ads-on-social-25/>

- Engagement:
 - Of total paid search site traffic to plugintothe-present.com, 15% of traffic to website came from low-income and disadvantaged community audiences
 - The top traffic driving search keyword for low-income and disadvantaged community audiences was ‘EV charging stations,’ indicating demand for EV chargers (or information about EV chargers) in these communities

Electrify America also shared the JetStones campaign with top media publications, receiving coverage in Reuters, Ad Age, CNET and the New York Daily News, as well as top EV-focused blogs Green Car Reports, Inside EVs, Electrek and Electric Car Reports, among others. Several of these outlets also shared their articles on social media, driving additional engagement with key audiences.

Lastly, in June 2018, Electrify America made a commitment to match up to \$2 million for the nonprofit organization Veloz’s “Electric for All” campaign in California (<http://www.veloz.org/initiatives/electric-for-all/>), 35% of which supported low-income and disadvantaged communities. To amplify the “Electric for All” campaign, Electrify America also added the campaign tagline to the end of its “JetStones”

Figure 13 - Veloz and Electrify America “Electric for All” Logos



commercial. With Electrify America’s commitment, Veloz launched the “Electric for All” campaign, producing content and digital media, including a series of short video spots on the diversity of lifestyles that can be served by electric vehicles.

3.1.2. Creative and Media Strategy

In July 2018, Electrify America published a Request for Proposal for creative marketing services to support ZEV brand-neutral education and awareness programs going forward into Cycle 2. After receiving seven proposals and conducting in-person meetings, Electrify America selected Eleven, an agency based in a low-income census tract in San Francisco, California. Eleven was awarded a contract in November 2018. Eleven has strong omni-channel marketing disciplines and the agency has demonstrated abilities to elevate ZEV awareness by normalizing zero emission vehicles on a national scale. Eleven has been tasked with diversifying the “JetStones” campaign through the end of Cycle 1.

A strategic communications services Request for Proposal was also issued in August 2018 to secure a firm to promote brand-neutral education and awareness of ZEVs through earned media. Through a competitive selection process, including in-person meetings with nine agencies, a joint communications agency team, led by Zeno Group (based in Chicago) and in partnership with Compass Communications (based in California), was appointed the company’s strategic communications agency. The Zeno / Compass agency was awarded the contract in December 2018.

3.1.3. Discover and Drive Experiential Education

In early 2018, Electrify America and its partners, Gail and Rice and Forth, began conducting experiential education "Discover and Drive" events in California to help increase brand-neutral ZEV awareness. These events allowed individuals to experience ZEVs without having to purchase a vehicle. The multi-lingual curriculum highlighted the benefits and cost-effectiveness of ZEVs in California. The program specifics included:

- **12 Locations (nine of which were in low-income or disadvantaged communities – See Appendix 1a):**

Bakersfield, Fresno, Indio, Milpitas, Orange County, Richmond, Sacramento, San Bernardino, San Diego, San Francisco, Stockton, and Torrance

- **Format:** 31 days at shopping centers and Stockton’s “Tune In/Tune Up” event
- **Dates:** February – April 2018
- **New and Used Zero Emission Vehicles:** Nissan Leaf, Chevy Bolt, VW e-Golf, Tesla Model S, BMW i3, Hydrogen Fuel Cell Honda Clarity
- **Target attendance:** 100+ participants/day
- **Recruitment:** Electrify America worked with community-based organizations and CARB staff to increase turnout among low-income and disadvantaged communities, while also intercepting shoppers, promoting via social media and conducting local PR
- **Curriculum:** The curriculum, in English, Spanish, and Chinese, highlighted the benefits and cost effectiveness of ZEVs in California. To supplement the curriculum, Air Quality Management Districts, utilities, the Clean Vehicle Rebate Project, and community-based organizations were invited to table at the events to share information on their programs
- **Co-Hosting:** Assemblymember Eduardo Garcia, Contra Costa County Supervisor John Gioia, and Assemblymember Eloise Gómez Reyes co-hosted the events in Indio, Richmond, and San Bernardino, respectively.

Figure 14 - Discover and Drive Event



The “California Discover and Drive program” yielded a total of 3,644 attendees, 53% of whom reported incomes defined by California as low-income. Among all participants:

- 90% of attendees reported learning about EV infrastructure and are more comfortable driving electric
- 42% increase in those considering a ZEV as the next car they buy or lease
- 40% gained knowledge about ZEVs

3.1.4. Low-Income and Disadvantaged Community Outreach Investments

In the Cycle 1 Supplement to the California ZEV Investment Plan, Electrify America committed \$2-3 million – a very substantial portion of its education partnerships budget -- to seek partnerships with entities with particular access and credibility within California’s disadvantaged and low-income communities. Electrify America conducted a competitive RFP process in 2018 to seek partnerships with culturally appropriate community-based organizations and local entities to raise awareness of ZEVs. More than 75 nonprofit, private, and public entities from across California were invited to submit proposals for this solicitation, including organizations suggested by CARB staff.

In October 2018, Electrify America contracted with six Community-based Organizations (CBOs) for \$2.7 million in work to support Electrify America’s mission of providing education campaigns to low-income and/or disadvantaged communities in the State of California. Electrify America awarded these contracts to: Valley Clean Air Now (Valley CAN); Pacific Asian Consortium in Employment (PACE); Chinese Newcomers Service Center (CNSC); Self Help for the Elderly (SHE); Liberty Hill Foundation (LHF); and GRID Alternatives.¹⁰ Red Horse Hill provides project management services for this program.

Electrify America conducted kick-off meetings with the six CBOs to review their project plans, implementation timelines, and reporting cadence. In addition, on December 4, 2018, a summit was conducted with all six CBOs to share the ZEV education and awareness initiatives by each CBO, provide an overview of the ZEV incentives, and foster conversation between CBOs. The census tracts in which CBOs reported activities in 2018 can be found in Appendix 1e.

Of the total committed funds for these activities and project management, just over 11% was expended in 2018. The following table describes the activities of each organization:

Figure 15 - Clean Vehicle Rebate Project Tabling Activities at Discover and Drive



¹⁰ Electrify America Press Release. November 7, 2018.: <https://elam-cms-assets.s3.amazonaws.com/inline-files/Electrify America LIC DAC Education and Awareness Campaign.pdf>

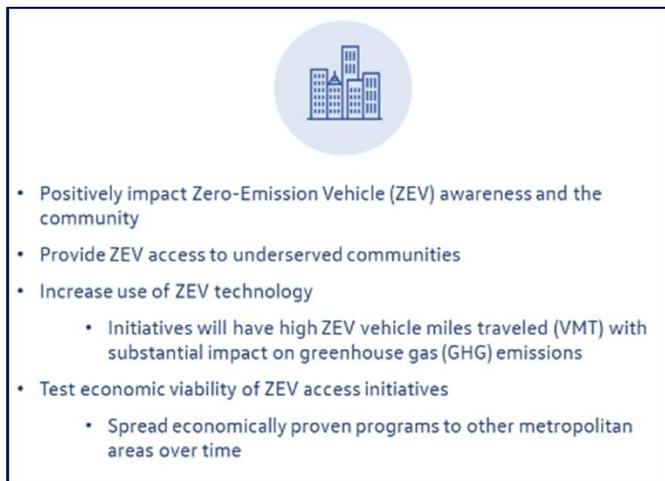
Organization	Description	2018 Accomplishments
 <p>Self Help for the Elderly (SHE)</p>	<p>SHE is a San Francisco-based lead agency of a statewide coalition of immigrant-serving CBOs, providing outreach and education to communities with limited English proficiency.</p>	<ul style="list-style-type: none"> • November training session on ZEV educational content for 17 people, representing 10 organizations. Resulted in consumer education to 3,163 people through local workshops • Materials translated into 10 languages (Arabic; Armenian; Cambodian; Chinese; English; Farsi; Hmong; Korean; Spanish; and Swahili)
 <p>Chinese Newcomers Service Center (CNESC)</p>	<p>CNESC focuses on the educational and outreach activities for Chinese immigrants in the San Francisco area.</p>	<ul style="list-style-type: none"> • Hired a local EV expert and the translation of material prepping for outreach in 2019 • Translated materials included a flyer and a poster translated into Chinese • Physical outreach activities to be completed in Q1 and Q2 of 2019
 <p>Pacific Asian Consortium in Employment (PACE)</p>	<p>PACE is a nonprofit community development organization that creates economic solutions to meet the challenges of the environment, employment, education, housing, and business development for low-income residents in the Pacific Asian and other diverse communities in the Los Angeles county.</p>	<ul style="list-style-type: none"> • Created, translated, and distributed flyers on ZEVs into four languages (Spanish; Korean; Tagalog; and Vietnamese). Promoted materials on PACE website • Participated in seven LIC/DAC community events in Los Angeles to promote ZEVs information, benefits, and rebate programs. Included indirect outreach to 3,030 residents and direct outreach (e.g., received and signed for information materials, etc.) to 351 individuals
 <p>GRID Alternatives</p>	<p>GRID, based in the San Francisco Bay area, is a non-profit organization providing low-carbon solutions exclusively to low-income communities.</p>	<ul style="list-style-type: none"> • Supports the consolidation of existing ZEV education materials to communicate the benefits of ZEVs. Materials will be deployed through CARBs one-stop-shop network. • Began the process of collecting ZEV collateral and on boarded staff to support this initiative
 <p>Valley Clean Air Now (ValleyCAN)</p>	<p>Valley Clean Air Now, based in Sacramento, is a public charity committed to quantifiably improving air quality in California's San Joaquin Valley, a region with some of the worst air quality in the nation.</p>	<ul style="list-style-type: none"> • Conducted two Tune In & Tune Up events with a ZEV ride and drive program: <ul style="list-style-type: none"> ▪ Stockton event drew 151 attendees at a Community Car Clinic, which included 87 test drives, 500 vehicle smog checks, and 28 completed Enhanced Fleet Modernization Program (EFMP) applications ▪ Bakersfield event included 525 vehicle smog checks, 30 ZEV test drives, and 102 attendees at a Community Car Clinic, with 52 completed EFMP applications
 <p>Liberty Hill Foundation (LHF)</p>	<p>Liberty Hill Foundation, based in Los Angeles, has experience working with grassroots organizations in LIC/DAC across Los Angeles County.</p>	<ul style="list-style-type: none"> • Signed MOUs with CBO Partners, including 3 bilingual training sessions • Coordinated Messaging with Sustainable Energy and created Survey and Intake Form (English/Spanish) • Logo and Messaging developed and Salesforce Logic acquired for tracking and reporting needs • Conducted meetings with SCAQMD, CSE, CalETC, CARB Board and had an external evaluation with UCLA's Luskin Center

4. Green City Initiative

4.1 Introduction

The goals of Electrify America’s Green City Initiative are to positively impact Zero-Emission Vehicle (ZEV) awareness, provide ZEV access to underserved, low-income and disadvantaged communities, increase use of ZEV technology to maximize ZEV miles traveled while reducing greenhouse gas emissions, and test the economic viability of ZEV access initiatives. In 2018, Electrify America’s Green City initiative continued implementing programs in three investment areas: ZEV car share and ride-hail service; fleet services, including ZEV shuttle/bus; and charging infrastructure.

Figure 16 - Green City Goals and Impacts



4.2 Car-Sharing and Ride-Hailing Services

In Q1 2018, Electrify America executed agreements with two vendors to provide car-share services in Sacramento. Under the terms of the agreements, GIG Car Share, a wholly-owned subsidiary of the American Automobile Association (AAA), and Envoy Technology, Inc., will deploy more than 400 zero emission vehicles in the Sacramento market during Cycle 1. GIG Car Share will provide a free-float car share service within the urban core of Sacramento. Complementing this investment, Envoy provides a round trip car-share model at multi-unit dwellings. Both car share providers will have a focus in low-income and disadvantaged communities. GIG Car Share will have an estimated 13 sq. mile “Home Zone” operations area, with 67% of the served census tracts designated as low-income or disadvantaged communities. Envoy car share will have an estimated 75% of its properties located within low-income or disadvantaged communities.

After agreements with both car-share vendors were complete, in 2018 the Green City Initiative focused on laying the groundwork for launching car-share services. These efforts were focused on the following critical areas:

- **Securing MUD Properties to Host Envoy Car-share:** By the end of 2018, Envoy signed 19 locations to Mobility Service Agreements and submitted permit applications. Charging stations were installed and services activated at 12 Sacramento multiunit dwelling property sites, 75% of which were in a disadvantaged or low-income community.
- **Gaining regulatory approval for free-float Car-share:** In Q3 2018, the Sacramento City Council adopted permit fees for car-share parking and set eligibility criteria and requirements for any car

share operator seeking special parking privileges in the public right-of-way. Under the approved framework, GIG Car Share will be able to operate in Sacramento.

- **Securing and Preparing the Vehicle Fleets**: GIG Car Share ordered a fleet of 260 Chevy Bolts to begin operationalization of the car-share program. In Q2 2018, Envoy placed their fleet order for 152 Volkswagen eGolfs, and the fleet was incrementally delivered. GIG Car Share and Envoy also ordered aftermarket car-share hardware, software needed to operate the service, and other materials necessary to bring the vehicles up to their brand specifications.
- **Marketing New Services**: Electrify America, the City of Sacramento, GIG Car Share, and Envoy collaborated in a joint marketing campaign, Sac-to-Zero, undertaken by 3Fold Communications, which laid the groundwork for successful car-share program launches.

Envoy car-share service initiated a soft launch at four properties in November and added eight additional properties in December 2018. The cost to use the Envoy service is \$0.15 per minute (or \$9 per hour). Initial utilization is presented in Appendix 2c. As initial results are below Envoy's projections, Electrify America had opened a dialogue with Envoy on options to improve performance through marketing and other means.

4.3 ZEV Shuttle / Bus

In Q1 2018, Electrify America asked entities with a background handling fleet services (e.g., bus, van, shuttle, or micro-shuttle operators and administrators) to submit proposals to provide ZEV shuttle services within Sacramento or connecting Sacramento to regionally significant destinations (e.g., universities, airports, or large employers). Qualified services would address either new needs or substitute for current internal combustion engine shuttle or bus fleets with ZEV shuttles, micro-shuttles, or buses before June 2019.

In Q2 2018, Electrify America evaluated submissions and offered letters of intent to two services: a bus service from Davis to Sacramento jointly provided by Sacramento Regional Transit (SacRT) and Yolo County Transportation District (YCTD); and an on-demand, micro-shuttle service in the Franklin Boulevard region proposed by Franklin Neighborhood Development Corporation and operated by SacRT. On August 1st, SacRT announced the launch of the Franklin Blvd. route using SacRT owned internal combustion engine shuttles. These shuttles will be replaced by the battery electric shuttles purchased by Electrify America through the Green City investment.

Figure 17 - Mayor Steinberg, Supervisor Serna, and other dignitaries at Sac-to-Zero Event



Throughout 2018, Electrify America and these service providers worked to create scopes of work to identify the specific needs of each service and each service provider. For the UC Davis-Sacramento route, this culminated in a verbal agreement with SacRT and YCTD in late Q4 2018, to be signed by all parties in early January 2019. For the Franklin Boulevard agreement, work between SacRT and Electrify America continued through the end of year, with the goal of having a signed agreement in Q1 2019.

Figure 18 - SacRT Franklin Boulevard Shuttle



4.4 Disadvantaged and Low-Income Impact

The Electrify America Green City Initiative has prioritized investments that increase access to ZEV technology in low-income and disadvantaged communities in Sacramento. GIG Car Share will have an estimated 13 sq. mile “Home Zone” operations area in which 67% of served census tracts are designated as low-income or disadvantaged communities. Envoy car share will have an estimated 75% of its properties located within low-income or disadvantaged communities. And the two ZEV shuttle/bus services will also operate in low-income and disadvantaged communities, with the UC Davis route having stops in low-income and disadvantaged communities. Of the census tracts served by the Franklin Blvd shuttle service, 84% are low-income or disadvantaged communities.

Of the 12 sites at which Envoy launched service by the end of 2018, nine are in low-income or disadvantaged communities (1801L Apts., Comstock, Creekside Village, Terracina Gold, Fremont Mews, Gibson Oaks, Q19 Apartments, Willow Glen, and Whispering Pines). To educate tenants at the respective properties and register new members, Envoy will be holding on-site learning events, providing take-away material and snacks. Envoy has also been seeking out a resident at each property that is willing to be an Envoy Ambassador to assist fellow tenants with information and how to register.

4.5 Infrastructure

For public DC fast charging (DCFC) infrastructure, in 2018 Electrify America secured 13 station site leases in the Sacramento region. Electrify America is focused on finalizing permitting, design, and initiating construction. These depot sites are to be publicly accessible and open 24 hours a day as part of the Electrify America charging network.

In Q3 2018, Electrify America energized the first DCFC charging station site in Sacramento County, in the City of Elk Grove. By the end of 2018, the status of the 13 leases was: one site operational; five station sites in construction; two sites in permitting; three in design; and two pending construction on hold due to holiday blackout.

Envoy also worked through their vendors to install L2 charging infrastructure at each of the 12 locations where Envoy launched car-share service. Finally, Electrify America coordinated with Sacramento

Regional Transit, Yolo County Transit District and UC Davis on the design of charging infrastructure for ZEV shuttle bus services.

4.6 Green City Marketing

In July 2018 Electrify America published a Request for Proposal for marketing services to support Green City mobility investments. After receiving multiple proposals and undertaking a competitive process, Electrify America selected 3fold Communications, a local agency in Midtown Sacramento. 3fold Communications has strong roots in many of the Sacramento’s diverse communities, and the firm has demonstrated abilities to elevate awareness employing their unique and comprehensive perspective of California as a whole and the Sacramento region specifically. 3fold Communications created an awareness campaign focused on the Green City Initiative pillars and goals. The campaign, named “Sac-to-Zero,” is an umbrella of all Electrify America services in the Sacramento Region, and 3fold Communications deployed event and media plans, including social media channels under the Sac-to-Zero tagline.

On November 1st, Electrify America launched the Sac-to-Zero campaign at a press conference with Mayor Steinberg and other stakeholders. After launching the campaign, 3fold began participating in local community events and gatherings, including the Midtown Farmer’s Market, DOCO outside the Golden One Center before and during Sacramento Kings games, and the Downtown Ice Skate rink, as reflected in Appendix 3b, 2018 Green City Event Schedule. 3Fold’s event plan incorporates more aggressive outreach once additional mobility services in the city have been launched.

Figure 19 - Green City Marketing Event at DoCo in Sacramento



The media plan is designed to generate mass awareness in the city of Sacramento across all high-profile channels. Each channel has been strategically planned to produce the largest reach possible while providing support for localized initiatives. Paid search was the first channel to launch in December, supporting the Sac-to-Zero, GIG Car Share and Envoy car sharing campaigns. Partnerships with Bing and Google drive interested users to the Sac-to-Zero landing page, further educating about ZEV’s and acting as a resource for consumers looking for more information.

4.7 Problems, Concerns and Lessons Learned

Electrify America learned a great deal during 2018 as it further developed the Green City programs. Most importantly, the program discovered that it has a strong, innovative, and creative partner in the Sacramento community. During the year, the City of Sacramento enacted a new EV Strategy and a set of

policies to enable free float car-sharing, and it has shown leadership and organization that will be instrumental in enabling this Initiative to be a success.

In the car-share programs, Envoy encountered challenges signing up properties to Mobility Service Agreements, which has been attributed to unfamiliarity with Envoy's "Mobility as an Amenity" car-share model among many Sacramento property managers. In addition, Envoy informed Electrify America that some property managers were unfamiliar with electric vehicles and have little experience with L2 charging infrastructure, how it works and the load that it could place on their electrical equipment. Lastly, some properties were reluctant to give up valuable parking space required by the Envoy service.

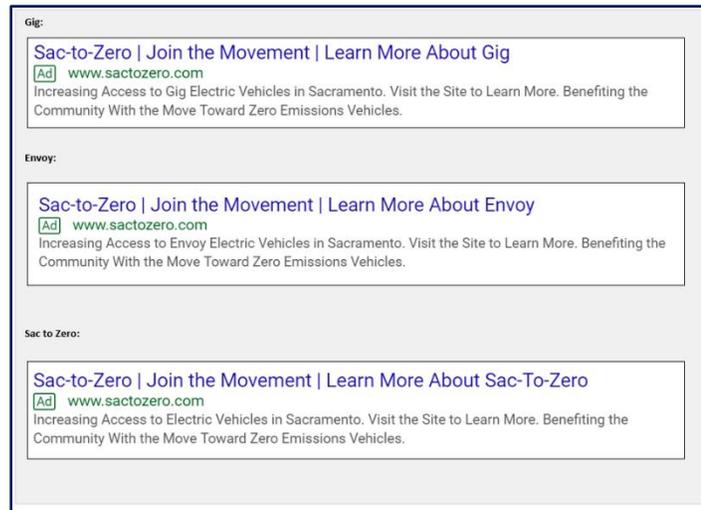
Another important lesson learned in the car-share programs was the importance of sufficient beta testing in advance of launch, which allows vendors to identify any technical issues that emerge as a result of integrating three distinct technologies – electric vehicles, charging stations, and aftermarket car-share hardware and software systems – into a single seamless system.

In the shuttle programs, Electrify America and its vendors learned over the course of the year that demand for ZEV buses and shuttles is exceeding production capacity, leading to substantial time between order and delivery. In addition, as buses are primarily built to order, many of the ZEV bus manufacturers require between 12 and 18 months of lead time to deliver their product. For ZEV shuttles the time range is between six and nine months. Additionally the range for many ZEV bus/shuttle models, while continuing to grow, remains substantially below traditional buses and shuttles.

Finally, with regard to ultra-fast electric vehicle charging station installation, Electrify America was greatly impressed by the permitting processes established by the cities of Rocklin, Elk Grove, and Sacramento, which have established permitting approaches consistent with A.B. 1236 requirements. In each case, these cities have worked with Electrify America to bring themselves into compliance with statewide requirements. The permitting process in Sacramento County is long, and the county does not constrain review to health and safety matters. Electrify America encourages the county to amend its ordinances to comply with A.B. 1236 requirements.

Regarding infrastructure installation for car-share programs, Envoy learned a number of valuable lessons, including that older properties often take longer to plan for and install charging infrastructure due to the dated status of existing electrical cabinets. Another factor is that the permitting process has a deliberate pace; therefore, it is important that the electrician developing and submitting the permitting plans ensure the information provided is entirely accurate, enabling the reviewer to approve the permit request after the first submission.

Figure 20 - Examples of Green City Digital Marketing Materials



5. Outreach and Planning

5.1 National Outreach Effort

Consistent with Electrify America’s commitment to engage in national outreach as part of its investment planning process, Electrify America launched its second call for comments, proposals, and recommendations in 2018 to inform decisions regarding Cycle 2 investments. Electrify America intends to invest \$200 million in California in Cycle 2.

In 2018, Electrify America made a huge effort to engage with stakeholders throughout the ZEV adoption space to understand opportunities to increase ZEV adoption in California. In January 2018, Electrify America opened a national outreach website to solicit specific information for Cycle 2 planning. The request for input provided an opportunity for governments, organizations, and others to assist Electrify America as it updated its analytical models, evaluated new technology and public policy developments, tracked evolving consumer expectations, and explored the value of new allowable ZEV Investments. To assist in drafting the Cycle 2 California ZEV Investment Plan, Electrify America specifically sought the following types of input:

- Suggestions and Data Relevant to Cycle 2 Investments – Inputs from governments or organizations helpful to the decision-making process, including data for helping qualify appropriate new use cases or to place charging stations, ZEV infrastructure plans for individual communities, and information regarding state and local policies designed to increase ZEV adoption;
- Education & Access Suggestions – Suggestions on Electrify America’s approach to brand-neutral education and access or specific events it should consider for participation;
- Specific Site Locations – Site locations nominated for consideration in Cycle 2 infrastructure investments;
- Cycle 1 Comments and Feedback – Feedback on Cycle 1 National and California ZEV Investment Plans, including approaches to metro selection, highways included, evaluation of use cases, and integration of new technology; and
- Other – All other comments or submissions that relate directly to Electrify America’s ZEV Investment Commitment.

Electrify America advertised the submission period in both California and National newspapers, reached out directly to hundreds of government staff and elected officials throughout the country, and held multiple webinars to explain the process and answer questions from government stakeholders.

As part of this process, Electrify America received more than 800 submissions, including 174 from California, each of which was carefully reviewed and considered in developing the Cycle 2 California ZEV Investment Plan. Electrify America reviewed all submissions closely and reached out to submitters for clarification or to discuss collaboration where appropriate. All submissions received either a follow up phone call or an individual email response. In addition to reviewing the submissions, in California, Electrify America continued active outreach to community-based organizations, environmental justice organizations, local governments, and industry stakeholders in order to solicit their suggestions and

guidance regarding Cycle 2 investments. Input from these organizations, as well as from state agencies, municipal governments, federally recognized Indian tribes, and federal agencies, collected through the entire national outreach process helped Electrify America make informed, data-driven decisions about where to invest and what type of investments to make when Cycle 2 commences in mid-2019.

5.2 Cycle 2 Planning

After considering all input received during the National Outreach Process, Electrify America completed its Cycle 2 California ZEV Investment Plan and submitted it to CARB on October 3, 2018. The guiding principles Electrify America used when developing the Plan were:

1. **Start from the basics:** *Analyze both business fundamentals (e.g., highway and metro) and new business opportunities.*
2. **Actively engage external stakeholders:** *Collaborate with stakeholders throughout planning process to strengthen thinking.*
3. **Emphasize real world inputs:** *Leverage operational data, evidence, and customer-backed research to make data-driven decisions.*

In September, dozens of California stakeholders received in-person or telephone briefings on the key components of the Plan, to ensure Electrify America was responsive to input.

The submission of the Cycle 2 California ZEV Investment Plan to CARB began a public process of review. After receipt of comments from the public, two hearings, a workshop, and CARB staff recommendation for approval of the Plan, the Board determined on December 13, 2018, that the Cycle 2 California ZEV Investment Plan met the terms and goals of the 2.0L Partial Consent Decree.

6. Vendor Survey

“The survey will help us understand how investments in California are creating jobs and opportunity. We are committed to ensuring that our investment in the State of California reflects the rich and diverse characteristics of the state and its people.... It is greatly appreciated if you would be willing to prioritize the completion of this survey. Your company’s responses can help ensure that the reports to our regulator accurately reflect the impact of the \$2 billion investment on job creation and economic opportunity.”

–Giovanni Palazzo
President and CEO

–Brendan Jones
Chief Operating Officer

Source: 2018 Semi-Annual Vendor Survey Letter

Electrify America surveys its vendors semi-annually on the economic and job creation impact of its investment in California. Conducted over a period of six weeks, the vendor survey was highlighted to company vendors, and they were notified of its importance to Electrify America’s reporting needs via email, official correspondence, and direct conversations with business unit leads across the company.

As Cycle 1 saw an increasing amount of investment expended in 2018, the pool of vendors receiving the end-of-year survey also increased. Though vendors can neither require their employees to provide demographic information, nor can Electrify America independently verify the residence information provided regarding vendor employees, 45 separate firms voluntarily responded to the survey – more than 50 percent of all vendors surveyed. Nineteen of these

vendors are based in California. Electrify America deeply appreciates that its vendors are willing to invest so much time and effort in order to complete this survey, which highlights the impact on job creation and economic development in disadvantaged and low-income communities across the state.

Many vendors, especially those based in California, noted active efforts to recruit in low-income or disadvantaged communities. For example, BTC Power, a supplier of charging station hardware, noted specific efforts to recruit employees in the areas of Westminster, Garden Grove, and Santa Ana, which are close to their company headquarters, also located in a LIC/DAC area.

Among the total pool of respondents, nine vendors reported recognition as either a woman- or minority-owned entity.¹¹ Of the survey respondents’ total domestically-employed workforce, approximately 12% was employed in California as of the end of 2018. Of the total employees who performed work related to Electrify America projects in California in 2018, 490 vendor employees, including subcontracted personnel, resided in California. Among the California-based vendors who provided information regarding employee demographics, 39% of their employees and subcontractors resided in a disadvantaged or low-income community, while 6% of their employees self-identified as veterans. Lastly and collectively, survey respondents reported working on Electrify America’s projects at 84 offices and vendor-controlled facilities across the state of California, 65 percent of which were located in disadvantaged or low-income California communities.¹²

¹¹ Non-profit organizations qualify as minority-owned or women-owned based on Board of Directors composition.

¹² In addition to these permanent locations, vendors also provided services, such as ride-and-drive events or car-sharing programs, in many locations across the state, which are not part of this dataset.

7. Corporate Citizenship

Electrify America has an unprecedented opportunity to make business-driven investments that facilitate ZEV adoption, thereby improving the quality of life for all Californians. Electrify America is committed to making a difference through our investments, and the impacts of this commitment take many forms.

Electrify America's investments are having a growing economic impact. The firm's vendors range from multi-national corporations to passion-driven community-based non-profit organizations, but they are each growing and doing new work due to their relationship with Electrify America.

Electrify America also has a unique opportunity to drive ZEV adoption, which is an opportunity and responsibility that firm staff takes very seriously. Electrify America seeks to engage stakeholders throughout the ZEV community in order to learn what other experts know, but also to share what Electrify America is learning in pursuit of this goal. This collaboration is an essential element of Electrify America's corporate citizenship. Continuing examples of this activity in 2018 included Electrify America's active participation in Veloz and the Clean Energy Working Group.

In 2018, Electrify America executives and senior leaders were asked to speak at or participate in dozens of meetings, conferences, and other events regarding electric vehicles, charging technology, and ZEV mobility. Electrify America had to turn down many of these invitations in order to focus resources on ZEV infrastructure deployment and investment execution. However, Electrify America attempted to participate in events which were specifically focused on ZEV technology, are likely to grow ZEV awareness, or are consistent with the spirit of Electrify America's outreach obligations.

7.1 50x50 Commission

In October 2017, the Alliance to Save Energy chartered the Commission on U.S. Transportation Sector Efficiency (the "50 by 50 Commission"). Comprised of business executives, local elected officials, utility representatives, and other key stakeholders, the Commission investigates ways to reduce energy use in the United States transportation sector by 50% by 2050 while meeting future mobility needs. Electrify America is now represented on the Commission by its President and CEO, Giovanni Palazzo.

Working through six technical committees, the Commission developed a set of regulatory and policy recommendations needed to achieve the "50 by 50" energy use reduction goal. The report was released on September 26, 2018, and engagement is ongoing with local, state, and national officials, key stakeholder groups, and the general public to broaden the awareness of the Commission's work.

7.2 Minority, Women, and Veteran Business Outreach Efforts during the RFP Process

The company continues to work with the VWGoA Supplier Diversity Manager to ensure a diversity of vendors are aware of Electrify America's RFP process, and in October, this Manager conducted a company-wide training workshop on supplier diversity. We continue to seek out diverse vendors for our RFP's and awarded nearly \$64.5 million to diversity suppliers in 2018.

If a vendor notes an interest in doing business with VWGoA and the vendor's capabilities may match the industries in which Electrify America is investing (real estate, construction, charging hardware, electrical

installers, etc.), the Supplier Diversity Manager sends vendors to the Electrify America team. The same manager also attends supplier diversity meetings and conferences and distributes contact information for the Electrify America Purchasing Team to vendors matching the company's needs. An influx of companies seeking more information about engaging with Electrify America often immediately follows one of the conferences.

Electrify America continues to keep a record of any diversity supplier who seeks to do business with Electrify America and reaches out directly through the info@electrifyamerica.com and/or nationaloutreach@electrifyamerica.com email addresses. Electrify America informs potential vendors of any upcoming opportunities or shares how the vendor might fit within future investment plan cycles.

8. Schedule of Creditable Costs

For the reporting period of January 1, 2018, through December 31, 2018, Electrify America had the following creditable costs. Creditable Costs are in accordance with the final National Creditable Cost Guidance approved by EPA in a letter dated March 21, 2017, as supplemented and the California Creditable Cost Guidance approved by CARB in a letter dated August 4, 2017, as supplemented.

Electrify America formally requests that the California Air Resources Board confirm that all costs expended during the period covered are creditable costs.

Electrify America, LLC

Schedule of Creditable Costs For Fiscal Year ending December 31, 2018 (in U.S. Dollars)

Creditable Costs	Total	California	National
ZEV Infrastructure Investments			
DCFC Infrastructure Investments			
L2 MUD & Workplace Investments			
Green City Infrastructure Investments			
Other Infrastructure Related Investments			
Total - Investments	110,270,923	13,075,698	97,195,225
ZEV Infrastructure Expenses			
Site Identification & Acquisition			
Land Lease			
Maintenance Expense			
Networking Fees & Software			
Customer Call Center			
Credit Card Processing Fees			
Demand Charges			
All Other Operating Expenses			
Subtotal - ZEV Infrastructure Expenses	18,360,488	2,587,029	15,773,458
Green City Expenses			
Car Share			
Infrastructure			
Marketing			
Subtotal - Green City Expenses	5,540,232	5,540,232	0
Education and Marketing Expenses			
Brand Neutral Education	19,315,394	6,975,460	12,339,934
Branded Marketing	2,313,217	1,480,052	833,165
Subtotal - Education and Marketing Expenses	21,628,611	8,455,512	13,173,099
Overhead Expenses			
Personnel Costs			
Personnel-Related Costs			
Service Level Agreements			
Office Rent and Facility Costs			
Legal Costs			
Office Facility and Equipment Maintenance			
Miscellaneous			
Property Taxes and Governmental Fees			
Telecom			
Subtotal - Overhead Expenses	17,673,068	3,448,271	14,224,797
Total - Expenses	63,202,398	20,031,045	43,171,353
Grand Total - Creditable Spending	\$ 173,473,321	\$ 33,106,742	\$ 140,366,579

Notes:
The basis of cost presentation is accrual accounting in accordance with VWAG IFRS accounting standards (reference VW IFRS Handbook – May 2018). The acquisition of capitalizable assets (i.e. additions to property, plant and equipment) are reported in the Schedule of Creditable Costs when the costs are incurred.
Creditable Costs are in accordance with the published National Creditable Cost Guidance approved by EPA in a letter dated March 21, 2017 and the California Creditable Cost Guidance approved by CARB in a letter dated August 4, 2017, as modified by the Creditable Cost Supplement approved by CARB and EPA on March 13, 2019.
Reported overhead expenses in any given year will be provisionally treated as creditable, but EPA/CARB will only approve overhead costs for a particular investment cycle where the average overhead over a given 30-month cycle ends up being at or below the threshold specified in § 5.1 of Appendix C-1. The weighted average of 13 percent will be used as the overhead threshold for the first ZEV Investment cycle as a whole.
For 2018, the overhead costs as a percentage of total creditable costs is within the annual target. The first cycle planning demonstrates that the overhead costs in subsequent years will be below the threshold and the overall overhead costs for the Cycle is expected to be below the threshold. No overhead costs are required to be claimed as provisionally creditable, subject to measurement and verification at the conclusion of the first Cycle, for 2018.
The cumulative Cycle 1 spending, including costs included in the 2017 Annual Report, totals \$152,323,930 for the National Investment Plan and \$38,344,634 for the California Investment Plan. The Cycle 1 spending goal is \$300,000,000 for the National Investment Plan and \$200,000,000 for the California Investment Plan. In accordance with the National and California Creditable Cost Guidance, Cycle 1 Investment Plans will cover the period of January 2017 through June 2019 for the purpose of defining the 30-month period. However, costs incurred beginning in October 2016 through December 2016 are allowable expenses and were included under the 2017 Annual Report.
The Service Level Agreement costs, reported in the Schedule of Creditable Costs, are Related Party Transactions between Electrify America, LLC and affiliated companies comprised of Volkswagen AG subsidiaries.

9. Attestation by Third-Party Reviewer



Crowe LLP
Independent Member Crowe Global

Independent Accountant's Report

To the Board of Directors and Management of Electrify America, LLC
2003 Edmund Halley Drive
Reston, Virginia 20191

We have examined the management of Electrify America, LLC's ("Electrify America") assertion that the total amounts presented in the Schedule of Creditable Costs ("Schedule") for the period of January 1, 2018, through December 31, 2018 ("Reporting Period") are creditable costs in accordance with Appendix C of the Partial Consent Decree dated June 28, 2016, and the approved California Creditable Cost Guidance (collectively referred to as "the Requirements"). Electrify America's management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about whether management's assertion is fairly stated, in all material respects. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management's assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

In our opinion, Electrify America's assertion that the total amounts presented in the Schedule for the period of January 1, 2018, through December 31, 2018, are creditable costs in accordance with Appendix C of the Partial Consent Decree dated June 28, 2016, and the approved California Creditable Cost Guidance, is fairly stated, in all material respects.

This report is intended solely for the information and use of Electrify America, LLC, the United States Environmental Protection Agency, and the California Air Resources Board and is not intended to be and should not be used by anyone other than the specified parties.

Crowe LLP
Crowe LLP

Washington, D.C.
April 25, 2019