2019 Q1 Report to California Air Resources Board

Public Version

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1. Introduction

Electrify America, LLC is investing $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's activities in Q1 2019 were focused on permitting and building ultra-fast electric vehicle charging stations at an unprecedented rate, while overseeing vendors as they deployed Level 2 charging stations at workplaces and multiunit dwellings (MUDs). The marketing team launched its third flight of brand-neutral education and awareness campaign activities, while the Green City Initiative launched its second car-share program. Finally, Electrify America began implementing the Cycle 2 California ZEV Investment Plan.

Electrify America publishes this quarterly 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 between 150 and 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 development of DC fast charging stations at 150-160 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.

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. 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. And 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.

Using dedicated internal staff and external real estate experts, Electrify America secured licenses and leases in more than 80% of its target zones in 2018. In Q1 2019, Electrify America nearly finalized its Cycle 1 site acquisition efforts, and at the end of the quarter Electrify America had secured sites in 97% of target zones. Electrify America also initiated real estate procurement for Cycle 2 investments.

Electrify America strives to ensure that 35% of its business driven investments are in low-income or disadvantaged California communities. In Q1, 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

Electrify America has contracted with 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.

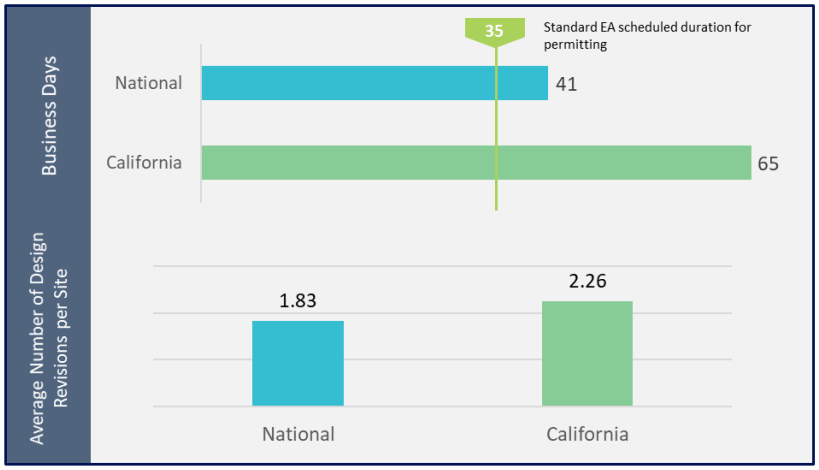
Black & Veatch is utilizing a deep and experienced pool of subcontractors throughout California. Furthermore, in order to expand the pool of subcontractors and experienced workers, in 2018 Electrify America worked with Black & Veatch to invite new, qualified local companies to participate in project bids. 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.

[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.

In Q1, Electrify America and Black & Veatch made progress designing, permitting, and constructing DC fast charging stations.

However, Electrify America continued to encounter challenges and issues, particularly with regard to permitting timeframes. During the quarter, the average time to complete the permitting process for DC fast charging station sites in California grew from 53 business days to 65 business days – nearly 60% higher than the national average. Permitting processes are also requiring station site redesigns much more frequently in California than in the rest of the nation (Figure 2), which both increases cost and leads to delay.

Figure 2 - National and California Permitting Duration and Site Revisions



In January, Electrify America arranged a meeting between the charging industry and members of the California State Assembly. Stakeholders drew attention to local level indifference to California statute (AB 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.

Electrify America has also engaged closely with the Newsom Administration to encourage continued state-level engagement and oversight of AB 1236 compliance. Through publication of the Electric Vehicle Charging Station Permitting Guidebook, staff-level engagement with planning and permitting officials, and state-level tracking of AB 1236 compliance, the state government has the ability to spread best practices and clearly establish expeditious permitting of EV infrastructure as a statewide priority.

At this time, the cost to build Electrify America's ultra-fast charging stations average more than 30% higher in California than in 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 California-specific 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.

During Q1 Electrify America revised its planned station investments in Cycle 1 due to these factors, establishing a new goal of completing construction on 100-120 station sites. Electrify America also cancelled or placed on long-term hold planned stations in jurisdictions with onerous requirements and lengthy permitting timelines that could not be met within Cycle 1 timeframes and budget requirements, in order to focus resources on the stations that can feasibly be built. Electrify America also began

evaluating alternative locations for Cycle 1 projects for which permits cannot be obtained consistent with AB 1236 best practice timelines.

In the first quarter of 2019, Electrify America also made progress moving projects through the utility new service interconnection process. Similar to permitting, Electrify America has encountered unique challenges with utility new service interconnection processes across the state. The quantity of locations and magnitude of power required at Electrify America's ultra-fast charging station sites requires significant effort from utilities to validate power availability, design utility service, create easements, and schedule construction crews to accommodate Electrify America's rapid build cycle and volume of sites.

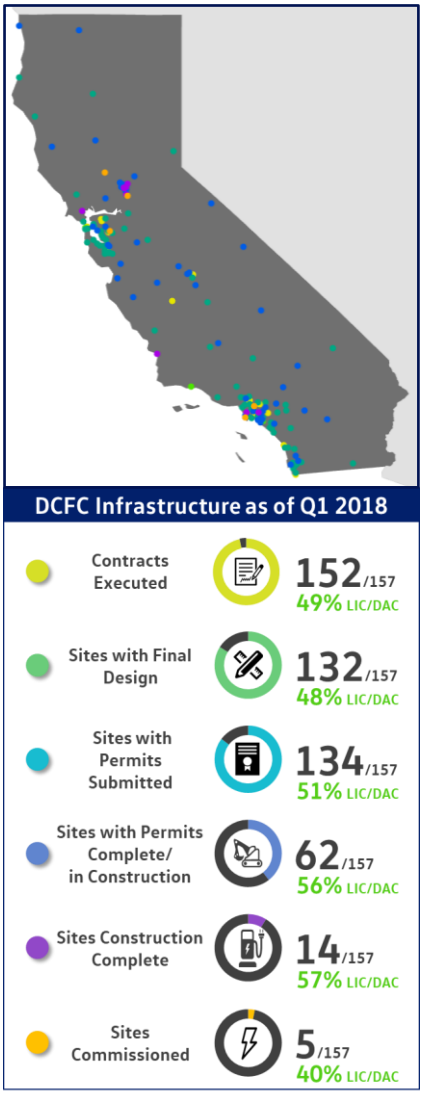
In some utility service areas, Electrify America is building ultra-fast charging stations at only a handful of locations. However, in several utility service areas Electrify America is building at dozens of station sites. In addition to this high number of locations, Electrify America's ultra-fast charging station locations frequently require more than a megawatt of power to be supported by utilities in the parking area of a retail development. In some cases, this requires upgrades to the utility's distribution system, while in others, the utility's distribution system can adequately support the additional power with few upgrades. This challenge can be further complicated when other high-power charging providers request service at the same location. To support Electrify America's rapid deployment, Electrify America has even taken on civil work to support upgrades to a utility's distribution system, termed "betterment work", to supplement the utility's crews and support Electrify America's deployment objectives.

In addition to these technological challenges, there have been a few instances where utility policies have needed to be changed to allow for an operator of charging equipment to be provided dedicated, separately metered electric service at a retail location. Permitting changes can further delay DC fast charging projects when they require significant changes to a location and result in the utility having to redesign their service.

As of today, Electrify America has requested but not received the final engineering design of the interconnection from utility companies at more than 20 station sites. For an additional six station sites, Electrify America is awaiting the finalization of the utility interconnection contract. Finally, at 12 station sites, Electrify America has completed station construction, but the station has not been connected to the power grid by the local utility company.

Despite these challenges, Electrify America and California utilities have worked together to make significant progress on improving processes to better fit the unique needs of DC fast charging providers across the state. A number of utilities have updated their policies, streamlined processes, and provided additional, dedicated resources to support the development of fast charging in their service area. Several noteworthy utilities that have worked closely with Electrify America to deploy its charging locations include Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Los Angeles Department of Water and Power, and Southern California Edison.

Figure 3 - California Sites and Construction Status



As shown in Figure 3, 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 62 sites with permits, and five station sites were open to the public by the end of Q1.

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 4). 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.[3]

Highway stations are 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.[4]

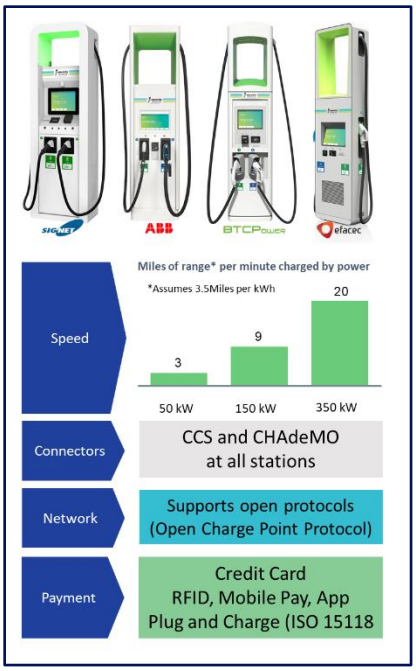
Metro charging stations will feature configurations of either three or six DC fast chargers, reducing queuing times and providing redundancy in high-utilization urban areas. The majority of metro stations in California feature 150 kW chargers.

Electrify America DC fast charging sites support both the CCS Combo and CHAdeMO connectors. To maximize the ability of customers to use charging stations regardless of which charging network they

[3] 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 2019.

[4] 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.

Figure 4 - Transformational DC Fast Charging Technology



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, and it was announced in January that Electrify America will be the first DC fast charging network in the United States to offer "Plug & Charge" capability at its stations. A strategic agreement with Hubject to implement "Plug & Charge" has been established, and Electrify America has joined CharIN to leverage that organization's support.[5]

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 are managed for Electrify America by Greenlots, and Electrify America has also exchanged Open Charge Point Interface (OCPI) based roaming specifications with most U.S. charging networks.

On Friday, January 25, out of an abundance of caution and at the recommendation of its supplier, Electrify America shut down many of its high-powered CCS chargers. HUBER+SUHNER, a leading supplier of high-powered charging cable technology, recommended that all customers worldwide shut down chargers with liquid-cooled cables in order to allow HUBER+SUHNER to investigate an incident involving a prototype liquid-cooled cable. Electrify America chargers not affected by the shutdown – 50kW CCS chargers, all CHAdeMO connectors and L2 chargers – remained open and available for use.

The recommendation from HUBER+SUHNER came following an isolated event experienced at a private test facility in Europe with an early prototype liquid-cooled cable. During the shutdown, Electrify America's technical team observed HUBER+SUHNER's extensive testing, which showed that the cables met all industry standards for use. On Tuesday, January 29th, Electrify America brought its entire network back to full capacity.

[5] "Electrify America and Hubject Collaborate to Advance the Future of EV Charging," January 8, 2019; https://elam-cms-assets.s3.amazonaws.com/inline-files/Electrify%20America%20and%20Hubject%20to%20Provide%20Plug%26Charge%20ISO%2015118%20Feature%20010820199.pdf; "Electrify America Joins CharIN to Support Charging Infrastructure Access and Education," February 15, 2019; https://elam-cms-assets.s3.amazonaws.com/inline-files/Electrify%20America_CharIN%20Announcement%20-%202.19.2019.pdf.

[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.

2.2.3.1. Chargers and Equipment Ordered and Delivered

Figure 5 - Electrify America DCFC and User Interface

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.[7] 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. By the end of Q1, 158 DC fast chargers had been 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.[8] In Q1, Electrify America announced that it had ordered Tesla batteries for more than 60 station sites in California, totaling more than 20 MWh of behind-the-meter energy storage to be delivered and installed in 2019. The destinations of battery systems will continue to be reevaluated based on site-specific limitations, ongoing changes in utility rates, and utility grid needs. Should utility rates for EV charging be modified to better reflect the cost to serve such demand, the storage systems will continue to provide value by reducing costs and stress on the electric grid during on-peak periods and grid events.

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 245 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).

Under standardized site host agreements between Electrify America's vendors and station site hosts (e.g., property developers, office space facility managers, and other real estate site hosts), Electrify America funds all costs associated with pursuing necessary permits, purchasing charging equipment, and installing and maintaining charging stations, and none of these costs are incurred by the workplace or

[7] 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

[8] Demand charges can be extremely expensive if not mitigated. For example, for a common station configuration (two 350 kW chargers and two 150 kW chargers) a single event where four vehicles charge at full power would draw one megawatt of power. If this were to occur once on-peak, annual utility demand charges exceeding $150,000 would apply in a select California utility service area, irrespective of further charging at that site the remainder of the year.

MUD. Although this contract structure has not proven to be an economically sustainable investment for Electrify America in Cycle 1, the program provides a truly unique benefit to workplace and residential property owners in California.

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.

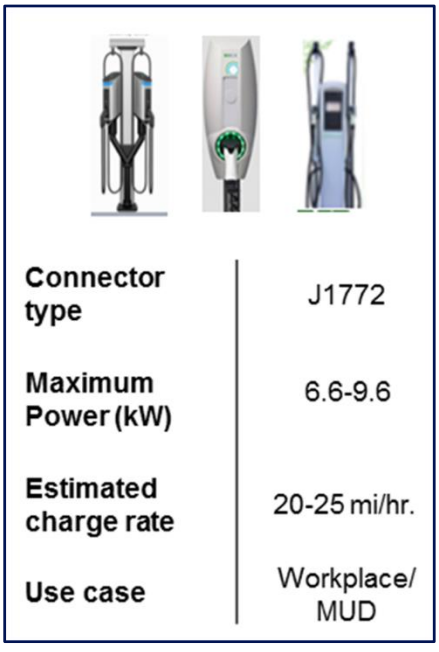
Once sites are reviewed and approved by Electrify America, vendors finalize a standardized site host agreement with potential site hosts. After reaching an agreement, the vendor will pursue the necessary permits and install and maintain charging stations at no cost to the workplace or MUD.

Figure 6 - Level 2 Project Status

At the end of Q1, Electrify America's vendors had signed site host agreements for 239 station sites in California, and the first 74 stations were operational (Figure 6).

Each of the vendors is contractually obligated to install 35% of their overall station quota in low-income or disadvantaged community census tracts. At the end of Q1, 43% of contracted sites and 35% of operational station sites were in a low-income or disadvantaged community.

Figure 7 - Level 2 Charger Technology



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 7). The chargers 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 Q1, Electrify America sustained its $20 million Cycle 1 education and awareness campaign in California to educate consumers about the reasons to purchase a ZEV. 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.

Figure 8 - "Plug into the Present" Landing Page

3.1.1. JetStones

In Q1, Electrify America initiated Flight 3 of its multi-media campaign (e.g., TV, radio, digital, etc.), which features a brand-neutral advertising spot, titled "JetStones" (Figure 9). Using the theme songs from two popular Warner Bros.' Hanna-Barbera cartoons, "The Jetsons" and "The Flintstones," the spot is a playful take on the transition of personal transportation from the Stone Age to the reality of electric vehicles available today. The TV 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 – 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.

Figure 9 - Scene from "JetStones" Advertising Spot

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, the third of which began in Q1 (Figure 10).

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.

Figure 10 - "JetStones" Media Schedule

During Flight 3, Electrify America and its media agency are buying air time on cable networks in specific zip codes, in order to ensure that 35% of all media spending is in low-income and disadvantaged communities. Electrify America is also continuing to run both English and Spanish advertising. By these means, Electrify America ensured that more than 35% of all media spending occurs in low-income and disadvantaged communities.

Flight 3 is also introducing new channels, including out-of-home (e.g., billboards), and continues the shift into a more digitalized approach, which began in Flight 2. In particular, streaming audio (e.g., Pandora and Spotify) has been an effective platform for its pertinent data and geo-targeting capabilities to reach the desired low-income and disadvantaged communities and audiences. As shown in the table below, these accomplished a total of 130 million impressions (i.e. listeners and viewers) in the first quarter.

Total California Impressions – Q1	
Media Type	**Impressions**
TV	13,334,280
Streaming Audio	9,517,741
Search	732,059
Digital/Video	26,864,951
Podcasts	160,157
Social	44,325,521
OOH	35,361,835
TOTAL	**130,296,544**

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, during Cycle 1. With Electrify America's commitment, Veloz launched a fund-raising effort for the "Electric for All" campaign and initiated development of a $4 million TV and digital campaign featuring top tier acting talent. As of Q1, Veloz had not raised the full match from other Veloz members and partners, and Electrify America and Veloz opened a dialogue about how to proceed in the event that the full match cannot be raised by the end of Cycle 1. To amplify the "Electric for All" campaign, Electrify America added the campaign tagline to the end of its "JetStones" commercial.

Figure 11 - Veloz and Electrify America "Electric for All" Logos

3.1.2. 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.

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 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.[9] Red Horse Hill provides project management services for this program.

The activities of these organizations in Q1 are described in the table on the following page.

[9] 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

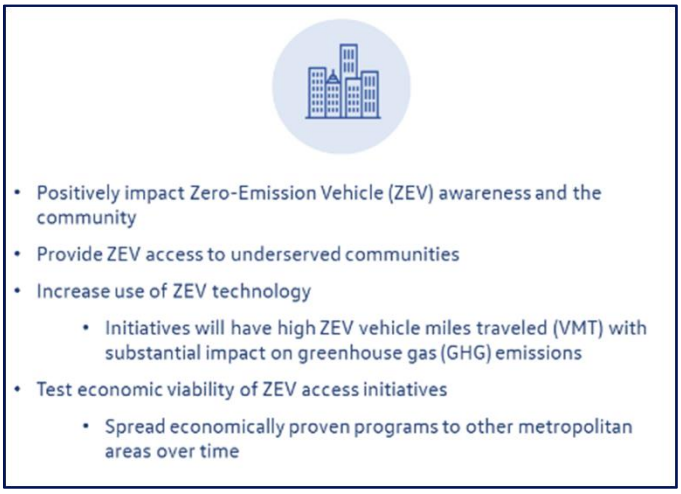
Organization	Description	Q1 Accomplishments
Self Help for the Elderly (SHE)	SHE is a San Francisco-based lead agency of a statewide coalition of immigrant-serving CBOs, providing outreach and education to communities with limited English proficiency.	• Worked with 10 community based organizations that resulted in consumer education to 5,781 people in 21 languages through local workshops • Participated in 11 community events conducted by local CBOs, resulting in 9,300 attendees learning about ZEVs
Chinese Newcomers Service Center (CNSC)	CNSC focuses on educational and outreach activities for Chinese immigrants in the San Francisco area.	• Conducted outreach activities during tax season; flyers and educational materials on ZEV benefits that were distributed to tax clients • Held four educational workshops with a total of 100 attendees • Reached out to 500 people through ZEV ambassadors • Places three ZEV informational articles in Chinese newspapers Singtao Daily and World Journal
Pacific Asian Consortium in Employment (PACE)	PACE is a non-profit 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 Los Angeles county.	• Participated in 13 community events to promote ZEV information, benefits, and rebate programs • Conducted 11 presentations to organizations, associations, and agencies to promote ZEVs • Completed seven ZEV presentations at local K-12 schools • Engaged 940 residents/workers and about 2,500 participants in community events, presentations and other outreach activities
GRID Alternatives	GRID, based in the San Francisco Bay area, is a non-profit organization providing low-carbon solutions exclusively to low-income communities.	• Conducted ZEV awareness and favorability quantitative research • Developed social media messaging and creative content for ZEV awareness • Outlined and secured locations for ZEV ride and drive events for Q2 2019 activities
Valley Clean Air Now (ValleyCAN)	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.	• Conducted 3 Tune In & Tune Up events, averaging 495 vehicles at each event, with a ZEV ride and drive program: ▪ Stockton event – 169 test drives conducted ▪ Madera event – 145 test drives conducted ▪ Bakersfield event – 173 test drives conducted • Completed 162 additional test drives in Fresno and 192 in Tulare • Held 19 Community Clean Car Clinics, resulting in 775 attendees and 211 EFMP Plus-Up applications • Finalized 210 vehicle transactions • Reached 258,000 people through paid social media promotion
Liberty Hill Foundation (LHF)	Liberty Hill Foundation, based in Los Angeles, has experience working with grassroots organizations in LIC/DAC across Los Angeles County.	• Hired Program Manager to support and coordinate CBO activities • Secured date and location for five ride and drive events in Q2 2019 • Coordinated and scheduled Community Clean Car Clinics with local CBOS for Q2 2019

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 Q1, 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 12 - Green City Goals and Impacts



4.2. Car-Sharing and Ride-Hailing Services

Two car-share service vendors – GIG Car Share, a wholly-owned subsidiary of the American Automobile Association (AAA), and Envoy Technology, Inc. – provided car-share services in Sacramento during Q1. GIG Car Share conducted a beta launch of its free-float car share service within the urban core of Sacramento. Complementing this investment, Envoy provided a round trip car-share model at multiunit dwellings. Both car-share providers focus investment in low-income and disadvantaged communities.

In Q1 the Green City Initiative car-share activities were focused on the following critical areas:

- **Securing MUD Properties to Host Envoy Car-share**: By the end of Q1, Envoy had installed charging stations and activated services at 17 Sacramento multiunit dwelling property sites, 82% of which were in a disadvantaged or low-income community.

- **GIG Car Share Beta Testing**: In Q1, GIG launched its free-float car-share service in beta testing mode. The initial launch included 40 vehicles, which grew to 100 vehicles by the end of Q1. Participation results were extremely strong, even with a limited fleet. The app was downloaded to 8,821 phones, drivers took 2,744 trips and travelled 18,346 miles, and the trip rating score on the GIG Car Share app was 4.7.

- **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 built awareness of Green City services.

Initial utilization of car-sharing services is presented in Appendix 2.

4.3. ZEV Shuttle / Bus

In Q1, significant progress was made towards the launch of 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.

Figure 13 - SacRT Franklin Boulevard Shuttle

In Q1, Electrify America finalized the scopes of work with each service provider. For the UC Davis-Sacramento route, this culminated in a signed agreement with SacRT and YCTD in Q1. For the Franklin Boulevard shuttle, the agreement was finalized during Q1.

Both services initiated procurement of a fleet of zero emission vehicles to be delivered by the end of 2019. In Q1, SacRT ordered twelve Proterra 40 foot Catalyst E2 electric buses with custom configurations and seating capacity of 37-40 to serve the Sacramento-Davis Route. Six buses each will be provided to SacRT and YCTD. Upon delivery expected in Q4 2019, the buses will enter an extensive testing protocol.

On March 25, the SacRT Board approved a resolution supporting a cooperative agreement with Electrify America for the acquisition of ZEV shuttles to serve the Franklin Neighborhood. The vehicle order is anticipated to follow soon after the agreement is finalized in Q2.

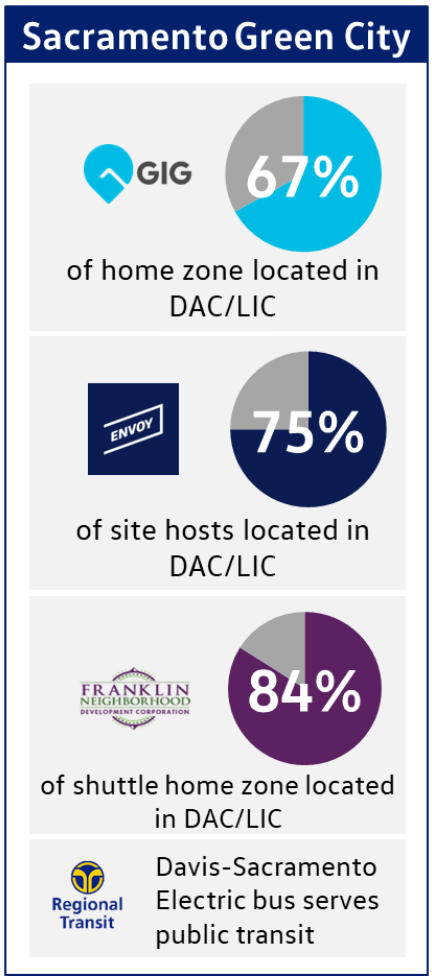
4.4. Disadvantaged and Low-Income Impact

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 has an approximately 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. Of the 17 sites at which Envoy launched service by the end of Q1, 14 are in low-income or disadvantaged communities, exceeding the target. To educate tenants at the respective properties and register new members, Envoy will hold on-site learning events, providing take-away material and snacks. Envoy has also been seeking out a resident at each property who is willing to be an Envoy Ambassador to assist fellow tenants with information and registration.

The two ZEV shuttle/bus services will also operate in low-income and disadvantaged communities. The Davis-Sacramento public transit route will serve stops in low-income and disadvantaged communities. And of the census tracts served by the Franklin Blvd shuttle service, 84% are low-income or disadvantaged communities. These percentages are illustrated in Figure 14.

Figure 14 - Green City Project Impact on Low-Income and Disadvantaged Communities



4.5. Infrastructure

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

Electrify America energized the first DCFC charging station site in Sacramento County, in the City of Elk Grove, in 2018. By the end of Q1, the status of the 13 leases was: one site operational; five sites fully constructed and awaiting utility service or commissioning; five station sites in construction; one site in permitting; and one site on a construction hold until May 1.

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

3fold Communications continued the "Sac-to-Zero" education and awareness campaign in Q1. The campaign is an umbrella of all Electrify America services in the Sacramento Region, and it deploys events and media, including social media channels under the Sac-to-Zero tagline.

3fold participated in local community events and gatherings in Q1, including Sacramento Republic and Sacramento Kings games, an event in District 8, and the Sacramento Zoo Earth Festival. 3Fold's event plan incorporates aggressive outreach in support of the mobility services as they launch.

The media plan is designed to generate mass awareness in 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. In Q1, the campaign significantly

expanded, adding radio, TV, and out-of-home advertising. These efforts resulted in more than 23 million impressions (i.e. listeners or viewers), more than 20 million of which resulted from out-of-home advertisements, during the quarter.

Figure 15 - Mayor Steinberg, Supervisor Serna, and other dignitaries at Sac-to-Zero Event

4.7. Problems, Concerns and Lessons Learned

The Green City Initiative made major strides in Q1. As Cycle 1's conclusion approaches, Electrify America continues to learn important lessons from the variety of initiatives launched.

As noted in the 2018 Annual Report, the Envoy car-share program's ability to expand in Sacramento depends on the willingness of multiunit dwelling managers to host Envoy's "Mobility as an Amenity" car-share services in their communities. To date, Envoy has proven such interest and achieved an increased trend of adoption and utilization. Indeed, Envoy has collected numerous examples of its positive impact on the lives of those who have access to the service in Sacramento. However, as is common with any mobility system deployment, there were a series of unexpected delays, due in part to third-party construction permitting and technology integrations. Therefore, Electrify America and Envoy continue to engage in a productive dialogue regarding the scope of the car-share program in order to best serve the communities where the most interest exists and the community will most benefit. A more targeted scope will permit deployment to be completed within the timelines established by Electrify America for its Cycle 1 CA ZEV Investment Plan.

Electrify America and Envoy also continued efforts to increase utilization of the Envoy fleet. With the assistance of 3Fold's Sac-to-Zero campaign and an Envoy "Ambassador" identified at multiple sites with existing car-share services, the number of registered members and utilization increased during the quarter. Envoy also experienced that targeted and time sensitive promo codes are an effective tool to incent members to try the service for the first time.

GIG Car Share's Q1 beta testing period allowed them the opportunity to assess their car-share technology, fleet operations and fleet charging protocols prior to their announced official launch in Q2. GIG also demonstrated that myriad channels for input should be developed and monitored, and the information gleaned used to improve the service and improve communication with local and regional stakeholders and the public. In coordination with the Sac-to-Zero campaign, GIG's continuous outreach to neighborhood groups and associations in Q1 increased local knowledge of their free-float service, mitigating potential issues related to the introduction of the GIG fleet in public parking spaces.

Regarding the development of the Davis to Sacramento battery electric bus route, Electrify America learned of the complexities associated with the configuring and testing buses as part of the ordering process.