

2019 Annual 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 in 2017, Electrify America has moved rapidly to implement its \$2 billion ZEV Investment Commitment.

As detailed below, Electrify America's activities in 2019 were focused on completing its Cycle 1 investments and commencing full-scale implementation of the Cycle 2 California ZEV Investment Plan.

During 2019, Electrify America opened 318 new public charging stations – on average more than one per business day. Its network of ultra-fast, public charging stations became the nation's largest open network of fast chargers. Electrify America also completed its deployment of thousands of Level 2 (L2) chargers at workplaces and multi-unit dwellings (MUDs) during the year, consistent with Cycle 1 commitments.

The marketing team successfully completed its brand-neutral "JetStones" campaign in the first half of 2019, recording stellar results. In the second half of the year, the team launched a new brand-neutral education and awareness campaign titled "Normal Now," with an increased focus on digital channels.

Finally, the Green City Initiative launched two distinct car-share programs and deployed additional charging stations, providing Sacramento with the highest per-capita density of Electrify America ultrafast chargers in the nation. The Initiative also procured bus and shuttle vehicles in anticipation of launching two services in 2020 and marketed the programs through the "Sac-to-Zero" Campaign.

The beginning of Q3 marked the official beginning of Cycle 2. However, Electrify America continued making a limited set of Cycle 1 investments during the second half of 2019 in order to complete the commitments specified in the Cycle 1 California ZEV Investment Plan, as supplemented.

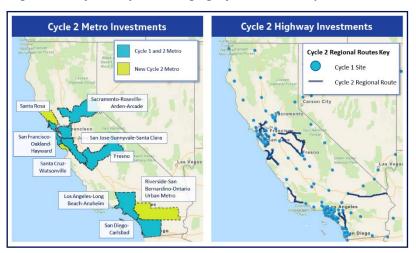
Electrify America publishes this annual report to share the progress and impact of its Cycle 1 and Cycle 2 investments in 2019.

2. A Network of Electric Vehicle Charging Stations

2.1. Introduction

As laid out in the Cycle 2 California ZEV Investment Plan, Electrify America is developing a network of electric vehicle charging stations along highly traveled highway corridors, on critically important regional routes, and in nine carefully selected metropolitan areas during Cycle 2 (Figure 1). The planned network, when combined with investments made in Cycle 1, will consist of more than a

Figure 1 - California Cycle 2 Charging Infrastructure Maps



thousand DC fast charging dispensers at hundreds of charging station sites built or under development in the state. The network deploys cutting-edge technology to deliver convenient customer-centric charging, connecting California to the Electrify America national network in 45 other states. Electrify America anticipates that 35% of its business-driven investments within California will be in low-income or disadvantaged communities (LIC/DAC).¹

2.2. Electrify America's DC Fast Charging Network

As laid out in the Cycle 1 California ZEV Investment Plan, Electrify America developed a network of electric vehicle charging stations along highly traveled highway corridors and in six carefully selected metropolitan areas during Cycle 1. In 2019, Electrify America initiated development of Cycle 2 DC fast charging along high-traffic regional routes and in nine targeted metro areas in the state. Target locations (known as "target zones") for each station were identified using Electrify America's proprietary station siting methodology, which projected locations where DC fast charging stations will be most needed.

2.2.1. Acquiring 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.

In each target zone, Electrify America considers multiple real estate leads, based on their unique attributes, such as the availability of three-phase power, site lighting, and access to customer amenities. Throughout the site acquisition process, Electrify America works closely with 17 electric utilities in California to identify efficient locations from a grid perspective and those with the lowest service connection costs for Electrify America. To acquire high-quality sites, Electrify America has also entered

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

into master agreements with 38 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 2019, Electrify America focused on station site acquisition, increasing the total number of station sites under contract by 52%.

At the end of 2019, more than 35% of all lease-executed DC fast charging station sites in California were in low-income or disadvantaged communities.

2.2.2. Constructing a Network of DC Fast Charging Stations

Electrify America permitted, constructed, energized and commissioned ultra-fast charging stations at an unprecedented rate in 2019, opening 75 stations to the public in California.³ When combined with 243 stations opened to the public in the rest of the nation, Electrify America opened 318 stations over the course of the year, at a pace of 1.2 stations per business day.

Electrify America has contracted with highly qualified and experienced engineering and construction firms to complete DC fast charging station permitting, design and installation work. These contracting firms, which together employ nearly 12,000 employees nationwide, have managed the installation of thousands of DC fast chargers across the United States, making them some of the most experienced engineering and construction companies in the industry.

Figure 2 - Construction Contractors Lay Conduit under an Electrify America Equipment Pad



Electrify America's design and build contractors utilize a deep pool of experienced subcontractors throughout California, creating new work for dozens of construction and electrical contracting firms, and hundreds of workers. Furthermore, in order to expand the pool of subcontractors and experienced workers, in 2019, Electrify America's primary California contractor continued to invite new, qualified local companies to participate in project bids. This outreach has enabled new electrical contracting firms, including those that employ unionized electricians, to subcontract on a significant number of ultra-fast electric vehicle charging stations.

² Electrify America's announced real estate station site hosts with multiple stations include Bank of America, Brixmor Property Group, Casey's General Stores, DDR Corporation, Federal Realty Investment Trust, Fulcrum Property, Global Partners LP's Alltown, Jamestown, Kimco Realty Corporation, Kroger, The Macerich Company, Pan-Cal Corporation, the Save Mart Companies, Sheetz, Inc., ShopCore Properties, Simon Property Group, Target Corporation, ValueRock Realty Partners, Walmart, and Washington Prime Group.

³ The Annual Report to EPA covers investment in the United States, excluding California, pursuant to Section 2.9 of Appendix C of the Partial Consent Decree. Unless noted otherwise, National or Nationally refer to the United States, excluding California.

Although ultra-fast charging stations opened at an unprecedented rate in California, Electrify America and its contractors continued to encounter challenges and issues, particularly with regard to permitting timeframes and utility station energization.

During 2019, the average time to complete the permitting process for DC fast charging station sites in California rose from 53 business days to 75 business days – 70% longer than the national average. Permitting processes also result in station sites being redesigned 33% more frequently in California than in the rest of the nation (Figure 3), which increases both cost and delays.

National Standard EA scheduled duration for permitting Paraticular P

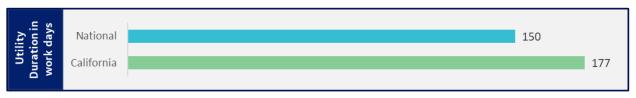
Figure 3 - California Permitting Duration

The cost to design and construct an Electrify America station costs 24% more, on average, in California than the same station designs built in another state. While many factors contribute to station costs, the additional permitting burdens imposed in California – including costs to address station design and other aesthetic requests of local jurisdictions – appear to be the primary cause for this difference. This higher cost per station ultimately means that California will receive fewer stations per dollar invested by Electrify America.

Electrify America has encountered California jurisdictions either unfamiliar with or unwilling to follow California's AB 1236 statute, which requires California cities and counties to expedite EV charging station permitting, to constrain review to health and safety matters, and to bypass traditional zoning reviews. Unfortunately, a review by Governor Newsom's administration has found that only 15% of California jurisdictions have streamlined their permitting as required by AB 1236.⁴

Electrify America has engaged with the Newsom administration to encourage continued state-level oversight of AB 1236 compliance. The state's Electric Vehicle Charging Station Permitting Guidebook, staff-level dialogue with planning and permitting officials, and state-level tracking of AB 1236 compliance are spreading best practices.





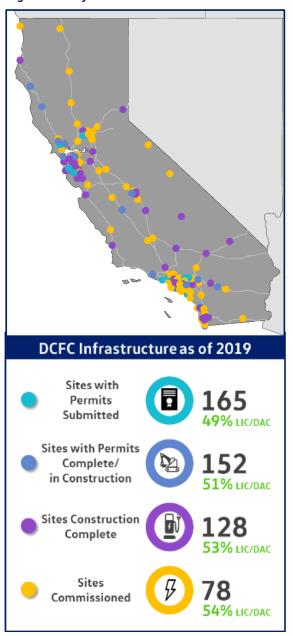
⁴ Governor's Office of Business and Economic Development (GO-Biz). "EV Charging Station Permitting Streamlining Map." Accessed March 15, 2020. https://business.ca.gov/industries/zero-emission-vehicles/plug-in-readiness/

In addition to permitting, Electrify America also encountered unique challenges with utility new service interconnection processes across the state (Figure 4). 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.

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 stations frequently require more than a megawatt of power to be supported by utilities in the parking area of a retail development. In some, but not all, cases, this requires upgrades to the utility's distribution system. To support rapid deployment, in some areas Electrify America has 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 and tight schedule.

To address the utility interconnection delays shown in Figure 4, in Q4 Electrify America's leadership engaged directly, frequently, and effectively with the leaders of California's largest utility companies in a collaborative effort to connect charging stations constructed by Electrify America to the power grid as quickly as possible. Although Q4 was a challenging period for utilities due to wildfires and Public Safety Power Shutoffs, the engagement led to a significant improvement. As of the end of 2019, Electrify America had completed station construction at 50 sites that were not yet open to the public because they were awaiting the addition of electrical equipment (e.g., transformers), utility inspection, utility energization and commissioning, which represented a 32% reduction in the number of delayed projects when compared to the beginning of Q4. At the end of the year, Electrify America had requested but not received

Figure 5 - California Sites and Construction Status



the final engineering design for interconnection from utility companies at seven station sites – also a 30% reduction in the backlog when compared to the beginning of Q4. Finally, 28 station sites had passed final utility inspection and were awaiting energization at the end of the year.

In the Q1 2019 Report to CARB, Electrify America reported that challenges with permitting and utility interconnections had prompted Electrify America to focus on achieving 100-120 station site construction

starts by the end of Q2, with the intention of completing these Cycle 1 investments as quickly as possible. Electrify America also shared that it has cancelled or placed on long-term hold planned stations in jurisdictions with onerous requirements and lengthy permitting timelines, in order to focus resources on the stations that can feasibly be built. These changes were successful. At the end of 2019, Electrify America had 152 station sites open or permitted and in the construction phase, 146 of which were Cycle 1 sites, exceeding established targets. Stations at 78 sites were open to the public by the end of the year.

As shown in Figure 5, a significant percentage of Electrify America's station sites at each stage of development are in disadvantaged and low-income communities.

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. 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.⁵

Highway and regional route stations are equipped with chargers capable of delivering maximum power levels from 150 kW to 350 kW. The chargers are also able to step 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 capable of receiving such power, vastly improving the customer experience.

Metro charging stations feature configurations of either three, four or six DC fast chargers, reducing queuing times and providing redundancy in high-utilization urban areas. A significant fraction of metro stations feature 150 kW chargers, and Electrify America plans to increase the power level of DC fast chargers with lower power levels where appropriate and when it is feasible.

Electrify America DC fast charging sites support both the CCS Combo and CHAdeMO connectors, ensuring that all sites are universally compatible with today's electric vehicles.⁶ In recent years, an increasing percentage of non-Tesla EVs sold in the U.S. have relied on the CCS standard, and CCS is increasingly the non-proprietary standard of choice for automakers in the U.S. market.⁷ As a result of increasing demand for CCS charging from these two trends, Electrify America's public ultra-fast stations all include both CCS and CHAdeMO capable chargers, but Electrify America typically deploys more CCS chargers per station site. In 2019, CHAdeMO chargers delivered 8% of the power delivered at Electrify America stations in California, and in Q4 that percentage dropped to 7%.

To maximize the ability of customers to use charging stations regardless of which charging network they have joined, Electrify America's networked public stations accept credit and debit card payments, creating an easy customer experience that is the primary goal of most interoperability efforts. In June,

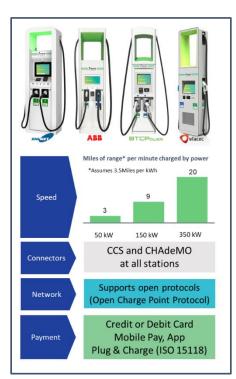
⁵ Neither liquid-cooled cables nor 350 kW charging had been deployed commercially in the United States before the Electrify America network. As a result, Electrify America leases the Center of Excellence for equipment quality control and validation.

⁶ Vehicles utilizing proprietary charging systems must use an adaptor at Electrify America stations.

⁷ "Electrify America Comment regarding Staff Workshop on Future Equipment Requirements for CALeVIP." December 14, 2019. https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=17-EVI-01

Electrify America released a mobile app, available for both Android and iPhone, which allows users to locate a charger, pay for and start a charge, and track their charging session on their mobile phone, making charging with Electrify America even more convenient.⁸

Figure 6 - Electrify America's Transformational Ultra-fast EV Charging Technology



Electrify America is equipping its networked DC fast chargers using the CCS standard with ISO 15118, and in 2019 Electrify America worked diligently to be the first DC fast charging network in the U.S. to offer "Plug & Charge" capability. This technology will allow people to pay for their electric vehicle charging simply by plugging in their Plug & Charge compliant vehicles. Electrify America and Hubject, a recognized leader in charging interoperability technology, announced a strategic agreement focused on enabling Plug & Charge in January. In February, Electrify America became a member of the Charging Interface Initiative (CharIN). Finally, in May Electrify America's Center of Excellence technology laboratory provided the setting for the 11th International Testing Symposium for the Combined Charging System, bringing together more than 200 engineers and technical experts from global automakers, charging equipment manufacturers, charging networks and related companies to test the next-generation technologies for electric vehicle charging, including Plug & Charge capabilities.9

During Q3, Electrify America and Porsche collaborated for the Porsche Taycan global launch event to conduct the first 270 kW charging event in the United States, the highest DC fast charging

power level ever achieved by a production vehicle. Using Electrify America's 350 kW charger, the Taycan obtained a 5% to 80% charge in just 22.5 minutes. 10

In August, Electrify America announced an agreement with San Francisco-based EV fleet charging company Stable Auto to deploy robotic charging solutions for self-driving vehicles in a commercial demonstration in San Francisco. The solution will charge autonomous EVs without human intervention using a robotic arm attached to a 150 kW DC fast charger. The dedicated fleet charging facility will allow self-driving EV fleets to charge with no operators present, ensuring that Electrify America's ultra-fast charging technology is compatible with automated vehicles of the future.¹¹

⁸ "Electrify America Launches Its First-Ever Mobile App, New Membership Options and a New Pricing Structure to Help Increase Electric Vehicle Adoption," June 3, 2019. https://media.electrifyamerica.com/en-us/releases/61

⁹ "Electrify America Hosts International Testing Symposium for Combined Charging System." May 21, 2019. https://media.electrifyamerica.com/en-us/releases/59

¹⁰ "Electrify America's Open Network of Ultra-Fast DC Chargers: First to Charge an 800-Volt Electric Vehicle Battery at 270 Kilowatts." June 3, 2019. https://media.electrifyamerica.com/en-us/releases/75

¹¹ "Electrify America and Stable Announce Collaboration to Deploy Robotic Fast-Charging Facility for Self-Driving Electric Vehicle Fleets." August 1, 2019. https://media.electrifyamerica.com/en-us/releases/70

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. These capabilities are managed for Electrify America by Greenlots, which is headquartered in Los Angeles. Electrify America has also exchanged roaming specifications with most U.S. charging networks, and in 2019, Electrify America continued efforts to advance network-to-network interoperability with several of the nation's charging service providers. 14

Figure 7 – Robotic Arm Charging Autonomous Vehicles



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. ¹⁵ Electrify America has ordered all of the more than 600 chargers needed in California for Cycle 1. In order to procure the hardware needed to build Cycle 2 ultra-fast charging stations, Electrify America ran a series of competitive solicitations, and in Q3 Electrify America selected vendors to supply Cycle 2 chargers. Chargers are scheduled to be delivered to station sites upon commencement of construction. By the end of 2019, 524 DC fast chargers had been delivered to Cycle 1 sites in California.

Electrify America has also ordered battery storage capacity to mitigate high demand charges, reduce on-peak energy charges, and ease grid loads. In Q1, Electrify America announced that it had ordered Tesla batteries for more than 100 station sites in California and nationwide, totaling more than 35 MWh of behind-the-meter energy storage. During 2019, Electrify America identified 75 destinations of battery systems based on site-specific limitations, ongoing changes in utility rates, and utility grid needs in California. Electrify America submitted 62 applications to electric utilities for permission to connect battery systems. And Electrify America initiated installation of battery storage systems.

Electrify America encountered numerous challenges while attempting to gain approval for these behindthe-meter systems, including utilities that considered the storage as added load or generation. These

 ¹² Electrify America's public stations will be equipped with back end systems that can use Open Charge Point Interface (OCPI)
 2.1 to communicate with other networks and Open InterCharge Protocol (OICP) to be able to connect to roaming platforms, when a business agreement is secured, in a manner that does not require use of any particular firm's intellectual property.
 13 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.

¹⁴ "EVgo, Electrify America Join Forces to Increase EV Public Charging Accessibility Across the U.S." September 9, 2019. https://media.electrifyamerica.com/en-us/releases/74

¹⁵ "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://media.electrifyamerica.com/en-us/releases/21

¹⁶ "Electrify America Adds Tesla Battery Storage To More Than 100 New Charging Stations." February 4, 2019. https://media.electrifyamerica.com/en-us/releases/48

battery systems are designed to reduce peak load and lower demands on the distribution system. Treating them as new load – in addition to the EV charging station load – serves as a barrier to rapid deployment efforts, and frequently leads to rigorous, time-intensive interconnection studies.

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.

2.2.4. Electrify America Ultra-Fast Charging Station Operations

Electrify America is committed to operating a reliable, ultra-fast, and customer-centric charging network that meets the needs of those who drive electric vehicles produced by all brands. In 2019, as Electrify America opened stations at an unprecedented pace, it also focused on increasing the reliability and quality of the charging experience. Internal goals are focused on increasing customer satisfaction and charging station uptime. During 2019, Electrify America improved on both of these metrics.

As a result of this commitment, in 2019 Electrify America announced partnerships with Byton, Fisker, Ford, Harley-Davidson, and Porsche. These agreements, when combined with agreements with Audi and Lucid reached in 2018, provide ultra-fast charging services to buyers of electric vehicles from seven brands.¹⁷

During the course of 2019, Electrify America saw a substantial increase in customer activity and station utilization, whether measured by the number of sessions or kWh delivered, and even when



Figure 8 - Harley-Davidson LiveWire and Electrify America

adjusted to account for the rapidly increasing size of the Electrify America network. Between January and December, the number of monthly charging sessions rose 46-fold (from 112 to 5,159), and the number of charging sessions per open charger more than doubled (from 7.5 to 18.0). Total sessions rose month to month all year long (except for the short month of February), and sessions per open charger rose month over month in every month but two (February and June).

As Electrify America's stations are not staffed, the Electrify America Customer Support Center plays a critical role in ensuring reliable, customer-centric charging experiences. Twenty-four hours a day, seven days a week, the Customer Support Center team provides support for customers, whether they need assistance initiating a charge at an Electrify America charging station or have general questions.

Electrify America recognizes the importance of providing our customers with a reliable, seamless, and stress-free experience when contacting the Customer Support Team. Calls in to and out of our Call

¹⁷ "Fisker Ocean to Make Global Public Debut at CES 2020; Electrify America Revealed As Charging Station Network." December 19, 2019. https://media.electrifyamerica.com/en-us/releases/87

Center are evaluated on an ongoing basis to ensure we are consistently providing customers with an experience that exceeds their expectations. Evaluated calls are shared with the team to review strengths and learning opportunities as we are continuously striving to promote greater ZEV adoption and strengthen customer relationships.

The Customer Support Center staff provides excellent and prompt customer service. In 2019, the Customer Support Center handled 26,595 calls, a more than 20-fold increase from the call volume in 2018, and the average wait time to speak with a Charging Specialist has remained under 10 seconds. In 2019, the average call length was just under 10 minutes.

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

In order to ensure that the Electrify America network is open and accessible to customers regardless of the brand of vehicle they drive or their charging network membership, Electrify America's public DC fast charging stations accept credit and debit card payments via a card reader on every charger. Until Electrify America launched its App in June, credit and debit card payment was the primary means of customer payment. However, once an App was available, customers used it to pay for 53% of charging sessions during the second half of 2019. The rest were initiated by credit or debit card.

Figure 9 - All Public Ultra-fast Charging Stations accept Credit Cards



Customers who used an App to initiate and manage their charging sessions had a higher success rate during 2019 than those who initiated a charging session via a credit card reader, and Electrify America took numerous steps to identify the root causes and implement solutions that increase the success rate of transactions initiated with a credit card reader. First, Electrify America worked with the credit card reader manufacturer to address early production quality issues, such as water intrusion, and to replace card readers that suffered premature failure. Second, Electrify America worked with its charger manufacturers and the credit card reader manufacturer to identify and address all software integration issues between the systems that were the cause of communication errors. Third, Electrify America initiated the capability to issue over-the-air updates to credit card readers, which will increase the ability to rapidly fix software issues. Finally, Electrify America discovered that failure rates were sometimes attributable to user error, and our technology team worked with the Customer Support Center to identify these situations and guide the customer through the steps to successfully use a credit card.

Electrify America paid extremely close attention to customer feedback in other areas as well, and it initiated a series of station improvement campaigns in 2019 to implement customer and automaker suggestions. For example, Electrify America added longer charging cables at more than 100 locations to

ease customer use, prioritized repairs to CHAdeMO chargers, and added signage to help dissuade internal-combustion engine vehicles from blocking access to Electrify America's stations.

Out of an abundance of caution, in January Electrify America briefly shut down a subset of its chargers with liquid-cooled cables manufactured by HUBER+SUHNER, a leading supplier of high-powered charging cable technology. HUBER+SUHNER had recommended that all customers worldwide shut down chargers with its liquid-cooled cables in order to allow HUBER+SUHNER to investigate an incident involving a prototype liquid-cooled cable. During this temporary shutdown, every station remained open, allowing customers to charge on available 50 kW or L2 chargers, which were not impacted. Electrify America restored full capacity to its network within four days, and only after its high-powered charging cables cleared extensive testing from the cable manufacturer.

For the first three quarters of 2019, electricity to power Electrify America's ultra-fast charging station sites in California was purchased from utilities at commercial rates and reflected the renewable content provided by the utility. Late in 2019, Electrify America conducted a renewable energy procurement that resulted in Electrify America's California stations being 100% powered by renewable energy during the fourth quarter of 2019.

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) installed and opened L2 charging stations at workplaces and multiunit dwellings.

Past Electrify America reports noted that this program had encountered issues and challenges that had led it

Figure 10 - EV Charging at Workplace/MUD Sites



to fall behind schedule, but in 2019 Electrify America implemented a series of reforms to increase the pace of deployment. As a result, all L2 chargers proposed in the Cycle 1 California ZEV Investment Plan were successfully deployed by the end of 2019. More than 1,500 charging ports across 241 sites were operational, with 42% of these station sites in low-income and disadvantaged communities.

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 funded <u>all costs</u> of permitting, procuring equipment, constructing and maintaining charging stations. Although this contract structure has not proven to be an economically sustainable investment for Electrify America that we could continue in Cycle 2, the program provides a truly unique benefit to workplace and residential property owners and residents in California.

Electrify America's efforts to request station site proposals from state agencies, local governments, and non-profit entities through the National Outreach Plan process bore tremendous fruit, as 33% of all station sites are at government or non-profit workplaces and housing developments. For example,

Electrify America funded stations at more than 30 CalTrans workplaces, and the Catholic Diocese's schools and churches host more than 10 station sites.

In 2019, Electrify America saw a substantial increase in the use of the program's L2 workplace and MUD stations, which delivered approximately 974 MWh to vehicles during the year.

2.3.1. Charger Technology

Electrify America-funded workplace and MUD charging stations typically have four to six L2 chargers, each with a minimum power level of 6.6 kW (Figure 11). The chargers provide 20 to 25 miles of driving range per hour of charging for a typical EV 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 networks in support of L2 chargers installed and operated on behalf of Electrify America, as well as those installed independently of the program's efforts. Electrify America owns the data from these charging stations. The chargers installed under this program will be on vendors' networks, and will be able to connect and interoperate with Electrify America's network.

Figure 11 - 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

3. Education, Awareness, and Marketing

3.1. Brand-Neutral ZEV Education and Awareness Media Campaign

Over the course of 2019, Electrify America completed its Cycle 1 brand-neutral media campaign, and debuted a new outreach campaign for Cycle 2. The Cycle 1 campaign, known as "Plug Into The Present," had a goal of educating consumers about reasons to purchase a ZEV. As stated in the Cycle 1 California

Figure 12 - Plug Into The Present Landing Page



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 provided 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. 18

3.1.1. JetStones

During the first half of 2019, Electrify America concluded its Cycle 1 multimedia campaign. The campaign centered around the "JetStones" spot, which used the themes from two popular Warner Bros.' Hanna-Barbera cartoons, "The Jetsons" and "The Flintstones," as 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 was also available on the website, featured the Chevy Bolt EV and included 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 featured at no cost. Electrify America also developed companion radio spots using the same music, themes, and

messages, in both English and Spanish.

Over the first six months of 2019, the JetStones campaign generated 604 million impressions in California, 53% of which resulted from media buys targetted specifically in low-income and disadvantaged communities, as illustrated in Table 1 below. Over 2018 and 2019 combined, the campaign's advertisements were

Figure 13 - Scene from "JetStones" Advertising Spot



¹⁸ The "Plug Into The Present" website and video are no longer available due to expiration of licenses for music and actor likenesses used in the campaign. Examples of creative materials from this campaign can be found in the Appendix.

seen 2.8 billion times nationwide across TV, outdoor billboards, radio and digital advertising, and it prompted over 829,000 visits to the Plugintothepresent.com website.

Table 1 -Cycle 1 Campaign Impressions in 2019

Media Type	California Impressions – General Audience	California Impressions – Media Targeted in LIC/DAC Areas
TV	42,000,000	6,300,000
Radio	45,500,000	N/A
Streaming Audio	48,970,509	19,090,572
Search	N/A	N/A
Digital/Video	71,655,106	86,777,738
Podcasts	N/A	N/A
Social	54,700,450	57,196,698
Out of Home (OOH)	19,100,000	153,000,000
TOTAL	281,926,065	322,365,008

In addition to measuring total impressions, Electrify America collaborated with ComScore, an American media measurement and analytics company, to assess whether the Cycle 1 Jetstones and Plug Into the Present campaign generated awareness of ZEVs amongst U.S. target audiences. Specifically, the analysis surveyed an audience panel representative of the target audiences and compared the results of those who saw the media campaign with those who did not (the control group). By comparing the two groups of respondents, Electrify America and ComScore were able to assess the campaign's impact.

The Cycle 1 campaign proved successful in achieving its objective of increasing ZEV awareness amongst the priority target audiences in California generally and in low-income and disavantaged communities in particular. The campaign achieved improvements in ZEV familiarity and purchase consideration, and it began to alleviate range, battery, and affordability concerns. Specifically:

- Those exposed to the campaign had significantly higher "Top of Mind Awareness" of ZEVs (+3.9%), suggesting the media presence in California impacted general ZEV awareness.
- Common misconceptions of ZEVs were successfully alleviated in the California market, with the exposed group having less concern about Affordability (-3.8%) and Range Anxiety (-3.4%).
- Among the "Discerning Driver" target audience who were exposed to the campaign, ZEV Awareness increased (+3.8%) and price concerns were significantly reduced (-9.8%).
- In low-income and disadvantaged community zip codes, top-of-mind awareness of ZEVs was vastly increased (+6.7%). Simultaneously, those exposed to the campaign had less concern about ZEV range (-7.9%).

Electrify America's collaboration with ComScore has provided detailed information regarding which Cycle 1 JetStones campaign messages worked with each target audience, and these insights played a key role in developing a new creative message for Cycle 2.

3.1.2. Normal Now

In the second half of 2019, Electrify America launched its new Cycle 2 education and awareness campaign in California to educate consumers about the reasons to purchase a ZEV. As stated in the Cycle 2 California ZEV Investment Plan, Electrify America committed to "boost ZEV adoption through informing mainstream car buyers on the key benefits offered by ZEVs in a brand-neutral manner." Based on the 2017 New Vehicle Experience Study that found that drivers identify performance (handling and cornering) and comfort (ride quality and quiet interior) as two of the top four "Extremely Important" characteristics when shopping for a vehicle, the Cycle 2 efforts to drive ZEV adoption will focus on four messaging pillars around ZEVs: performance, range, product spectrum, and charging infrastructure.

The education and awareness efforts include brand-neutral digital and paid search campaigns in all California media markets, and a bilingual landing page (www.NormalNow.com) that – through a humorous presentation that shows how technology matures and becomes mainstream – provides an overview of the benefits of both battery electric and hydrogen fuel cell electric ZEVs, with links to

Figure 14 - "Normal Now" Spanish-Language Mobile Landing Page



third-party websites containing robust content for users (Figure 14). In addition to the Normal Now website, this multifaceted digital campaign includes online videos, streaming TV ads, digital banner ads, social media ads, paid search, and streaming audio and podcast ads.

The "Normal Now" campaign, developed by San Francisco-based communications firm Eleven, aims to introduce and normalize zero-emission vehicles for the vast majority of Americans who are not aware of or have never considered switching to a ZEV. Through comical 15-second videos, GIFs and still images, the Normal Now campaign draws comparisons between "new technology" of the past – including cell

Figure 15 - Example of "Normal Now" Digital Advertisement



phones, smart watches and online dating – and what is assuredly the transportation method of the future. The campaign explores how scary previous forms of "new technology" were at first and reinforces that – just like EVs – while they may have seemed weird at first, they're normal now.

Researchers have identified functional concerns about EVs, like range anxiety, charge time and cost, as reasons why car buyers wouldn't drive electric. However, the Normal Now campaign is inspired by the insight that there is actually a deeper, more emotional set of barriers standing in the way of ZEV consideration and adoption. Specifically, the Normal Now campaign is designed to address the public's fear of change and lack of exposure to EVs in pop culture, which is making people view electric vehicles as too different from what they are used to. The campaign strives to normalize EVs.

During the second half of 2019, Electrify America launched the Normal Now campaign with its first significant media buy, or "flight," which was concentrated on digital media channels, as shown in Figure 16. The Normal Now campaign will run in California through December 2021, with three flights planned. The campaign is focused on reaching two target audiences, which were refined based on lessons learned from the Cycle 1 media campaign effectiveness analysis.

Channel Examples Sept. Aug. Oct. Digital Display Hearst, Wired, Streaming Audio Spotify, Pandora Streaming Spotify, Pandora Audio Podcasts Slate Food Network. Digital TV Discovery, ESPN Online Video Vevo, Hearst Instagram, Twitter, Social Search
9 States/CAL Google, Bing

During the second half of 2019, Electrify Figure 16 - Media Channels for Brand-Neutral Campaign

Electrify America and its media agency bought digital media by specific zip codes, in order to ensure that 35% of all media spending occurred in low-income and disadvantaged communities. Electrify America is also continuing to run both English and Spanish advertising.

Table 2 below illustrates how these channels accomplished more than 108 million impressions (i.e., listeners and viewers) in California during the second half of 2019, 41% of which resulted from the targeted media buy in low-income and disadvantaged communities. Flight 1 successfully put the Normal Now message in front of millions of people in the state, attracting 23 million completed video views of the Normal Now message, and prompting a further 214,000 clicks through to the Normal Now website to find out more about zero emission vehicles. Media targeted towards low-income and disadvantaged communities attracted 10 million video completions and 83,000 clicks through to the website.

Media Type	Impressions – General Audience	Impressions – Media Targeted in LIC/DAC Areas
Streaming Audio	12,819,242	6,944,203
Search	971,555	159,718
Digital/Video	26,456,375	12,460,846
Social	23,990,528	24,510,971
TOTAL	64,237,700	44,075,738

Table 2 - Normal Now Campaign Impressions in 2019

Electrify America and ComScore have begun to evaluate the impact of the Normal Now Campaign, using the same survey methodology used in Cycle 1. The results are promising, and they also identify areas in which the Normal Now campaign can tailor its messaging.

Overall, Top of Mind awareness, which is when 'Electric' was named first as a type of vehicle fuel or fuel alternative, increased by 3.2% among those exposed to the campaign nationwide. Even greater positive lifts were witnessed in California across ZEV Familiarity (+14.6%) and ZEV Consideration (+15.4%). The Flight 1 campaign was most effective among those from low-income and disadvantaged communities, which saw even greater improvements in ZEV Familiarity (+19.9%) and ZEV Consideration (+20.4%). Finally, the campaign achieved a +9.9% increase nationwide in agreement that electric vehicles are likely to meet the target audience's everyday needs, which is a core message of the Normal Now campaign.

However, those exposed to the Normal Now campaign were more likely to identify key barriers to ZEV adoption than the control group, including affordability, range anxiety, accessibility and charge time. Electrify America is investigating this result in order to increase the campaign's impact in future flights.

To facilitate even greater impact and increase the total number of impressions in collaboration with others, Electrify America has made the Normal Now creative content available to third parties at no cost via the website https://toolkit.normalnow.com/. Through the end of 2019, there were more than 1,200 creative asset downloads by individuals who are able to deploy the content in their own efforts to build EV adoption.

3.1.3. Low-Income and Disadvantaged Community Outreach Investments

In June 2019, at the end of Cycle 1, Electrify America concluded the first phase of its outreach and education partnership with community-based organizations (CBOs) in California. Between October 2018 and the end of Cycle 1, Electrify America collaborated with six CBOs to conduct outreach to diverse communities in California to promote awareness of the benefits of electric vehicles and electric transportation. These programs yielded multiple successes, as well as lessons learned that Electrify America will use to inform future outreach efforts.

The accomplishments of Electrify America's Cycle 1 CBO outreach program are described in greater detail in Table 3 below.

Table 3 - Community Based Organization Accomplishments

Organization Description		Cycle 1 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.	 Held 19 community-based events, reaching 13,909 consumers and distributing ZEV handouts in languages including English, Spanish, Arabic, Armenian, Chinese, Dari, Hmong, and Japanese. Provided information about ZEVs and incentives to local communities through in-language, local ethnic media: print, radio, and TV. Fifteen promotions reached 770,000 people in nine languages. Special outreach projects included a short online educational video in Chinese providing information about ZEV ownership, used on social media and YouTube; an educational display on ZEVs for the SHE lobby where 1,000 people had access/exposure; a partnership with Peninsula Clean Energy to provide information on available ZEV incentives and rebates to 100+ people. Developed a 4-page Special Edition on ZEVs published in a popular online Armenian newsletter. 		
電車優惠推廣計劃 Electric Vehicle Awareness & Education Project Chinese Newcomers Service Center (CNSC)	CNSC focuses on educational and outreach activities for Chinese immigrants in the San Francisco area.	 Hosted a "field trip" ride-and-drive event to visit car dealers that offer ZEVs, home charger suppliers, and public chargers in the Bay Area. Participated in the Chinatown Resource Fair at the City College of San Francisco Chinatown Campus, reaching over 550 residents in Chinese language. Hosted six educational workshops for approximately 350 people to provide information on ZEVs. Social media promotion, including three educational Facebook videos and two YouTube videos, as well as WeChat and text message outreach to share upcoming events. 		
Pacific Asian Consortium in Employment (PACE)	PACE is a non-profit 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 Los Angeles county.	 Ran ads in native language media for Korean, Vietnamese, and Filipino communities: Korea Daily, Korea Times, Asian Journal, a widely-circulated Filipino newspaper, and Nguoi Viet Daily News. Participated in 13 community events across LIC/DAC areas to provide ZEV education materials in five languages. Events had approximately 8,000 attendees, and PACE directly engaged with 2,052 consumers. Translated material into Russian and Armenian languages for substantial local communities of these speakers Conducted seven presentations in K-12 schools to provide education on ZEV benefits. 		

GRID Alternatives	GRID Alternatives, based in the San Francisco Bay area, is a non-profit organization providing low-carbon solutions exclusively to low-income communities.	 Conducted seven Ride and Drives with 615 attendees. 291 completed drives 245 pre-drive survey completions 208 post-drive survey completions Performed quantitative research among English, Chinese, and Spanish speakers on ZEV awareness and purchase intent, finding high familiarity with electric cars (75%) and ZEV purchase intent (70%). Developed and launched social media campaign for EV incentive awareness, reaching 664,000 people through culturally diverse animations, screenshots, and short videos. Worked with Electrify America to build understanding of communities' needs with regard to ZEV adoption and highlighted need for a materials bank for partnering CBOs and organizations.
valley Clean Air Now (Valley CAN)	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 39 Community Clean Car Clinics in the first half of 2019, with 500 total EV incentive applications submitted. Ongoing partnership with 200+ San Joaquin Valley CBOs, churches, farmworker organizations, and Spanish-language radio to generate strong turnout for Valley CAN events. Hosted 10 ride-and-drives with Charge Across Town at Tune In and Tune Up events. Attendance has averaged 495 vehicles per event, with outreach in Spanish, Mixtec, and Punjabi, and coverage in local media. Facilitated 1,252 ZEV purchases during 2019, including results from both Cycle 1 and Cycle 2 activities.
EMPOWER Liberty Hill Foundation (LHF)	Liberty Hill Foundation, based in Los Angeles, has experience working with grassroots organizations in LIC/DAC across Los Angeles County.	 Coordinated LA countywide effort that seeks to overcome barriers to sustainable energy and ZEVs in LIC/DAC areas. Surveyed 1,400 households to collect data with 95% response rate; verified Replace Your Ride eligibility for over 1,100 households; provided EV and other sustainability materials. Trained nine community organizations with historic ties to the communities they serve on ZEVs and incentive programs Participated in 32 Community Clean Car Clinics with 600+ attendees; hosted five ride-and-drive events resulting in 612 test drives.

Three of Electrify America's CBO partners reached out to immigrant populations and non-English speaking communities using in-language materials designed to bridge the language gap with these groups. Self Help for the Elderly (SHE) hosted events and trainings translated into 22+ languages, while the Chinese Newcomers Service Center conducted community events and fairs with materials in the Chinese language, and the Pacific Asian Service Center developed activities for residents whose primary language is Chinese, Spanish, Korean, Vietnamese or Tagalog.

GRID Alternatives and Liberty Hill Foundation conducted ride and drives, including those focused on tribal communities, as well as outreach campaigns focused on raising ZEV awareness. Valley Clean Air Now (Valley CAN) hosted Clean Car Community Clinics, followed by Tune In & Tune Up vehicle assistance

Figure 17 – UCLA's Luskin Center Study of Tune In & Tune Up Effectiveness



events, which helped attendees secure rebates and other incentives for electric vehicle purchase, targeting residents of low-income and disadvantaged communities as well as Central and South American subgroups, Hmong, Sikh, and African-American communities.

Electrify America found that in-language materials and community outreach helped to raise awareness of ZEVs, but tracking participants' follow-up activities was not possible, and so the ultimate impact on ZEV adoption could not be measured. However, the Valley CAN program in particular was effective in promoting and tracking follow-up actions due to direct engagement with the ZEV purchase process, providing hands-on support in filling out forms required to qualify for incentives, evaluating a driver's current vehicle for repair or trade-in, and coordinating event attendees with vehicles offerings at local EV sales outfits.

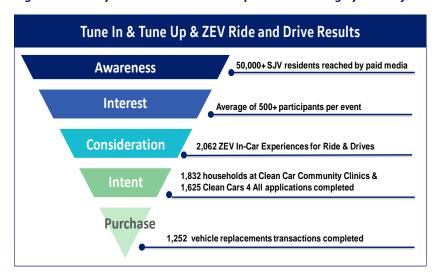
In October 2019, the UCLA Luskin Center for Innovation

published a paper on the impact of Electrify America's investment on the effectiveness of Valley CAN's Clean Car Community Clinic program.¹⁹ The assessment considered four stages of impact – awareness, involvement, engagement, and vehicle acquisition – and the authors concluded "we observe notable positive impacts of Electrify America funding in all four stages." The assessment found that event attendance had increased by 34 attendees on average, with over 100 participants at several events, signifying increased involvement. Regarding engagement and vehicle acquisitions, the assessment noted that monthly applications had more than doubled from 51 to 106, with 84 percent of applicants residing

in a low-income or disadvantaged community.

Due to the success of the Valley CAN program in yielding positive results and tracking interactions that directly led to increased EV adoption, Electrify America elected to continue this program at the beginning of Cycle 2. Valley CAN's Clean Cars 4 All vehicle replacement program, which helps consumers in low-income and

Figure 18 - Valley CAN's Tune In & Tune Up events were highly successful



¹⁹ Gregory Pierce and Rachel Connolly, 2019. "Initial Assessment of Valley Clean Air Now's Clean Car Community Clinic Initiative." UCLA Luskin Center for Innovation. Available at: https://innovation.luskin.ucla.edu/wp-content/uploads/2019/10/Valley Clean Air Nows Clean Car Community Clinic Initiative.pdf

disadvantaged communities upgrade to an electric vehicle, has demonstrated a strong impact on ZEV sales in these areas. In the second half of 2019, Valley CAN implemented two key program improvements:

- Clean Car Community Clinics were held twice weekly in smaller rural communities throughout the San Joaquin Valley; and
- ZEV Ride & Drives were held at all biweekly Tune In & Tune Up smog repair events.

Valley CAN also worked with the Valley Air District to develop an expedited customer approval process for Clean Cars 4 All. In summary, Valley CAN provided 2,062 in-car experiences at Ride and Drives, leading to 1,625 complete applications and 1,252 completed ZEV purchases for applications completed during 2019.

3.1.4. Sponsorships

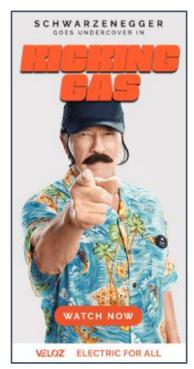
The Cycle 2 California ZEV Investment Plan states that "there may be occasions where it would be reasonable for Electrify America to further education and awareness of ZEVs ... by supporting the programs, activities, or events of an industry or non-profit organization."

In 2019, Electrify America's largest such activity was its ongoing collaboration with Veloz, an organization whose mission is to "inspire, educate and empower Californians to drive electric."

Electrify America contributed significantly to Veloz's "Kicking Gas" ZEV education and awareness campaign, which produced a humorous video and a series of shorts featuring Governor Schwarzenegger – viewable at www.electricforall.org. Consistent with past agreements, Veloz has agreed to raise funds to match Electrify America's financial commitment in the future.

The Kicking Gas campaign ran through the end of 2019 using digital billboard displays along major commuting corridors in Northern and Southern California, paid social media placement on Facebook and Instagram, search placement on Google, YouTube and Bing, and digital display banners. Veloz reports that the digital videos were viewed more

Figure 19 – Digital Ad for the Veloz "Kicking Gas" Campaign



than 85 million times, and the campaign's total impressions exceeded 180 million for the year. Thirty-five percent of the media buy was targeted towards low-income and disadvantaged communities.

Using the criteria specified in the Cycle 2 California ZEV Investment Plan for identifying these occasions, Electrify America chose to sponsor the brand-neutral education and awareness activities shown in Table 4 in the second half of 2019.

Table 4 - Sponsorships

Organization	Description	California Accomplishments	
Plug In America. Plug In America	Electrify America worked with Plug-in-America to help sponsor five ride & drive events in California for National Drive Electric Week, which took place from September 14-22, 2019.	 Hosted five ride and drives at the following locations: Chatsworth, Davis, Mammoth Lakes, Palm Desert and Richmond Total of 407 ride and drives Estimated over 2,300 in attendance at the events Of participants surveyed²⁰: 92% said that their impression of EVs is "better" after driving one 58% said that an EV drives and handles better than a gas car 85% said that they are "likely" or "definitely" going to buy/lease an EV if they get a new car in the next two years 	
AltCar Expo	Electrify America sponsored the Santa Monica AltCar event at Santa Monica College on November 2, 2019.	 Expo showcased a wide variety of ZEVs where the public could learn more about the vehicles and take a test drive. Leveraged Normal Now campaign materials in several forums throughout the event to increase ZEV education and awareness. Expo had 2,750 people in attendance. 	

²⁰ Survey results include feedback from participants from ten Plug In America Ride and Drives sponsored by Electrify America, five of which were outside California.

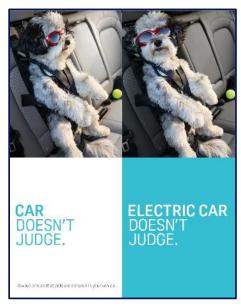
3.2. Branded Marketing

In July, Electrify America began a nationwide branded marketing campaign, with the goals of increasing utilization of Electrify America's charging infrastructure and awareness of the Electrify America brand. The success of this campaign will be measured by downloads of the Electrify America charging app and Pass+ membership enrollments.

The key messages of the campaign center around building range confidence, and showing both EV drivers and those considering an EV purchase that Electrify America's extensive DC fast charging network provide them with the same freedom to travel as those who drive gasoline powered vehicles. The campaign provides consumers with range confidence by highlighting that Electrify America's ultra-fast chargers are located every 70 miles on average along major highway corridors, in close proximity to amenities, and are highly visible and well lit. Leveraging support from Electrify America's media agency, the primary target audience was EV drivers and the secondary target audience was EV intenders (drivers in the market for an EV).

Consistent with the Cycle 2 California ZEV Investment Plan, the campaign used digital media channels in 2019. It included online banner ads that show comparisons to "classic car" moments, such as hitting the open road, strapping children into

Figure 20 - Example Branded Marketing Banner Ad



the back seat, and going through a drive-thru, emphasizing that the electric car experience includes all these same situations. Electrify America also debuted a number of digital video advertisements that can be viewed on YouTube here: https://www.youtube.com/channel/UC3GGcyuzYYyYmZ0hJKlBb6w.

Electrify America began its media campaign in July with paid search and Apple/Android advertising. In October, Electrify America began deploying banner ads, using the same videos available on the YouTube channel. In November, Electrify America also began advertising through paid posts on social media. The campaign ran through the end of the year and into 2020.

4. Green City Initiative

4.1. Introduction

The goals of Electrify America's Green City Initiative are to increase 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 2019, Electrify America completed its investments in pursuit of these goals.

4.2. Car-Sharing Services

Two car-share service vendors - GIG Car

Figure 21 - Green City Goals and Impacts



- Positively impact Zero-Emission Vehicle (ZEV) awareness and the community
- · Provide ZEV access to underserved communities
- · Increase use of ZEV technology
 - Initiatives will have high ZEV vehicle miles traveled (VMT) with substantial impact on greenhouse gas (GHG) emissions
- · Test economic viability of ZEV access initiatives
 - Spread economically proven programs to other metropolitan areas over time

Share, a wholly-owned subsidiary of the American Automobile Association (AAA), and Envoy Technology, Inc., a California-based startup – launched innovative and successful electric vehicle carshare services in Sacramento in 2019.

4.2.1. GIG Car Share

Electrify America provided GIG Car Share with the capital required to launch the largest all-electric carshare program in the U.S. during 2019, providing Sacramento residents with access to ZEVs at a level unmatched in any other community in the nation. The fleet of 260 long-range battery-electric Chevy Bolts, funded entirely by Electrify America, may be picked up or dropped off in any legal parking spot within the "home zone," which grew from an initial 14 square miles to 18 square miles during 2019. The fleet travelled more than 871,000 miles over more than 94,000 separate trips during the year. Activity was particularly strong in Q4, accounting for 35% of annual trips and more than 40% of miles driven in 2019.

Once the service successfully launched in Q2, GIG focused its efforts on building awareness of the service in the community, increasing membership, and managing the fleet. In Q3, GIG encouraged daylong use, launching a specific landing page to help educate drivers and inspire longer trips and offering pricing promotions (\$59/day for trips in GIG EVs), among its many marketing efforts. In Q4, Electrify America supported GIG's continuing discussions with Sacramento County on the possibility of expanding the home zone to include Sacramento International Airport parking lots. GIG also continued exploring the technical and operational structures needed to offer its fleet for use in ride-hailing and delivery services. These conversations have continued into 2020 after early explorations were positive.

4.2.2. Envoy

In 2019, Electrify America provided Envoy with the resources to expand the footprint of its all-electric, residential, community-based car-share service from 12 to 40 properties. By the end of the year, Envoy was operating 81 EVs and 82 L2 charging stations. The launch of Envoy service at the final five locations under contract was delayed unexpectedly, but Envoy anticipates launching in 2020.

Electrify America worked extremely closely with Envoy during 2019 to address initially low utilization rates and other deployment challenges. Tremendous progress has been made by setting realistic deployment targets, collaborating on program marketing efforts, and supporting Envoy Ambassadors – residents who help educate neighbors about Envoy's service and EVs in general.

Figure 22 - SacRT Franklin Boulevard Shuttle



Envoy stations showed varying levels of utilization in Q4, but nine locations exceeded 10% utilization, demonstrating continued improvement. In terms of user acquisition, the Harbor Oaks property had the highest number of participants, at 41 active users.

Envoy also coordinated with Transportation Network Companies (TNCs) to allow Envoy drivers to drive for the gig economy. A number of Envoy vehicles are already being used in this manner, increasing utilization.

4.2.3. Additional Car-share and Ride-hail Activities

In 2019, Electrify America requested proposals for additional car-share or ride-hail service activities and investments in the Sacramento region that would be consistent with the goals and requirements of the Green City Initiative. While a contract was not finalized in 2019, Electrify America anticipates announcing additional initiatives will serve the Sacramento region in 2020.

Additional information on the utilization of car-sharing services is presented in the appendix.

4.3. ZEV Shuttle / Bus

Through the Green City Initiative, Electrify America is investing in the vehicles and charging infrastructure necessary to launch two ZEV transit services: the "Causeway Connection" bus service from Davis to Sacramento jointly provided by Sacramento Regional Transit (SacRT) and Yolo County Transportation District (YCTD); and the "SmaRT Ride" on-demand, micro-shuttle service in the Franklin

Boulevard region proposed by Franklin Neighborhood Development Corporation and operated by SacRT.

For the Causeway Connection, Electrify America fully-funded the purchase and delivery of 12 Proterra E2 Catalyst electric buses. These best-in-class electric buses were assembled at Proterra's



Figure 23: Causeway Connection Electric Bus

factory in Southern California and delivered to SacRT and YCTD in Q4. Electrify America also designed and built ultra-fast charging stations at four sites – the SacRT depot, the YCTD depot, and two on-route

locations in Davis and Sacramento. While the stations progressed on different permitting timelines during 2019, the largest station at SacRT's depot was turned over to SacRT in Q4, enabling vehicle onroute testing to begin by the end of the year.

On December 9, the Boards for SacRT and YCTD both unanimously approved separate resolutions directing the Causeway Connection service to launch in April 2020. When launched, the new service will operate on a schedule that serves current rider needs, while also being more frequent, servicing more communities, and dramatically reducing pollution when compared to existing options.

For the highly innovative SmaRT Ride on-demand shuttle Figure 24 - Impacts on Low-Income and service in the Franklin Boulevard community, Electrify America fully funded the purchase and retrofit of three GreenPower EV Star shuttles, which were assembled in Porterville, California, and delivered to SacRT in Q4. The shuttles were then sent to be retrofitted with side ADAcompliant doors, which provide a superior customer experience to the rear ADA doors they replace, and for wrap applications. In 2019, the SmaRT Ride shuttle service launched using traditional diesel vehicles, and SacRT reports the service is highly successfully and heavily utilized. SacRT plans to transition the service to the GreenPower EV Star shuttles in 2020.

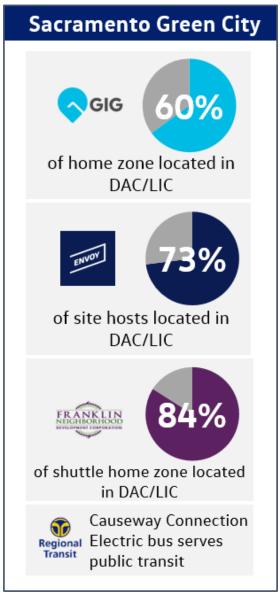
4.4. Disadvantaged and Low-Income Impact

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 18 sq. mile "Home Zone" operations area, in which 60% of served census tracts are designated as low-income or disadvantaged communities.

Envoy continues to focus on low-income and disadvantaged communities, and has achieved a key benchmark of 73% of the properties planned for the program being located in these areas. Of the Envoy properties active at the end of 2019, 29 are in lowincome or disadvantaged communities.

In addition to ensuring that ZEVs are accessible and available in low-income and disadvantaged areas of

Disadvantaged Communities



Sacramento, Electrify America has also worked closely with local and regional partners to ensure the services are included in programs targeted at low-income populations. In particular, in 2019 Electrify America encouraged the Sacramento Air Quality Management District (AQMD) RideHail VISA program, which helps community residents to travel throughout the Sacramento Region after trading in a polluting vehicle, to allow program participants to use ZEV car-share vehicles. During the summer of 2019, AQMD agreed to authorize the use of program VISA cards on EV car-share services, creating greater accessibility to GIG and Envoy services.

The two ZEV shuttle/bus services will also operate in low-income and disadvantaged communities. The Causeway Connection will replace a private, limited access bus with a public transit service, and 100% of this investment is classified as low-income or disadvantaged under CARB criteria.²¹ And of the census tracts served by the Franklin Boulevard shuttle service, 84% are low-income or disadvantaged communities. These percentages are illustrated in Figure 24.

4.5. Infrastructure

Electrify America designed, permitted, built and opened DC fast charging stations in the Sacramento market throughout 2019 – consistent with Electrify America's plan to provide Sacramento with the highest per-capita density of Electrify America DC fast chargers in the nation.

Electrify America opened charging stations to the public at 13 Sacramento sites by the end of 2019, providing 56 DC fast chargers. As a result of a unique collaboration with Sacramento County, Electrify America opened eight ultra-fast chargers at the Sacramento International Airport.

4.6. Green City Marketing

In collaboration with 3fold Communications, a Sacramento-based, women-owned business, Electrify America launched the "Sac-to-Zero" education and awareness campaign in 2019. 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.

During 2019, 3fold held 29 Sac-to-Zero events and activities, engaging more than 12,000 individuals. The activities included community-based events, such as farmers' markets, arts festivals, and sporting events, 26 of which were in low-income and disadvantaged communities. At the events, Sac-to-Zero staff were available to answer questions and engage participants regarding ZEV transportation options in Sacramento, and most events featured electric vehicles funded by Electrify America and put into service by either Envoy, GIG Car Share, or SacRT.



Figure 25 - Green City Outreach Event

²¹ For CARB criteria, see California Air Resources Board. "Evaluation Criteria for Providing Benefits To Priority Populations: Clean Transportation and Equipment." https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/ccidoc/criteriatable/criteria-table-cte.pdf. In the Schedule of Creditable Costs, Electrify America did not credit the Causeway Connection investment as an LIC/DAC investment, as the cited CARB criteria have not been independently validated as a basis for cost allocation.

Seven such events were held in collaboration with the Sacramento Republic soccer club, including an October 21 celebration of the Republic being elevated to Major League Soccer (MLS) at which Sac-to-Zero campaign staff were able to engage with 983 people. All seven of these event took place in low income and disadvantaged communities. The Wide Open Walls Mural Festival, for which GIG served as the Official Mobility Partner, providing complimentary access to GIG vehicles for artists, organizers and volunteers, was a similarly successful engagement.

To build awareness, 3fold also launched and supported digital marketing through Sac-to-Zero.com and Sac-to-Zero Social Media Channels (Facebook and Instagram). The campaign was particularly active on Facebook, recording 28.9 million impressions during the year.

4.6. Description of Spending Accomplishments

For detailed results of Green City spending accomplishments, including car-share program utilization and detailed marketing results, see the Annual Report Appendix.

4.7. Problems, Concerns and Lessons Learned

In 2019, Electrify America completed the vast majority of its Cycle 1 Green City investments. As Electrify America commenced Cycle 2 investments, there were a number of lessons learned from the first Green City Initiative in Sacramento.

Electrify America learned tremendously from the launch of car share services in 2019. For example, GIG Car Share's soft launch, in beta mode, allowed problems to be identified and fixed before general customer activity began, and proved to be a best practice. Electrify America's experience also demonstrated that being flexible regarding a project's scope is vital in order to enable partners to succeed. Expanding territory and right-sizing project scope were both successful strategies deployed during the year.

In 2019, Electrify America also worked closely with stakeholders – including SacRT, YCTD, UC Davis, and the City of Sacramento – to ensure that the Causeway Connection would meet rider needs in a manner consistent with the service proposed during a competitive solicitation to Electrify America. The originally proposed service was a transit bus service with 15-minute peak frequency and multiple additional Sacramento stops, which was a substantial increase in service when compared to the charter bus service provided by UC Davis. Electrify America's investment in vehicles and charging stations was designed to provide that service frequency.

During 2019, stakeholders worked together to secure the operating budget necessary to operate three buses per hour at peak times. Electrify America also welcomed the schedule adjustment recommendations from riders of the current charter bus service, which SacRT and YCTD adopted in December as part of a robust public engagement process. While the final Causeway Connection schedule includes gaps exceeding 15 minutes at peak travel times that are not consistent with the original proposal, the service will run three buses per peak hour. Electrify America provided SacRT and YCTD with the flexibility necessary to deviate from their original proposal in order to accommodate the scheduling requests of the rider community and operating budget limitations.

SacRT and SMUD also experienced significant delays in permitting the charging station at SacRT's depot in Sacramento. The delay presented a potential barrier to bus testing. To address this risk, Electrify America engaged directly with the Governor's office to seek support for station permitting, and Electrify America has also verified that bus testing will be feasible using the Sacramento Airport charging station if necessary.

5. Vendor Survey

Electrify America surveys its vendors semi-annually regarding the economic impact of its investment in California. The survey for the second half of 2019 was conducted over a six-week period, and respondents were notified of its importance to Electrify America's reporting requirements via email and personal outreach from business unit leads across the company.

Electrify America deeply appreciates the time and effort its vendors put into completing the survey. Fifty-two firms voluntarily responded – 64.1% of Electrify America's vendors. Twenty-three of the respondents are headquartered in California, four more than responded to the 2018 survey.

Approximately 12% of the total workforce reported by survey respondents worked in California, sprinkled across 103 offices and vendor-controlled facilities. Of those workers, 1,027 live in state – more than twice as many as reported in 2018.

The survey is designed to highlight the impact of Electrify America's investment on job creation and economic development in California's disadvantaged and low-income communities. However, vendors cannot require their employees to provide demographic information, and Electrify America cannot verify it.

Figure 26 - Construction Workers are part of the 1,027 Californians who worked on Electrify America projects



California-based vendors reported that more than 50% of their employees and subcontractors who worked on Electrify America projects reside in low-income and disadvantaged communities, up from 39% in 2018. They also reported that 63% of their offices and facilities (including home offices) were located in low-income and disadvantaged communities.²²

Three percent of the employees covered by the survey self-identified as veterans. Nine vendors reported qualifying as either woman- or minority-owned entities.²³ Several vendors, especially those based in California, also noted their efforts to recruit in low-income or disadvantaged communities. For example, SignTech, a designer, manufacturer, and installer of custom signage in San Diego, recruits employees directly out of trade schools in low-income and disadvantaged communities.

²² 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.

²³ Non-profit organizations qualify as minority-owned or women-owned based on Board of Directors composition.

6. Corporate Citizenship

Electrify America has an unprecedented opportunity to make business-driven investments that promote ZEV adoption, improving the quality of life for all Californians. The company is committed to making a difference through its investments. The impact of this commitment takes many forms.

Electrify America's investments are an engine of job creation in and around the nascent EV charging industry. The firm's vendors range from multi-national corporations to passion-driven, community-based non-profits, each of which is bringing on new workers and building new expertise because of their relationship with Electrify America. According to a survey of Electrify America's California-based vendors, more than half of their employees who worked on Electrify America projects reside in low-income or disadvantaged communities, up from 39% in 2018.²⁴

The company also seeks to engage stakeholders throughout the ZEV community, not only to benefit from their expertise, but also to share what it has learned. Examples of this included Electrify America's continuing collaboration with Veloz and its extensive community outreach efforts. Regarding the latter, Electrify America held well-attended community engagement meetings in its nine core California markets, with the intention of sharing its plans for investment in Cycle 2 and identifying opportunities for collaboration. Over nine hundred invitations were sent out to these events, primarily to representatives from local governments. Attendees included elected officials, regional planners, sustainability staff, and community leaders from dozens of jurisdictions.

6.1. 50x50 Commission

In 2017, the Alliance to Save Energy chartered the Commission on U.S. Transportation Sector Efficiency (the "50x50 Commission") to identify ways to reduce energy use in the U.S. transportation sector by 50% by 2050. Electrify America's President and CEO Giovanni Palazzo serves on the Commission along with several other business executives, elected officials, utility representatives, and other key transportation sector stakeholders.

The 50x50 Commission released its initial policy recommendations, "Reinventing U.S. Mobility," in September of 2018. In 2019, it followed up that report with a package of infrastructure recommendations designed to inform Congress' deliberations regarding future infrastructure investment.

6.2. Living Diversity

Electrify America's team comes from a diverse set of backgrounds. Inclusion and mutual respect are woven into the fabric of the company's culture, and it provides us with an advantage as we seek to drive ZEV adoption for all Americans. The executive team follows hiring standards and provides professional development opportunities designed to increase diversity within the company's ranks. Electrify America has a training program that promotes equality and acceptance. It has also committed to creating a wellness room to give employees a private space for practices such as meditation and prayer.

²⁴ For details about Electrify America's vendor survey, see the "Vendor Survey" section.

VWGoA, which provides human resource services to Electrify America, participates in INROADS (www.inroads.org), an organization that prepares young people from disadvantaged backgrounds for careers in corporate America. We enjoy a partnership with Out & Equal (www.outandequal.org), which provides resources to corporations and LGBTQ employees through advocacy, training programs, and events. Electrify America is also proud that U.S. military veterans make up five percent of its staff.

Additionally, Electrify America employees have the option to participate in a wide variety of Employee Resource Groups (ERGs), such as "A3," the African and African-American ERG; "Women in Motion," an ERG that encourages the development of leadership skills and career opportunities for women; and DRIVE Alliance (Drivers of Respect, Inclusion, Value and Equality), which promotes professional development and equality for LGBT employees and their allies. These groups offer community, fellowship, and an opportunity to engage with peers around causes they support. This commitment to diversity and inclusion was recognized in 2019 by Forbes, which included VWGoA on its list of "Best Employers for Diversity," and by DiversityINC, which named it among the "Top 25 Noteworthy Companies for Diversity."

6.3. Supplier Diversity

Diversity and Inclusion are not just business imperatives for Electrify America. They are core values. The company recognizes that in the same way its employees and customers come from diverse backgrounds, so too should its suppliers.

In 2019 Electrify America continued to work with the VWGoA Supplier Diversity Manager to ensure a diversity of vendors. If a vendor expresses interest in working with VWGoA, and its capabilities match any of Electrify America's needs, VWGoA's Supplier Diversity Manager refers them to the Electrify America team. The same manager also attends supplier diversity meetings and conferences, and distributes contact information for Electrify America's purchasing team to vendors working in sectors where the company is investing.

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

This commitment to diversity was reflected in Electrify America's 2019 vendor survey, in which 17.3% of respondents reported qualifying as either woman- or minority-owned or controlled entities.²⁵

²⁵ Non-profit organizations qualify as minority-owned or women-owned based on Board of Directors composition.

7. Update on Cycle 2 Spending Forecasted to be Incurred during Cycle 3

During Cycle 2, Electrify America is making all possible efforts to fulfill its Appendix C ZEV Investment Commitment to incur \$200 million in creditable costs by the end of Cycle 2. However, as of the drafting of this document, Electrify America anticipates a potential shortfall in Cycle 2 spending through December 2021 due to delays in charging station investments and marketing spending resulting from the COVID-19 global pandemic.

The COVID-19 pandemic did not impact Electrify America investment during 2019, which is the focus of this Annual Report.

But Electrify America acted aggressively to address the COVID-19 emergency early in 2020. With the health of our employees a top priority, a moratorium on employee travel and meeting attendance went into effect in the first week of March, and mandatory telework and employee stay-at-home policies took effect during the second week of March. The Electrify America team has continued to work remotely in an extraordinarily dedicated fashion. And consistent with guidance from the U.S. Department of Homeland Security and the California Energy Commission that EV charging stations are critical infrastructure providing an essential service, Electrify America charging stations remain open and available to those who need them.

Due to forces beyond its control, Electrify America's investment is substantially delayed. The national emergency and stay-at-home orders now implemented across most of the United States have slowed or stopped ultra-fast charging station site evaluation, site selection, permitting, construction, utility interconnection, inspection and commissioning activities. Some site hosts – especially those that provide essential services – have prohibited construction activities during the emergency. And Electrify America has required our suppliers, vendors, and contractors to follow the applicable regulations and guidance regarding the health and safety of their employees during this global pandemic. Dozens of active construction sites have been demobilized. While there are regional differences, approximately 70% of permitted charging station sites in Electrify America's portfolio are delayed.

Electrify America has also halted spending on our brand-neutral "Normal Now" media campaign while the appropriateness of its message in these unprecedented times is evaluated.

While the full magnitude and impact of the delays associated with the COVID-19 global pandemic cannot be known at this time, Electrify America will take measures to help mitigate these significant and material delays, understanding that the possibility that the pandemic could adversely affect Electrify America's ability to deliver on ZEV Investment commitments as scheduled.

8. Schedule of Creditable Costs

For the reporting period of January 1, 2019, through December 31, 2019, 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, and the California Creditable Cost Guidance, approved by CARB in a letter dated August 4, 2017, as those documents were amended by the First Supplement to the Creditable Cost Guidance dated March 12, 2019 and approved March 13, 2019.

Electrify America formally requests that CARB 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, 2019 (in U.S. Dollars)				
Creditable Costs	California	National	Total	
ZEV Infrastructure Investments				
DCFC Infrastructure Investments				
Green City Infrastructure Investments				
L2 MUD & Workplace Investments				
Other Infrastructure Related Investments				
Total - Investments	\$107,331,058	\$152,047,986	\$259,379,045	
ZEV Infrastructure Expenses				
Call Center				
Credit Card Processing Fees				
Creditable Electricity Charges				
Land Lease				
Maintenance Expense				
Networking Fees				
Site Acquisition and Identification				
Other Operating Expenses				
Subtotal - ZEV Infrastructure Expenses	\$19,293,121	\$14,737,286	\$34,030,407	
Green City Expenses				
Car Share				
Infrastructure				
Marketing				
SMUD Storage Shares				
Subtotal - Green City Expenses	\$17,515,355	\$0	\$17,515,355	
Education and Marketing Expenses				
Brand Neutral Education				
Branded Marketing				
Subtotal - Education and Marketing Expenses	\$18,622,927	\$22,252,777	\$40,875,705	
Overhead Expenses				
Facilities Costs				
Legal				
Maintenance				
Miscellaneous				
Personnel Costs				
Personnel-Related Costs				
Property Taxes				
Service Level Agreements				
Telecom				
Subtotal - Overhead Expenses	\$10,036,950	\$5,669,465	\$15,706,415	
Total - Expenses	\$65,468,353	\$42,659,528	\$108,127,881	

\$194,707,514

\$367,506,925

\$172,799,411

Grand Total - Creditable Spending

Notes:

- 1. The basis of cost presentation is accrual accounting in accordance with VWAG IFRS accounting standards (reference VW IFRS Handbook May 2019). 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.
- 2. 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.
- 3. 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 and subsequent Investment cycles are subject to a 10% percent threshold, unless otherwise agreed to in writing by EPA or CARB, as applicable, in advance of such cost being incurred.
- 4. For 2019, the overhead costs as a percentage of total creditable costs are within the annual threshold. The 2019 costs have been segregated between Cycle 1 and Cycle 2 activities. The Cycle 1 costs have been accumulated which allows for the assessment of overhead costs versus the stated target. The Cycle 1 total overhead cost totals \$40,678,475 and represents 8% of the total spending. Therefore, all of the overhead costs for Cycle 1 have been claimed as creditable without need to restate prior year amounts claimed as provisionally creditable. The 2019 overhead costs attributed to Cycle 2 are claimed as provisionally creditable, subject to measurement and verification at the conclusion of the second Cycle.
- 5. The cumulative Cycle 1 spending, including costs reported in the 2017 and 2018 Annual Reports, totals \$300,000,000 for the National ZEV Investment Plan and \$192,381,923 for the California ZEV Investment Plan. The Cycle 1 spending goal is \$300,000,000 for the Cycle 1 National ZEV Investment Plan and \$200,000,000 for the Cycle 1 California ZEV Investment Plan.

The Cycle 1 National ZEV Investment Plan spending goal was achieved for Cycle 1 through June 30, 2019. Total spending on Cycle 1 National ZEV Investment Plan activities through June 30, 2019 totaled \$300,000,000. The Cycle 1 National ZEV Investment Plan included 88 DCFC station sites that would be under development but not yet completed. The Cycle 2 National ZEV Investment Plan, which designated funding for the completion of these sites, was approved by EPA in February 2019. Section 2.6 of Appendix C of the 2.0 Liter Partial Consent Decree directs that Electrify America "shall start implementing the National ZEV Investment Plan upon its approval." Therefore, the development of these sites continued throughout 2019 and a portion of the Cycle 2 allotted investment was spent prior to June 30, 2019. A total of \$31,926,845 of the 2019 Cycle 2 spending was to continue the development of sites that were begun in Cycle 1.

The Cycle 1 California ZEV Investment Plan goal was not achieved within the specified Cycle 1 timeframe. The unfinished Cycle 1 projects include L2 Workplace / MUD sites, DCFC charging sites, Battery Storage systems, and Green City initiatives. The cumulative Cycle 1 spending through June 30, 2019 totaled \$141,494,481, a shortfall of \$58,505,519. The status of Cycle 1 spending in California was communicated to the California Air Resources Board staff regularly during 2019, and Electrify America also communicated its intention to complete some of the investments in the CARB-approved Cycle 1 California ZEV Investment Plan after June 30, 2019.

The activities for these specified Cycle 1 projects continued without pause after June 30 and the spending has been discretely tracked and reported as Cycle 1 spending. As of December 31, 2019, the spending shortfall for Cycle 1 is \$7,618,076. The projects and spending are expected to be completed in 2020 and will be discretely tracked and reported in the 2020 Annual Report.

6. 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. For FY2019, no Service Level Agreement costs have been claimed as creditable. The figures reported are the result of the Cycle 1 allocation true-up of prior year expenses claimed as creditable in 2017 and 2018.

Electrify America, LLC Schedule of Creditable Costs for Fiscal Year ending December 31, 2019 (in U.S. Dollars) California California California **Creditable Costs** Cycle 1 Cycle 2 **Total ZEV Infrastructure Investments DCFC Infrastructure Investments Green City Infrastructure Investments** L2 MUD & Workplace Investments Other Infrastructure Related Investments **Total - Investments** 106,900,114 430,944 107,331,058 **ZEV Infrastructure Expenses** Call Center **Credit Card Processing Fees** Creditable Electricity Charges Land Lease Maintenance Expense **Networking Fees** Site Acquisition and Identification Other Operating Expenses **Subtotal - ZEV Infrastructure Expenses** 8,122,883 11,170,238 19,293,121 **Green City Expenses** Car Share Infrastructure Marketing **SMUD Storage Shares Subtotal - Green City Expenses** 17,515,355 17,515,355 **Education and Marketing Expenses Brand Neutral Education Branded Marketing Subtotal - Education and Marketing Expenses** 12,105,454 18,622,927 6,517,474 **Overhead Expenses Facilities Costs** Legal Maintenance Miscellaneous **Personnel Costs** Personnel-Related Costs **Property Taxes** Service Level Agreements Telecom **Subtotal - Overhead Expenses** 9,482,115 554,835 10,036,950

18,242,546

18,673,490

65,468,353

172,799,411

47,225,807

154,125,921

Total - Expenses

Grand Total - Creditable Spending

Electrify America, LLC			
Schedule of Creditable Costs for Cycle 1 (FY 20	17-2019) (in U.S. Do	ollars)	
Creditable Costs	California	National	Total
ZEV Infrastructure Investments			
DCFC Infrastructure Investments			
Green City Infrastructure Investments			
L2 MUD & Workplace Investments			
Other Infrastructure Related Investments			
Total - Investments	\$121,236,091	\$218,953,713	\$340,189,804
ZEV Infrastructure Expenses			
Call Center			
Credit Card Processing Fees			
Creditable Electricity Charges			
Land Lease			
Maintenance Expense			
Networking Fees			
Site Acquisition and Identification			
Other Operating Expenses			
Subtotal - ZEV Infrastructure Expenses	\$10,967,710	\$24,364,324	\$35,332,034
Green City Expenses			
Car Share			
Infrastructure			
Marketing			
SMUD Storage Shares			
Subtotal - Green City Expenses	\$23,055,587	\$0	\$23,055,587
Education and Marketing Expenses			
Brand Neutral Education			
Branded Marketing			
Subtotal - Education and Marketing Expenses	\$20,927,072	\$32,198,953	\$53,126,024
Overhead Expenses			
Facilities Costs Legal			
Maintenance			
Miscellaneous			
Personnel Costs			
Personnel-Related Costs			
Property Taxes			
Service Level Agreements			
Telecom			
Subtotal - Overhead Expenses	\$16,195,464	\$24,483,011	\$40,678,475
Total - Expenses	\$71,145,832	\$81,046,287	\$152,192,120
Grand Total - Creditable Spending	\$192,381,923	\$300,000,000	\$492,381,924

Electrify America, LLC

Evaluation of California Costs spent in Low-income and Disadvantaged Communities For Fiscal Year ending December 31, 2019 (in U.S. Dollars)

Creditable Costs	FY2019 Non-LIC/DAC	FY2019 LIC/DAC	FY2019 Total
ZEV Infrastructure Investments (CAPEX)			
Highway			
Metro			
Multi-Unit Dwelling			
Workplace			
All Other Investments			
Total - Investments	\$45,869,290	\$44,975,731	\$90,845,021
ZEV Infrastructure Expenses (OPEX)			
Call Center			
Credit Card Processing Fees			
Creditable Electricity Charges			
Land Lease			
Maintenance Expense			
Networking Fees & Software			
Site Acquisition & Identification			
All Other Operating Expenses			
Subtotal - ZEV Infrastructure Expenses	\$11,443,386	\$7,849,734	\$19,293,121
Green City Investments & Expenses			
Car Share (CAPEX)			
Car Share (OPEX)			
Infrastructure (CAPEX)			
Infrastructure (OPEX)			
Marketing			
SMUD Storage Shares			
Subtotal - Green City Expenses	\$19,338,589	\$14,662,803	\$34,001,392
Education and Marketing Expenses			
Brand Neutral Education			
Branded Marketing			
Subtotal - Education and Marketing Expenses	\$8,622,931	\$9,999,997	\$18,622,927
Overhead Expenses			
Personnel Costs			
Personnel-Related Costs			
All Other Overhead Costs			
Subtotal - Overhead Expenses	\$5,078,547	\$4,958,403	\$10,036,950
Canada Cromona Expenses	Ç3,070,347	¥ 1,550,405	Ψ <u>2</u> 2,330,330
Total - Expenses (incl'g GC CAPEX)	\$44,483,453	\$37,470,937	\$81,954,390
Grand Total - Creditable Spending	\$90,352,743	\$82,446,668	\$172,799,411
Percentage (%) Creditable Spending	52%	48%	

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, 2019, through December 31, 2019 ("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, as amended (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 January 1, 2019, through December 31, 2019, 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 IIP

Washington, D.C. April 28, 2020