

# **ELECTRIFY AMERICA**

Second Quarter 2018 Report to the California Air Resources Board

August 10, 2018

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## 1. INTRODUCTION

Electrify America, LLC was created by the Volkswagen Group of America to invest \$2 billion in financially sustainable business opportunities that advance the use of Zero Emission Vehicle (ZEV) technology, \$800 million of which must be spent in California (see Figure 1). From its inception early in 2017, Electrify America has moved rapidly to implement the \$2 billion ZEV Investment Commitment.

As detailed below, the second quarter of 2018 (Q2 2018) was focused on securing real estate and preparing for construction of Electrify America's electric vehicle charging stations. The marketing team focused on finalizing brand-neutral education and awareness strategies, while the Green City Initiative took

Figure 1: Company Overview

#### **Our Mission**

Electrify America will be a catalyst for promoting ZEV adoption by offering transformative, customer-centric infrastructure and energy management solutions.

#### **Our Company**

Electrify America is a subsidiary of Volkswagen Group of America created to implement the \$2 billion ZEV Investment Commitment. We have recruited talent from across diverse industries.

#### **Our Approach**

Electrify America is a data-driven company committed to increasing the use of ZEV technology.

steps towards program launch. Finally, Electrify America continued its National Outreach effort as part of its Cycle 2 Planning process.

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

# 2. A NETWORK OF ELECTRIC VEHICLE CHARGING STATIONS

#### 2.1 Introduction

As laid out in the Cycle 1 California ZEV Investment Plan, Electrify America intends to develop a network of electric vehicle charging stations along highly traveled highways and in six carefully selected metropolitan areas during Cycle 1 (see Figure 2). The planned network in California will consist of more than 600 DC fast charging dispensers at approximately 160 charging station sites. In addition, Electrify America will build approximately 1,500 charging stations at workplaces and multiunit dwellings in its six target markets. The network will deploy cutting-edge technology to deliver customer-centric charging to consumers safely and conveniently, and it will connect California to the Electrify America national

network in 39 states.

To launch the network expeditiously, Electrify America initiated two distinct infrastructure strategies in California.

First, the company utilized a robust procurement and real estate acquisition process to launch its statewide ultra-fast DC charging network.

Second, it hired highly qualified and experienced "turnkey" vendors to deploy and maintain charging stations at workplaces and multiunit dwellings.

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



# 2.2 Electrify America's DC Fast Charging Network

Electrify America's internal goal is to build or initiate construction of DC fast charging stations at about 160 distinct sites along high-traffic highways and in six targeted metro areas in California, based on the budgets established in the Cycle 1 California ZEV Investment Plan. This is an ambitious target, based on aggressive

<sup>&</sup>lt;sup>1</sup> 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: <a href="https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm">https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm</a>

cost estimates, and it is subject to likely revisions as final station costs are realized. Target locations (known as "target zones") for each station were identified using Electrify America's proprietary station siting methodology, which projected locations where DC fast charging stations will be most in need by 2020.

#### 2.2.1. Acquiring Station Sites in Station Target Zones

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

Using dedicated internal staff and external real estate experts, Electrify America took steps to secure licenses and leases from site hosts for the 10-year period of the ZEV Investment Commitment in each of its target zones during Q2 of 2018. In each target zone, Electrify America considers multiple real estate leads, based on their unique attributes, such as availability of three-phase power, site lighting, and access to customer amenities. To acquire high-quality sites, Electrify America has entered into master agreements with 18 large-scale real estate owners that provide access to sites nationwide,<sup>2</sup> as well as site host agreements with owners of desirable individual properties across California. (In 2017, Electrify America considered an average of seven real estate leads for each target zone.)

Within each target zone, specific sites are identified for further desktop analysis and then onsite assessments. Electrify America then validates the installation specifics with the local utility and property owner through a site walk and discussion. Throughout the site acquisition process, Electrify America works closely with 14 electric utilities to determine efficient locations from a grid perspective with the lowest service connection costs for Electrify America.

The final step in the real estate process is to sign an individual lease with the property owner. Although many viable options may exist, ultimately, only one site will be leased or licensed within each target zone. In Q2 of 2018, leases were signed in 31 target zones, bringing the total number of target zones with signed leases to 71. Second quarter progress in real estate acquisition can be seen in Figure 3.



<sup>&</sup>lt;sup>2</sup> Electrify America announced Simon Property Group as a real estate partner in Q2 2018. Previously announced real estate partners include Walmart, Target Corporation, Brixmor Property Group, Kimco Realty Corporation, Sheetz, Inc., Casey's General Stores, Inc., DDR Corporation, and Global Partners LP's Alltown.

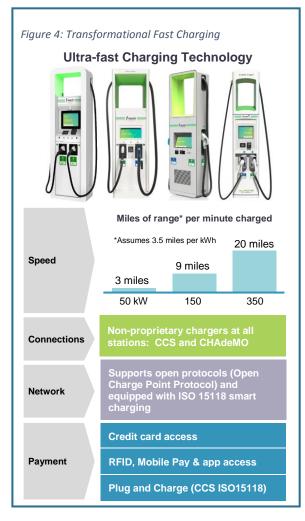
Electrify America strives to ensure that 35% of its business driven investments are in low-income or disadvantaged California communities. In keeping with these efforts, Electrify America strove to ensure that 35% of potential California sites in all stages of the site acquisition funnel – site identification, qualification, lease execution, and validation – were located in low-income or disadvantaged communities. In Q2 2018, Electrify America was able to exceed 35% among identified, validated, and lease executed sites in California.

# 2.2.2. Ultra-fast Electric Vehicle Charger Technology

Electrify America's customer-centric stations will use the most advanced technology ever deployed for convenient, fast charging (see Figure 4).

Highway stations will be equipped with chargers capable of delivering maximum power levels from 150 kW to 350 kW, which are capable of stepping down to lower power levels for vehicles equipped for lower powered DC fast charging. At maximum continuous power, 350 kW chargers will be able to deliver approximately 20 miles of range per minute to a vehicle, vastly improving the customer experience.<sup>3</sup> To deliver this level of power safely and with customer convenience in mind, Electrify America stations will be equipped with state-of-the-art liquid-cooled cable technology.<sup>4</sup>

Electrify America DC fast charging sites will support both the CCS Combo and CHAdeMO connectors. To maximize the ability of customers to use chargers regardless of which charging network they have joined, Electrify America plans to offer credit card payment at all DC fast charging stations, creating an easy customer



experience that is the primary goal of most interoperability efforts. Electrify America will equip all DC fast charging with ISO 15118, which enables smart charging functionality in 2018 and beyond. Finally, all DC fast charging stations will be networked.

<sup>&</sup>lt;sup>3</sup> Idaho National Lab, DOE, and DOT refer to power levels of 350 kW because the limit of the standard is currently 350 amps multiplied by 1000 volts, or 350kW. Comments from OEMs and experts during the Outreach Plan process have led Electrify America to believe that the next generation of vehicles will be designed to go up to 920V. As such, the actual range delivered per minute will depend on the vehicle, as vehicles govern the power level accepted. This estimate assumes the vehicle being charged can travel approximately 3.5 miles per kWh.

<sup>&</sup>lt;sup>4</sup> Neither liquid-cooled cables nor 350 kW charging has ever been deployed commercially in the United States. As a result, Electrify America leased a small space for equipment quality control and validation in 2017.

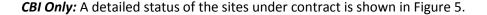
#### 2.2.2.1. Chargers Ordered and Delivered

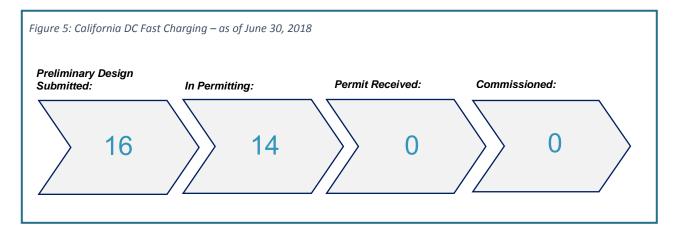
Following an RFP process, Electrify America selected four companies – ABB, BTC Power, Efacec, and Signet – as suppliers of its ultra-fast DC fast chargers during Cycle 1. Electrify America has ordered all of the more than 600 chargers needed in California for Cycle 1, and these chargers are scheduled to be delivered to California station construction sites in 2018 and 2019. Although chargers were delivered to dozens of ultra-fast station construction sites in many other parts of the country, no ultra-fast DC chargers were delivered to California construction sites in Q2 2018.

#### 2.2.3. Constructing a Network of DC Fast Charging Stations

After an extremely thorough and competitive process, Electrify America awarded a contract to Black & Veatch for all DC fast charging station design and installation work in California. This engineering and construction firm, which maintains a regional office in California for all California sites and provides good paying jobs to thousands of California employees, contractors and subcontractors, has managed the installation of more DC fast chargers than any other engineering and construction company in the United States. In addition, the firm has an exemplary safety record and has an established track record of building complex projects on time and on budget. The selection of one of the most experienced and qualified construction firms in the United States ensures that the qualifications, training, or reliability of the construction workers who will be installing Electrify America charging stations in California are second to none.

In Q2 2018, Electrify America and Black & Veatch made progress designing DC fast charging stations in California and began the permitting process. The permitting process for EV charging stations in California took substantially longer than similar processes in other states, where the average time to obtain a permit was 18 days. Electrify America was not able to obtain a permit in California during Q2. However, California has enacted very strong requirements (A.B. 1236) that municipal governments create EV charging station permitting rules that are "timely and cost-effective," and that permits can only be denied if a health or safety issue has been documented. California also recently issued an accessibility guidance that is being interpreted in a variety of different ways by permitting officials, which can add uncertainty not only to the permitting process but has also complicated site host agreements and station design and engineering. Electrify America initiated outreach to local and state government to bring attention to A.B. 1236 requirements, to discuss accessibility requirements, and to work with all parties to expedite the review process. While permit delays emerged as a major risk factor that could prevent Electrify America from completing investments on the schedule laid out in the Cycle 1 California ZEV Investment Plan, Electrify America is pleased by the commitment to address this risk factor shown by the Brown Administration's staff, and we are hopeful that with their support, we will be able to inspire similar urgency among local permitting officials.





#### 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 six communities, Electrify America and its "turnkey" vendors (EV Connect, Greenlots, and SemaConnect) plan to install approximately 1,500 Level 2 (L2) chargers, with approximately 75% of the new L2 charging stations at workplaces and the remainder at multiunit dwellings (e.g., apartment buildings, condominiums and row houses).

#### 2.3.1. Progress Deploying Workplace and Multiunit Dwelling Charging Stations

Electrify America oversees the process by which its three vendors secure station sites and deploy L2 charging stations. Electrify America assigns each vendor specific census tracts (i.e., "L2 target zones") in which to install stations based on a data-driven, geospatial analysis of the locations most likely to have stations with high utilization rates. Vendors use their own proprietary site leads analysis, supplemented by leads suggested by Electrify America, to identify and submit sites for preliminary review by Electrify America. Once sites have been reviewed and approved, vendors negotiate site host agreements with potential site hosts (e.g., property developers, office space facility managers, and other real estate site hosts). After acquiring a site, the vendor will pursue the necessary permits and install, operate, and maintain charging stations, providing a unique benefit to workplace and residential property owners.

At the end of Q2 2018, Electrify America's vendors had identified 873 leads in L2 target zones, and had qualified 527 leads as meeting key station site criteria. Vendors acquired 28 sites in California, as both the timeline to convert leads and the conversion rate did not meet projections during the quarter. In response, Electrify America took a series of mitigation actions to expedite the site acquisition process, and the three vendors leveraged extra sales resources, including new employees, to increase the pace. Electrify America is managing this program closely in an effort to get the program back on schedule. Chargers installed under this program will be networked and interoperable with the Electrify America charging network.

Each of the vendors is contractually obligated to install 35% of their overall station quota in low-income or disadvantaged communities, and Electrify America must approve every station location to ensure this

contractual term is being met. At the end of Q1 2018, more than 35% of qualified leads and nine of 28 acquired sites were in a low-income or disadvantaged communities.

#### 2.3.2. Charger Technology

Electrify America-funded L2 charging stations will have a minimum power level of 6.6 kW (see Figure 6). The chargers will provide 20 to 25 miles of driving range per hour of charging using the non-proprietary SAE J1772 connector, which can be used with all electric vehicles in the United States.

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

| Figure 6: Level 2 Infrastructure |                   |  |  |
|----------------------------------|-------------------|--|--|
| Level 2 Equipment                |                   |  |  |
|                                  |                   |  |  |
| Connector<br>type                | J1772             |  |  |
| Maximum<br>Power (kW)            | 6.6-9.6           |  |  |
| Estimated charge rate            | 20-25 mi/hr.      |  |  |
| Use case                         | Workplace/<br>MUD |  |  |

## 3. GREEN CITY INITIATIVE

#### 3.1 Introduction

The goals of Electrify America's Green City Initiative (see Figure 7) 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 Q2 2018, the Green City Initiative pursued four investment areas: (1) ZEV car share and ride-hail services; (2)

Figure 7: Green City Initiative Goals

#### **Electrify America Green City Goals and Impacts**



- **Green Cities**
- 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

fleet services, including ride-hail/delivery and ZEV shuttle/bus; (3) charging infrastructure; and (4) battery storage.

#### 3.2 Car Sharing

In Q2 2018, Electrify America finalized agreements with two vendors to provide car share services in Sacramento. The combined programs, which are set to launch between the third quarter of 2018 and the first quarter of 2019, will deploy more than 400 zero emission vehicles in the Sacramento market.

On June 13, 2018, Electrify America announced GIG Car Share and Envoy will provide Electrify America's car share services in Sacramento. GIG Car Share will operate a free float car share service with a 13 square mile "HomeZone" in the urban core of Sacramento, with 260 EVs. Envoy will operate a round-trip car share service with 71 properties within the City of Sacramento. A total of 152 EVs will service these properties with supporting Level 2 charging infrastructure.

Electrify America has established with car share vendors the percentage of low-income and disadvantaged communities in which they will deliver services. GIG Car Share is required to service a minimum 50% service area in low-income and disadvantaged areas, while Envoy is required to provide services in a minimum of 75% of properties in low-income and disadvantaged communities. Electrify America has directed vendors to provide registration and marketing opportunities in these communities, and it has also required car share vendors to explore the unbanked segment and opportunities to provide a variety of payment options.

#### 3.3 Infrastructure

Electrify America continued site acquisition efforts to purpose-place charging stations in Sacramento to support Green City programs, including car share. In Q2 2018, Electrify America secured eight leases for station sites in Sacramento.

#### 3.4 ZEV Bus and Shuttle Services

Electrify America is investing in a ZEV bus service and an on-demand micro-shuttle service. To support powering the fleets, Electrify America will also install charging stations with ultra-fast chargers to power each service.

In Q1 2018, Electrify America completed a Request for Information to identify partnership opportunities to deploy public or private ZEV shuttles and/or buses in the Sacramento area. Electrify America asked entities with a background handling fleet services (e.g., bus, van, shuttle, or micro-shuttle operators and administrators) to submit proposals identifying services within Sacramento or connecting Sacramento to regionally significant destinations (e.g., universities, airports, or large employers) that currently exist or will launch before June 2019. Qualified services would address either new needs or substitute for current internal combustion engine shuttle or bus fleets with ZEV shuttles, micro-shuttles, or buses.

In Q2 2018, Electrify America sent Letters of Intent to the two Request for Information awardee groups. One Letter of Intent was executed with Franklin Neighborhood Development Corporation (FNDC) and Sacramento Regional Transit (SacRT) for an on-demand micro shuttle in the Franklin Boulevard Region. The other Letter of Intent was executed with Sacramento Regional Transit and Yolo County Transportation District (YCTD) for the UC Davis to Sacramento route. The descriptions of the services follows:

On-Demand Electric Shuttle Service - Franklin Region: Electrify America has provided the investment for this service which will be operated by SacRT and supported by FNDC. SacRT is planning an initial launch in July 2018 as a new, on-demand micro-transit shuttle service. Investment from Electrify America will allow SacRT to transition the three-shuttle fleet to ZEV shuttle buses, once the shuttle manufacturer begins deliveries. The service is expected to provide about 26,000 rides in its first year. Consumers will be able to access it through an app-based ride-hailing system, an online reservation, or by phone. Electrify America will support the Franklin Boulevard Region service with DC fast charge and Level 2 infrastructure. More than 90 percent of the micro-shuttle's service territory is in a low-income or disadvantaged Sacramento neighborhood.

Electric Bus Service – UC Davis to Sacramento: Electrify America will enhance bus service between UC Davis and Sacramento with 12 new electric buses that will run from the main campus to the UC Davis Health campus in Sacramento. The shuttle will be co-operated by SacRT and the YCTD. Plans include increasing route frequency and providing four bus stops, including UC Davis, West Sacramento, and two stops in Sacramento (downtown and at the UC Davis Health campus, which also will be the eventual home of the planned Aggie Square tech complex). The bus service is expected to add more than 400,000 bus rides in the first year of operation. The enhanced route will

start in 12 to 18 months once the electric bus manufacturer begins deliveries. Electrify America will support the UC Davis to Sacramento route with DC fast charge and Level 2 infrastructure.

# 4. BRAND-NEUTRAL EDUCATION AND AWARENESS

#### 4.1 Broad Brand-Neutral ZEV Awareness Efforts

#### 4.1.1. Creative Strategy

During Q2, the education and awareness campaign documented in the Q1 report was expanded to include a website landing page for the campaign. Electrify America developed the page in order to educate consumers who were exposed to Electrify America's brand-neutral TV and radio campaign about the reasons to purchase a ZEV. The landing page provides an overview on the benefits of ZEVs and links to third-party websites providing robust content for users. The website will go live with the start of the media campaign in Q3, and Electrify America will track site traffic and performance.

The menu choices speak to the benefits of driving a ZEV and link to relevant web content:

- Performance: https://pluginamerica.org/why-go-plug-in/real-life-ev-stories/
- Convenience: <a href="https://www.plugshare.com/">https://www.plugshare.com/</a>
- Affordability: https://plugstar.zappyride.com/tools/incentives
- Availability: <a href="https://plugstar.zappyride.com/guide">https://plugstar.zappyride.com/guide</a>

#### 4.1.2. Media Strategy

As outlined in the Q1 report, Electrify America and its media agency, PHD USA, developed a media plan to target appropriate audiences for creative content being developed in partnership with the creative agency. That plan is currently scheduled to launch in Q3 2018 and has been expanded to include a robust reporting strategy. It is designed to track the response and success of the campaign by answering the following questions:

- Is the media resonating with the target audience, including low-income and disadvantaged communities?
- How is this media campaign supporting awareness and consideration of ZEVs?
- What is the online user journey?
- What topics are online users most and least interested in?

In Q2, Electrify America committed up to \$2 million to the nonprofit organization Veloz to match investments made by other Veloz members in its "Electric for All" campaign initiative in California. To amplify the "Electric for All" campaign, the tagline was added to the end of Electrify America's first TV spot.

#### 4.2 Communications and Public Relations Strategy

In Q2 2018, Electrify America conducted communications outreach to news media through press releases on key initiatives to advance zero emissions vehicle adoption. Electrify America issued an announcement about the "Green City" partnership with the City of Sacramento on June 13 highlighting charging infrastructure installation plans, a ZEV bus route connecting UC Davis and Sacramento, and ZEV microshuttles with the Franklin Neighborhood Development Corporation. In addition, the news release

announced plans for two car sharing services in Sacramento. The announcements garnered significant local media coverage in Sacramento.

Electrify America also made major news announcements in Q2 including: the selection of four DC fast charger equipment suppliers and two design and build engineering firms; the opening of the Electrify America's first fast charging sites; agreements by eight significant retail, convenience, and refueling companies to host more than 200 charging sites, including more than nine locations in California. A press release was also issued on April 30 announcing the appointment of Giovanni Palazzo as the CEO of Electrify America.

#### 4.3 Learn and Drive Experiential Education

In Q2 2018, Electrify America and its partners, Gail and Rice and Forth, began continued experiential education "Discover and Drive" events in California to help increase brand-neutral ZEV awareness. These events, which were first launched in Q1 2018, allow individuals to experience ZEVs without having to purchase a vehicle. The multi-lingual curriculum highlights the benefits and cost-effectiveness of ZEVs in California. The program specifics included:

- 12 Locations (nine of which are disadvantaged or lowincome communities):
   Bakersfield, Fresno, Indio, Milpitas, Orange County, Richmond, Sacramento, San Bernardino, San Diego, San Francisco, Stockton, Torrance
- Format: 31 days at shopping centers and Stockton's "Tune In/Tune Up" event
- Dates: February April
- New and Used Zero
   Emission Vehicles: Nissan
   Leaf, Chevy Bolt, VW e-Golf,



Tesla Model S, BMW i3, Hydrogen Fuel Cell Honda Clarity

- Target attendance: 100+ participants/day
- Recruitment: Electrify America worked with community-based organizations and CARB staff to increase turnout among low-income and disadvantaged communities, while also intercepting shoppers, promoting via social media and conducting local PR
- **Curriculum:** The curriculum, in English, Spanish, and Chinese, highlights the benefits and cost effectiveness of ZEVs in California. To supplement the curriculum, Air Quality Management Districts, utilities, the Clean Vehicle Rebate Project, and community based organizations were invited to table at the events to share information on their programs

 Co-Hosting: Assemblymember Eduardo Garcia, Contra Costa County Supervisor John Gioia, and Assemblymember Eloise Gómez Reyes co-hosted the events in Indio, Richmond, and San Bernardino, respectively.

The "California Discover and Drive" program extended through Q2 2018, taking place in an additional three



cities over six days, including three low-income and disadvantaged communities (see Appendix). An additional 529 attendees participated in Q2 events, yielding a total of 3,644 attendees, 53% of whom reported incomes defined by California as low-income. Among all participants, there was a:

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

#### 4.3 Partnerships

In Q2, Electrify America released a Request for Proposals for strategic program collaboration that will support the goal of providing education campaigns to disadvantaged and low-income communities in California. The aim of this effort is to increase the public's awareness of and exposure to ZEVs through targeted campaigns in markets with significant opportunities to increase the exposure, consideration, and adoption of ZEVs.

Electrify America has committed \$2-3 million to develop multiple collaborations with entities with particular access and credibility within California's disadvantaged and low-income communities.

Through this initiative, we will highlight that ZEVs today can meet most consumers' needs and provide awareness regarding the affordability of driving a ZEV. Considerable evidence demonstrates that the gap between the perceived and actual affordability of ZEVs appears to be significant, and this gap presents a meaningful opportunity for an effective, targeted education effort.

More than 75 nonprofit, private, and public entities from across California were invited to submit proposals for this solicitation, including organizations suggested by CARB staff. An explanatory webinar was conducted in June, and awards to multiple entities are expected in Q3.

## 5. OUTREACH AND PLANNING

#### 5.1 National Outreach Effort

Consistent with Electrify America's commitment to engage in national outreach as part of its investment planning process, in Q2 2018, Electrify America continued its second call for comments, proposals, and recommendations to inform decisions regarding Cycle 2 investments in ZEV infrastructure, education and access programs. Electrify America intends to invest \$200 million in California, and \$500 million nationwide, in Cycle 2 – the 30-month period beginning in July 2019.

The request for input provides an opportunity for governments, organizations, and others to assist Electrify America as it updates its analytical models, evaluates new technology and public policy developments, tracks evolving consumer expectations, and explores the value of new allowable ZEV Investments. To assist in drafting the Cycle 2 ZEV Investment Plans, Electrify America specifically sought the following types of input:

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

Electrify America advertised the submission period in California newspapers, reached out directly to hundreds of government staff and elected officials throughout California, and held multiple webinars to explain the process and answer questions from government stakeholders. Electrify America also encouraged stakeholders to complete submissions by March 1, 2018, to ensure full consideration in the Cycle 2 ZEV Investment Plan development process.

Figure 8 – California Submissions by Entity

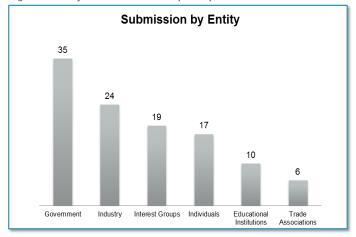
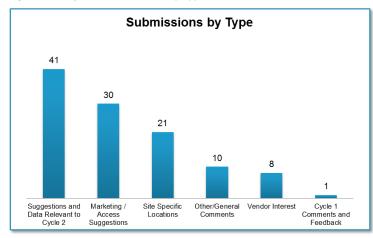


Figure 9 - California Submissions by Type



During Q2 2018, Electrify America received an additional 25 submissions from 24 unique entities in California, bringing the total to 136 submissions from 129 entities in California, with the largest number of submissions coming from governments (see Figure 8). Suggestions and data relevant to Cycle 2 planning represented the largest category of submissions (see Figure 9). Electrify America also received an additional 16 charging station site suggestions in Q2, yielding a total 191 site

suggestions, the vast majority of which were suggested in the six California metropolitan areas in which Electrify America is concentrating Cycle 1 community charging station investments (see Figure 10). Finally, considerable input was received on brand-neutral education and access programs.

Electrify America reviewed these submissions closely in Q2 and reached out to submitters for clarification

or to discuss collaboration where appropriate. All submissions received either a follow up phone call or an email response, and all submitters were invited to participate in two Electrify America webinars explaining the themes identified across all submissions. In addition to reviewing the submissions, Electrify America initiated active outreach to community-based organizations, environmental justice organizations, local governments, and industry stakeholders in Q2 in order to solicit their suggestions and guidance regarding Cycle 2 investments. Input from these organizations, as well as from state agencies, municipal governments, federally recognized Indian tribes, and federal agencies, collected through this process will help Electrify America make informed, data-driven decisions about where to invest and what type of investments to make in Cycle 2.



5.2 Cycle 2 Planning

Electrify America continued its Cycle 2 planning process in Q2 2018. The Guiding Principles for Cycle 2 Planning are:

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

This planning effort will culminate in Electrify America submitting its Cycle 2 California ZEV Investment Plan to CARB for review and consistency with Appendix C of the 2.0 Liter Partial Consent Decree in the second half of 2018.

# 6. 2018 SEMI-ANNUAL VENDOR SURVEY

As part of its oversight of Electrify America's investment in Cycle 1, CARB requested that Electrify America survey its vendors regarding ownership and hiring information and to submit periodic reports on the outcomes. Electrify America surveyed its 60+ vendors under contract in Q2 2018 to request information regarding their workforce.

Electrify America vendors were contacted numerous times about the 2018 Semi-Annual Survey, both by email and via personal correspondence to vendor company senior executives from Electrify America Chief Operating Officer Brendan Jones.

Roughly 37.5% of our vendors (24 in total) replied to the survey. Of the overall pool of 64 vendors, nine California-headquartered vendors replied to the survey. Amongst the total vendor pool, four certified minority-owned enterprises (MBE) and one women-owned enterprise (WBE) are under contract for work with Electrify America; two MBE vendors replied to the survey. The responding vendors have allowed Electrify America to compile their responses for reporting purposes, although most vendors requested the information be anonymized. It must be noted that vendors cannot require their employees to provide demographic information, and Electrify America cannot independently verify the residence information provided regarding vendor employees.

Of the survey respondents' total domestically-employed workforce, approximately 32.5% (31,978 employees) were employed in California. Of the total employees who performed work related to Electrify America projects during the first two quarters of 2018, 302 vendor employees, including subcontracted personnel, resided in California. Among vendors who provided information regarding employee demographics, 9% of their employees self-identify as veterans and 17% of California-based employees resided in a disadvantaged or low-income community. Lastly, two vendors reported having offices located in disadvantaged or low-income California communities.

Electrify America continues to keep records of any diversity supplier who seeks to do business with the company and reaches out directly through the <a href="mailto:info@electrifyamerica.com">info@electrifyamerica.com</a> and/or <a href="mailto:nationaloutreach@electrifyamerica.com">nationaloutreach@electrifyamerica.com</a> contact email addresses. As highlighted in the 2017 Annual Report, Electrify America's Purchasing Team works closely with Volkswagen Group of America's Supplier Diversity Manager to inform potential vendors of the company's work and any upcoming procurement opportunities related to future investment plan cycles.

# 7. APPENDIX: INVESTMENTS IN DISADVANTAGED AND LOW-INCOME COMMUNITIES

Three of four Discover and Drive events during Q2 2018 were located in disadvantaged or low-income communities.

| Investment type          | Location   | Disadvantaged or Low-Income Census Tract |
|--------------------------|--|--|
| Discover and Drive event | San Joaquin County Fairgrounds<br>1658 S Airport Way<br>Stockton, CA 95206 | 6077002202                               |
| Discover and Drive event | Weberstown Mall<br>4950 Pacific Ave<br>Stockton, CA 95207                  | 6077003305                               |
| Discover and Drive event | Shops at Hilltop<br>2200 Hilltop Mall Rd<br>Richmond, CA 94806             | 6013365003                               |