California Cycle 4 ZEV Investment Plan

Presented by Rob Barrosa, President & CEO of Electrify America, to the California Air Resources Board

January 25, 2024

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Progress to Date

Electrify America is the largest open DCFC network, reaching California communities across the state

7 Years
Of Electrify America investment in ZEV adoption in California

1,090+ Chargers
Have been built in California

250+ Stations
Have been opened in California

60 Grid-Independent
Solar-powered Level 2 chargers across **30** rural locations in California have been installed

75 MW solar PV generation facility Solar Glow 1
Was opened in San Bernardino, CA, complementing and separate from Consent Decree investments

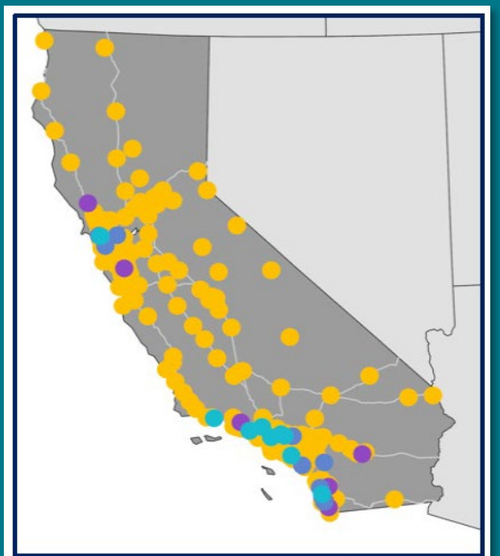
Serving all of California including LIC/DAC & rural communities

Electrify America will continue to strive to meet the requirement that 35% of spending benefit disadvantaged or low-income communities.*

More than 50%

Utilizing its current methodology, more than 50% of Electrify America's public ultra-fast charging stations at every stage of development are in disadvantaged or low-income communities, **exceeding the 35% target**.

As such, Electrify America continues to be intentional about disadvantaged and low-income community investments and growing ZEV adoption concurrently through local education, access, and awareness initiatives.



DCFC Infrastructure as of Q3 2023

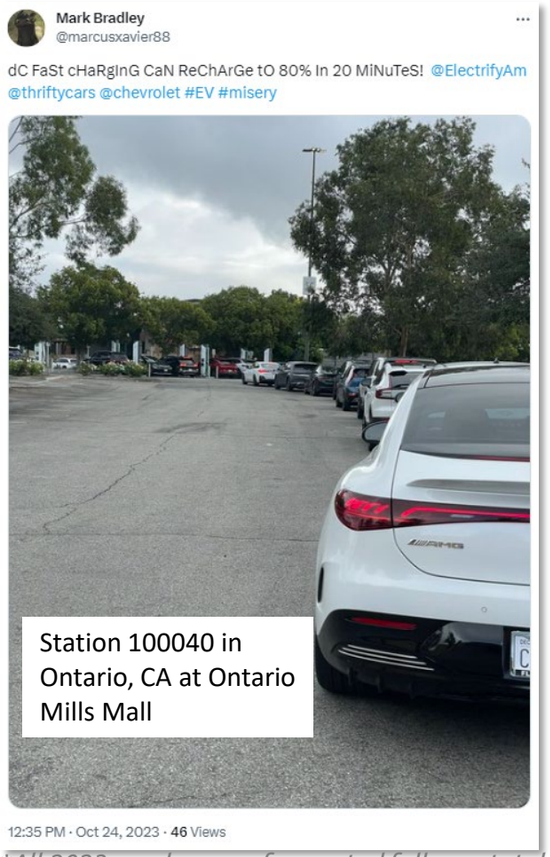
Sites pending Permit Completion	9	55% LIC/DAC
Sites in Construction	8	63% LIC/DAC
Sites pending Commissioning	8	50% LIC/DAC
Sites Commissioned	255	55% LIC/DAC

Total commissioned sites includes 1 non-Consent Decree site

*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.

Electrify America stations in California have seen tremendous growth in usage, supporting the wave of EV adoption

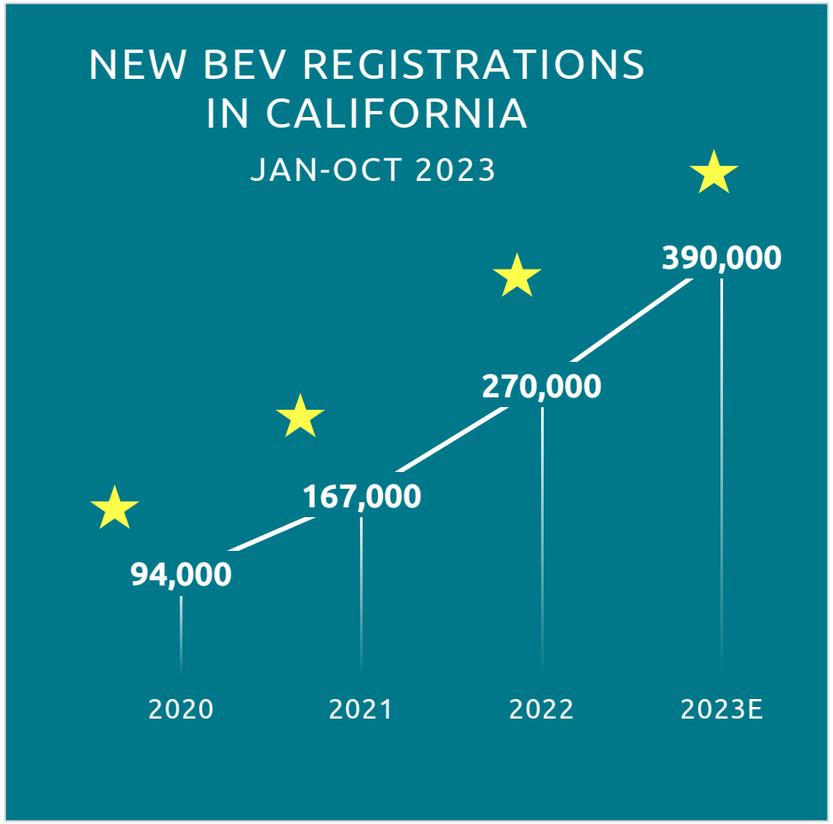
In California, Electrify America stations provided **more than 2.3 million charging sessions** in 2022, which represents about a 400% increase from the previous year and a more than 23x increase over two years.



Station 100040 in Ontario, CA at Ontario Mills Mall

California Station Utilization	Dec. 2022	Dec. 2023*
Utilization over 20%	41%	80%
Utilization over 40%	3%	43%

High utilization contributes to station congestion and queueing, which creates added pressure on the network.



BEV new registrations, IHS;
2023E number annualized based on Jan-Oct data

In 2024, an estimated 500,000 new BEV registrations for 2024 in California.

S&P, Guidehouse, and Electrify America estimates

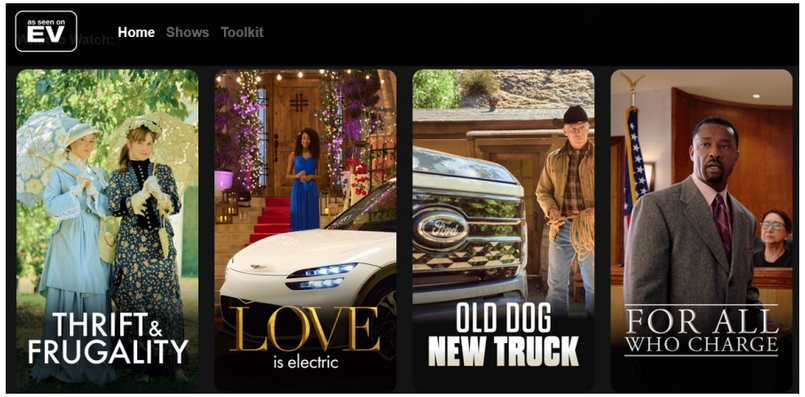
**All 2023 numbers are forecasted full year totals, and have not been validated by government reporting processes, and subject to actual performance for remainder of December.*

Since Cycle 1, Electrify America has boosted ZEV adoption through strategic education and awareness

CYCLE 1:
JETSTONES

CYCLE 2:
NORMAL NOW

CYCLE 3:
AS SEEN ON EV



Investments Over the Years

2023
$1.6 million investment in developement for STEM and Workforce Development Programs

2022
$3 million in four California Community-Based Organizations (CBOs)

2021
$1.6 million in four STEM and Workforce Development Programs

2020 - 2021
$3 million in six California CBOs

2018 - 2019
$2.7 million in six California CBOs

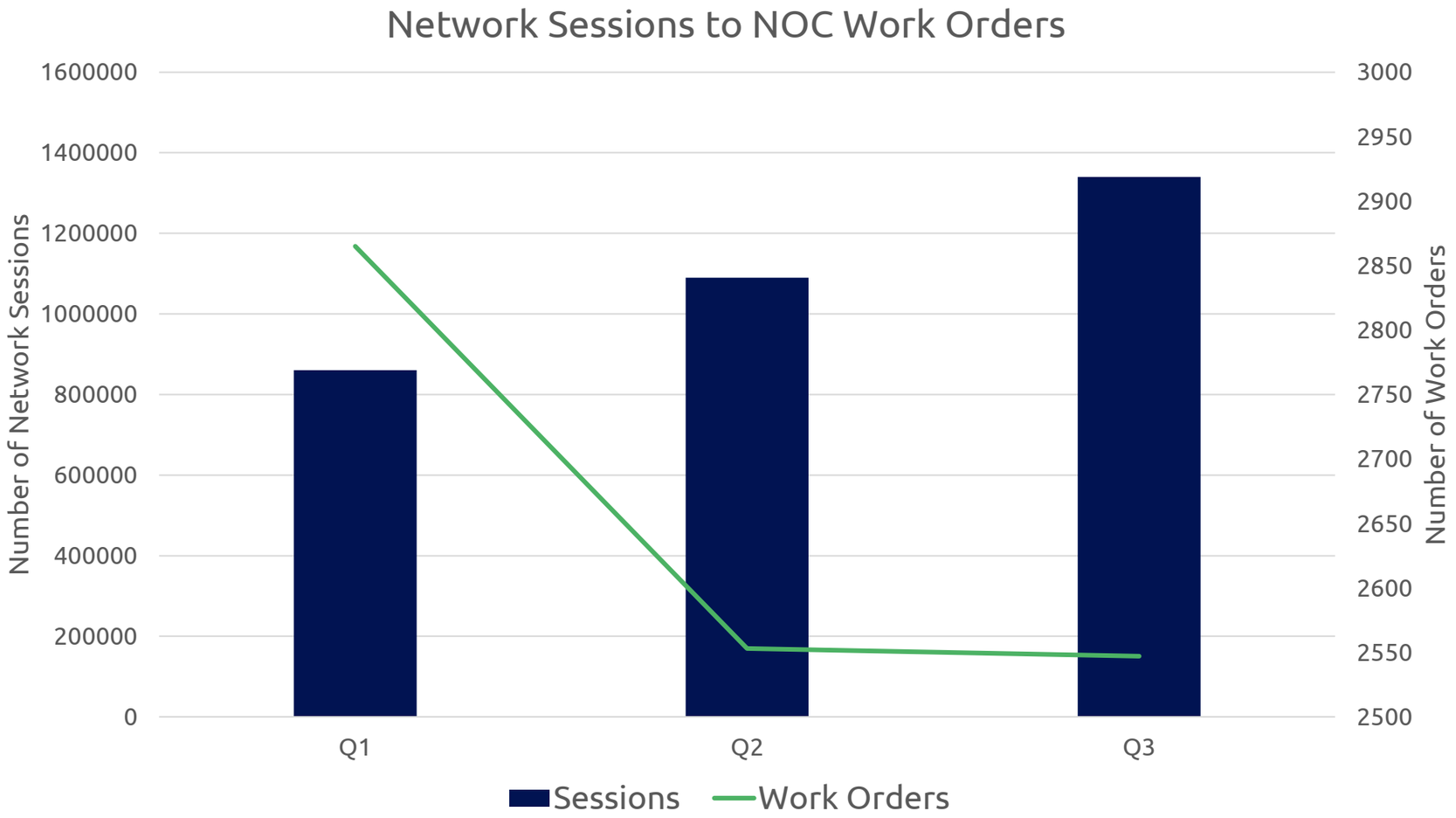
In Focus: Reaching More California Communities through Important Local Investments

Network Reliability

Addressing current network concerns

Electrify America collects user feedback to inform decisions that support a charging experience EV drivers expect

Work orders, calls, and cases to sessions ratios decrease, even as network usage grows in California



ONSITE MAINTENANCE RESPONSE TIME

SLA improvement of onsite time from an average per month of **49.3 hours** in January to **26.5 hours** in December.

A **50%** improvement, well below the 48 hour target.

Corrective work orders per charger in California is **7.2 in 2023.**

Improving reliability is an industry-wide initiative and Electrify America is engaged

Electrify America employees participate and lead working groups within ChargeX to address quality concerns regarding payments, reliability, and fault codes. Executive leadership participation in ChargeX Consortium and CharIN.

INDUSTRY INNOVATIONS

Session Auto-restart / Seamless Retry

Industry alignment on best practices for automatic session restart in case of failure.

Q2 2022

Electrify America initiated industry workshops and successfully developed whitepaper on automatic session retry with many industry stakeholders (OEMs, EVSE manufacturers, etc.).

Q1 2023

OEMs started to leverage new functionality. Implementation is now being adopted by ChargeX under NREL leadership.

INDUSTRY INVOLVEMENT

Q2 2023

Electrify America + EVgo co-authored white paper and initiated a **CharIN industry working group related to vehicle interoperability with charging equipment** with broad automotive OEMs and supplier participation.

Q4 2023

Key vehicle + charger reliability topics have been identified to enhance charging performance and improvements needed on vehicle side.

Recommendations submitted by group participants to relevant standards bodies.

Electrify America is focused on station reliability and improving quality beyond Cycle 3

Based on customer feedback and internal metrics, Electrify America is investing heavily to improve station reliability and the overall charging experience.

Legacy chargers before upgrades

Chargers upgraded to Next Gen

Cycle 4

An Overview + Station Reliability + New Stations

Cycle 4 ZEV investment plan for California

INFRASTRUCTURE INVESTMENTS

1. **Station Reliability Upgrades**
2. **New Station Development**

PUBLIC EDUCATION, AWARENESS, ACCESS AND MARKETING

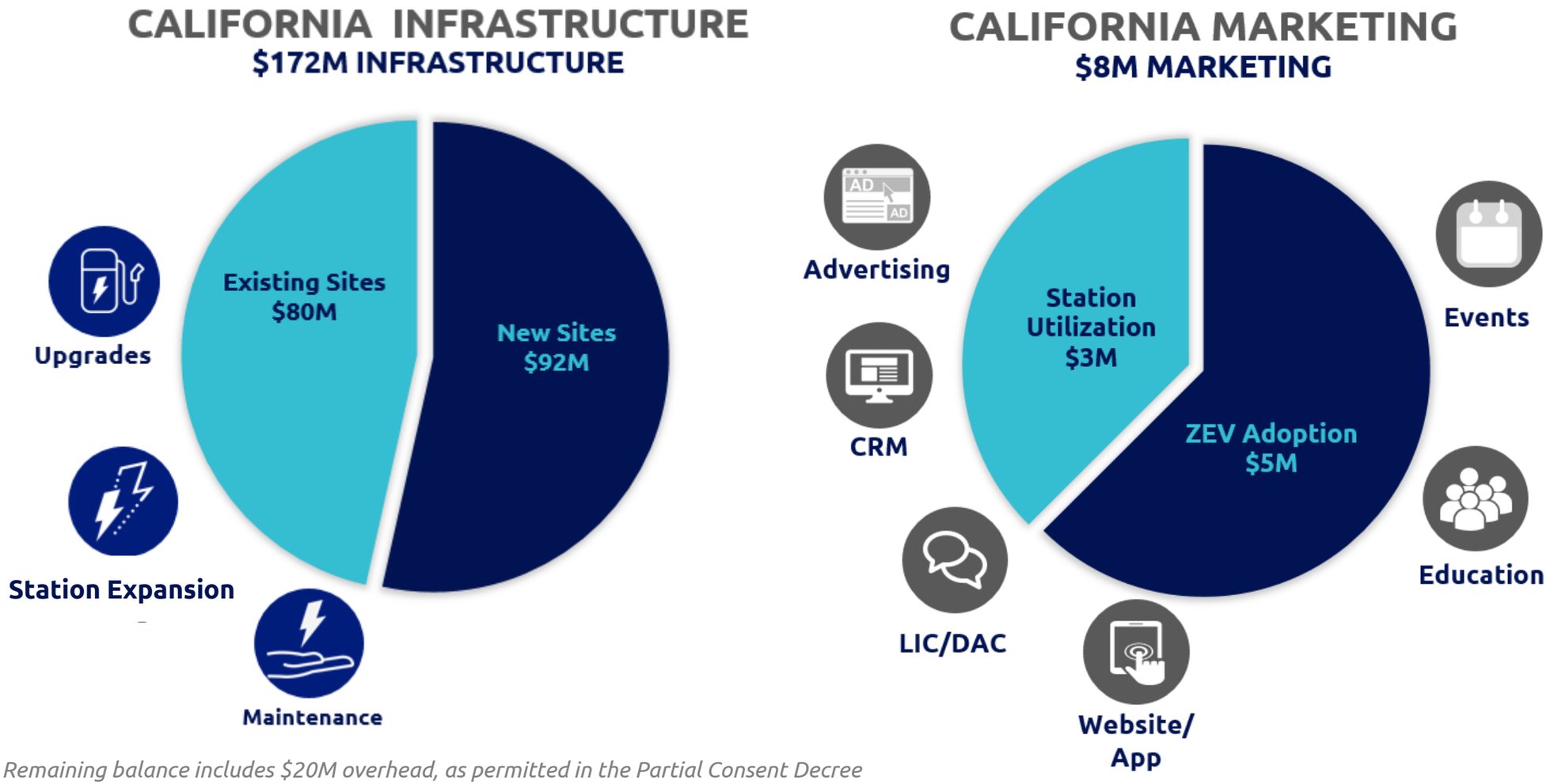
1. **Community Engagement**
2. **Brand neutral campaigns:** Boosting ZEV adoption through education and awareness
3. **Branded Campaign:** Boosting station utilization through branded marketing

Cycle 4 National Outreach Process

THEMES AND LESSONS LEARNED FROM OUTREACH CAMPAIGN

- Charging **station reliability** was prominently highlighted through portal submissions and in webinar conversations.
- **Station reliability was identified** by respondents as the largest current barrier to zero-emission vehicle adoption and the most important element of a successful charging experience.
- The National Outreach Process reinforced the importance of delivering a **reliable charging experience** to customers.

Electrify America's Cycle 4 plan focuses on maximizing availability and improving customer experience



Remaining balance includes $20M overhead, as permitted in the Partial Consent Decree

Cycle 4 will focus on three areas for infrastructure investments

Insights from our National Outreach Process shaped our investment decisions into key areas that will provide an improved customer charging experience.

HIGH QUALITY

Station reliability investments to replace chargers that no longer meet quality criteria

GROWTH OF THE NETWORK

Use innovative site selection model

FAST, PUBLIC CHARGING

Support current and future EVs on the road

Operations and Maintenance: People, Process, and Systems

Maintenance of the charging infrastructure is a crucial investment for Electrify America.

MULTI-FACETED OWNERSHIP APPROACH TO MAINTENANCE

- Pre-Deployment Maintenance
- Staff Training
- Recurring Preventative Maintenance Checks
- Internal Field Service Engineer (FSE) Program
- Supply Chain Maintenance
- Contact Center
- Network Operations Center (NOC)
- Work Order Maintenance
- Continued Quality Assurance Maintenance
- Future Improvement Measures

HIGH QUALITY

Case Study: Strong maintenance performance in LIC/DAC zones

STATION 110001: RAJU COUNTRYSIDE MARKET, LOST HILLS, CA

Date of response 11/27/23

- FSE was sent to this site for a suspected mainboard issue on **charger #1**. This meant the charger was reported inoperable by a customer.

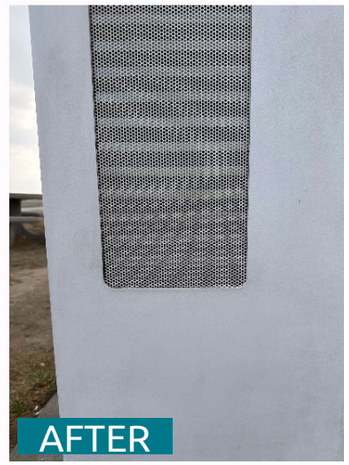
- There were no other service tickets open, but FSE proactively checked other chargers before leaving. What he found:

  1. **Charger #2** wouldn't charge his EV during testing.
     - After troubleshooting with the manufacturer, FSE identified the issue, resolved the charging error, and successfully charged his company EV.

  2. **Charger #3** had limited functionality. FSE went through the troubleshooting steps to reset its status and verified with his EV that the charger was fully operational.

STATION 100033: COUNTRYSIDE MARKET – SHELL, BAKERSFIELD, CA

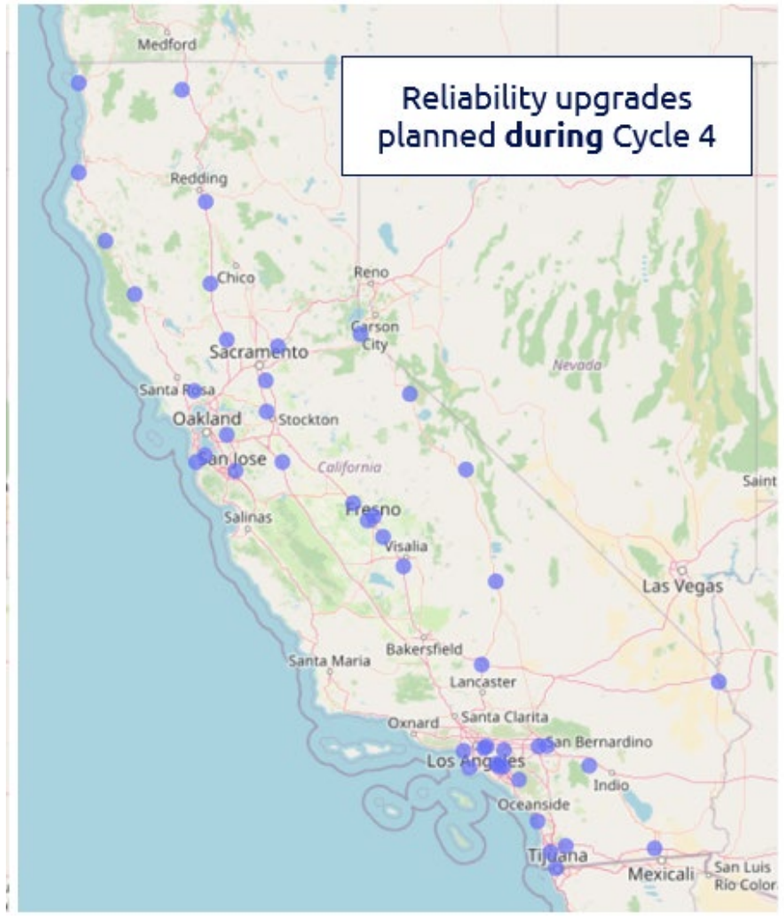
Cleanliness and upkeep of sites is important to the customer experience. Cleaning vendors visit stations outside of hardware preventative maintenance checks and corrective visits to focus on cleaning hardware and surrounding landscape.



Sample Status Report

Station reliability investments planned to provide positive charging experience

Electrify America plans to invest up to approximately 46% of Cycle 4 Infrastructure budget operating/maintaining and upgrading existing equipment to ensure a reliable charging experience. This includes the anticipated cost to upgrade approximately 600 chargers that were installed in Cycles 1 and 2 that will reach end-of-reliable-life during Cycle 4.



While expected useful life is the starting point for planning station reliability upgrades, the full methodology considers a variety of factors. These factors may include assessing the status of the following:

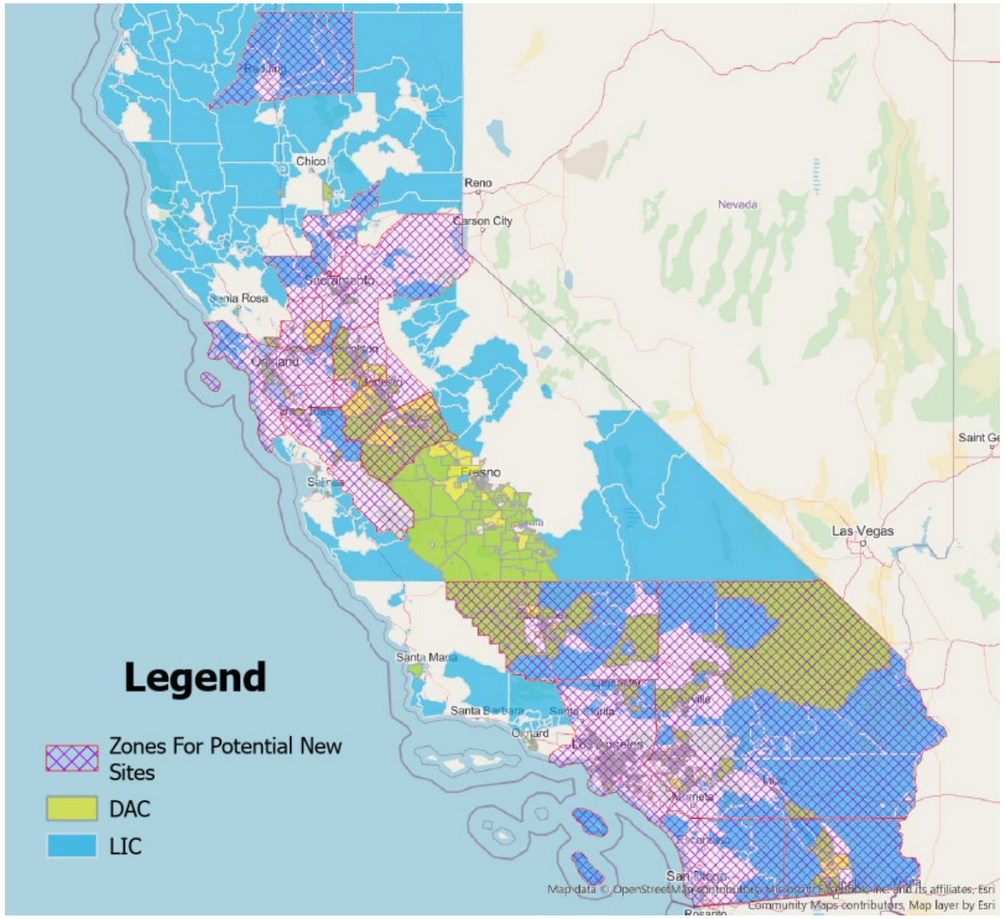
- Age of the charger
- Utilization
- Uptime performance
- Number/type of work orders
- Customer sentiment (based on PlugShare, Electrify America app, etc.)
- Location on key travel routes
- Parts availability
- Serviceability

Continued network growth with a data-driven approach

SITE SELECTION MODEL FACTORS

High traffic volume + Key travel routes + No pre-existing stations + Newer EV adoption space & socio-economics = Future Charging Location

POTENTIAL AREAS WHERE NEW STATIONS MAY BE BUILT:



Electrify America's Next Gen hardware allows the fastest charging vehicles on the market to utilize our network

Charging Speeds of Select Consumer EVs (kW)

Future High-Powered Mass Market ZEVs will drive increased demand for DC Fast Charging

Cycle 4

Community Engagement + Marketing

ZEV Equitable Access Program (ZEAP)

As part of Electrify America's participation in the **California Air Resource Board's ZEV Equity Task Force**, Electrify America will develop a new education and awareness program focused on low-income and disadvantaged communities in the state of California.

"ZEAP" will provide direct support to community-based organizations working specifically to drive education and awareness within California's low-income and disadvantaged communities.

Electrify America will conduct an RFP to Community-based organizations to solicit proposals. The RFP and award process will be as follows:

July – December 2024	January – June 2025	July – December 2025
Develop & Write RFP	Release RFP	Award

Branded Marketing in Cycle 4, Electrify America will focus on the following communication Pillars

AWARENESS

Continue use of nationwide network to drive station utilization

CONVERSION

Convert customers from intention to action leveraging the public charging network

CONSIDERATION

- Innovation and Technology
- Locations / Accessibility
- Quality Customer Experience
- Community Engagement

LOYALTY

Nurture and grow its brand relationship with customers to drive loyalty or repeat utilization

Cycle 4 Timeline

Cycle 4 timeline and next steps

Pending CARB approval, we hope to invest as quick as possible to help accelerate electrification in California.

- **Q1 2024:** Real Estate Acquisition for New Sites
  Station Reliability Upgrades
- **Q2 2024**: New Site Design and Development
  Utility / Permitting / Hardware
- **Q3 2024**: Cycle 4 Begins
  Construction Begins
- **Q2 2025:** First Stations Complete

Questions?