# California Cycle 3 ZEV Investment Plan



## **Corporate social responsibility pillars**



#### **Enabling electric transportation**

Commitment to making the world a more sustainable place by driving electric vehicle adoption through infrastructure and education



#### **Environmental sustainability**

Commitment to being carbon-neutral or better, powering our stations with renewable energy and building infrastructure sustainably



#### **Community support**

Unlocking electrification for all, including investments and education in disadvantaged, low income and rural areas



#### **Equality & diversity**

Striving to achieve diversity and inclusion in everything we do, from investing to hiring and supplier relationships



# **Progress to date**

Largest and most powerful open fast charger network

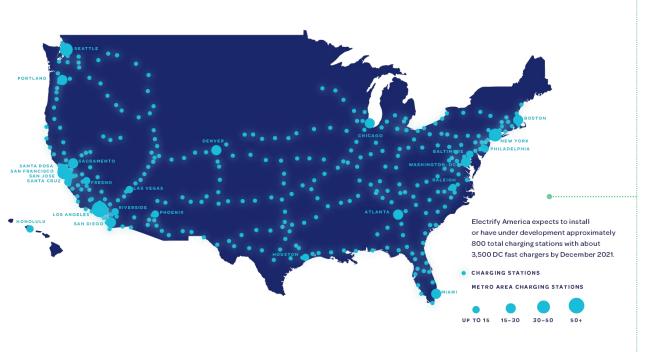
Reaching all California communities, including rural and disadvantaged communities

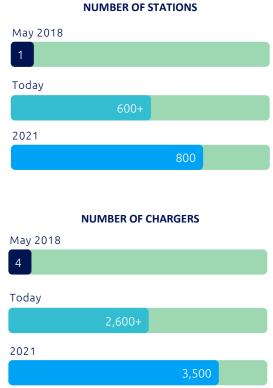
Award winning network with highest customer satisfaction

Expanding the market and access through education and outreach

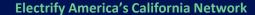


# The largest open ultra-fast network





# Serving all of California including low-income, disadvantaged and rural communities



Station spacing: 9 mi. (avg.), 42 mi. (hwy avg.)

Chargers per site: 3-10

Charging speed: 3-20 miles/minute

Access: 90% of Californians live within 15 miles of a

charger, 96% within 25 miles

# More than 35% of stations are in low-income and disadvantaged communities (LIC/DAC)

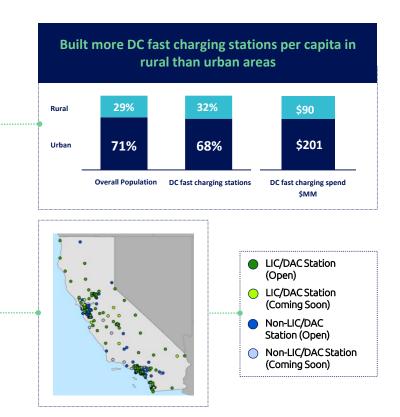
48% Contract executed

51% Permit submitted

**52%** In construction

**52%** Construction complete

53% Commissioned



# Sponsoring a range of education and awareness activities that help to educate about ZEV technology



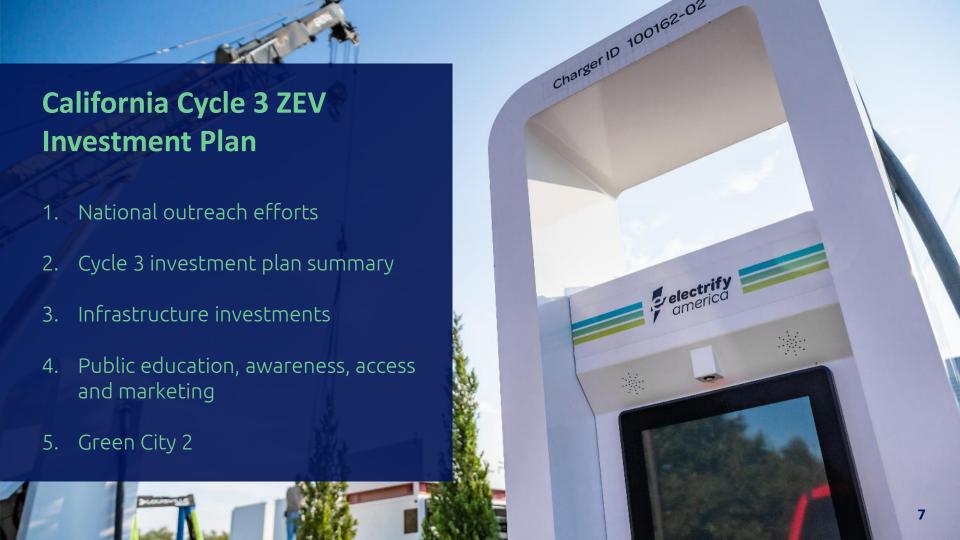
# Our Brand Neutral Campaign "Normal Now"

- 333 million impressions (views) in California in 2020
- Awarded "Outstanding Achievement in Internet Advertising" award by the Web Marketing Association
- 35% of all media spend is in low-income and disadvantaged communities



Sponsoring many other efforts, including Veloz and other prominent organizations

- \$6 million investment and collaboration with community-based organizations to reach diverse, DAC/LIC in CA
- Sponsorship of broad range of events focused on ZEV education and awareness, including Ride and Drives through Plug In America
- Kicking Gas campaign starring Arnold Schwarzenegger highlighted the benefits of EVs
- New 40 Million Reasons to Go Electric campaign



#### **National outreach efforts**

A year long, multi-pronged outreach effort captured insights from key stakeholders and informed Cycle 3 investments.



Active outreach to academics and industry



Listening sessions with regional government stakeholders and interest groups



Thorough review of website submissions for content and insights



Follow-up with website submitters via one-onone phone calls and emails



#### **National outreach efforts**

- Themes and lessons learned from outreach campaign:
  - Public ultra-fast charging is critical: California Energy Commission estimates 67,000 public fast chargers needed by 2030
  - Investment needed to support charging for transit and freight vehicles
  - Charging is the primary barrier to ride-hail drivers going electric
  - Disadvantaged and low-income communities benefit from targeted investment



## **Cycle 3 investment plan summary**

Build ultrafast 150kW - 350kW DC fast chargers across four primary use cases and complement chargers with solar, storage and other energy solutions. We will strive to achieve 35% LIC/DAC investments.

- Metros: Retail, ride hail, urban delivery, MUD
- Highway and regional routes
- **4** Transit
- **Delivery:** Medium-duty, heavy-duty (California only)



#### Infrastructure investments



Further expand access to charging infrastructure in California:



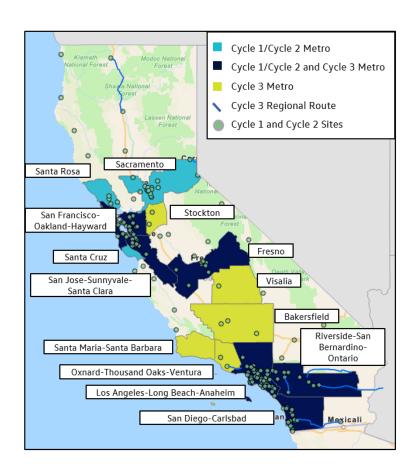
#### New metro area investments:

Bakersfield Oxnard-Thousand Oaks-Ventura Santa Maria-Santa Barbara Stockton Visalia



#### **Expansion of existing metro area investments:**

Fresno Los Angeles-Long Beach-Anaheim Riverside-San Bernardino-Ontario San Diego-Carlsbad San Francisco-Oakland-Hayward San Jose-Sunnyvale-Santa Clara



#### Infrastructure investments

Investing \$6-10MM in transit, medium- and heavy-duty fleet charging to expand transportation, electrification and benefits.

# Municipalities and transit agencies across the US are looking to electrify their fleets, but face barriers:

- Limited knowledge of charging technologies and station deployment
- Limited funding
- Limited expertise in energy / utility management

# Medium- and heavy-duty electrification is a top priority for both stakeholders and regulatory bodies:

- Likely requires dedicated sites due to footprint and safety considerations
- Engaged in CharIN effort to develop 1+ MW standard



### Public education, awareness, access and marketing

Boosting ZEV adoption through brand neutral campaigns. Our strategy:

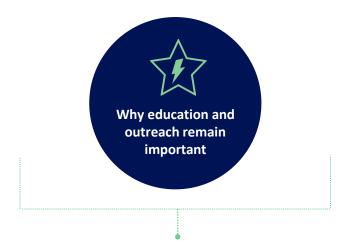


- Continue to leverage the great work of others
- At least 35% of education and outreach spending will target DAC/LIC









**92%** of EV ride & drive attendees said their impression of EVs is "better" after driving one<sup>1</sup>

**78%** of Americans think finding an EV charging station is at least moderately difficult<sup>2</sup>

**65%** of Americans have not driven or known someone who has driven an all-electric car or truck<sup>3</sup>

#### Sources:

- 1 2019 Participants from ten Plug In America Ride and Drives sponsored by Electrify America
- 2 MacInnis, Bo, and Jon A. Krosnick. 2020. Climate Insights 2020: Electric Vehicles. Washington, DC: Resources for the Future
- 3 MacInnis, Bo, and Jon A. Krosnick. 2020. Climate Insights 2020: Electric Vehicles. Washington, DC: Resources for the Future

#### **Access investments**

Provide funding to support taxi and TNC drivers who go electric. Incentivize the purchase and deployment of EVs as taxis and TNC fleet vehicles through a competitive RFP. Benefits include:

- Nearly three-times greater emissions savings than electrifying average California vehicle
- Support lower costs and higher takehome pay for TNC and taxi drivers, who are often low income
- Provide increased visibility for electric vehicles among passengers
- In one year in Denver, ~200 electric vehicles provided 300,000 rides



## **Green City 2**

- Projects located in Long Beach and Wilmington communities
  - \$25 million investment
  - Focused on freight and transit electric vehicle charging deployment
  - Freight charging depots will serve operators of all sizes, from large to small/independent
  - New, innovative technology and business models will be tested and implemented, including smart energy solutions to increase overall energy efficiency and to limit grid impact



## \$200MM to expand charging access in California



- Metro: \$70-100MM
  - Retail
  - Mobility
  - MUD
- Highway and regional routes: \$15-25MM
  - Highway
- New Opportunities: \$6-10MM
  - Heavy-duty
  - Transit



- ZEV Adoption: \$14MM
  - DAC/LIC
  - Ride and drives
  - Events/PR/social
- Station Utilization: \$12MM
  - Advertising
  - Web app
  - CRM
  - Events/PR/social
- TNC Electrification: \$2MM
  - TNC



- Charging Deployment: \$25MM
  - Heavy Duty
  - Transit

# **Cycle 3 timeline and next steps**

We hope to invest as quickly as possible to help accelerate transportation electrification in California.

- ★ Real estate acquisition (July 2021)
- Site design and development (starting September 2021)
- ★ Cycle 3 officially begins (Q1 2022)
- First Cycle 3 sites live (Q2 2022)



# Thank You

