

Transportation Electrification Program Update Electric Utility Commission

Karl Popham

Manager, Electric Vehicles & Emerging Technologies

Cameron Freberg

Utility Strategist, Electric Vehicles & Emerging Technologies





January 2021

© 2018 Austin Energy

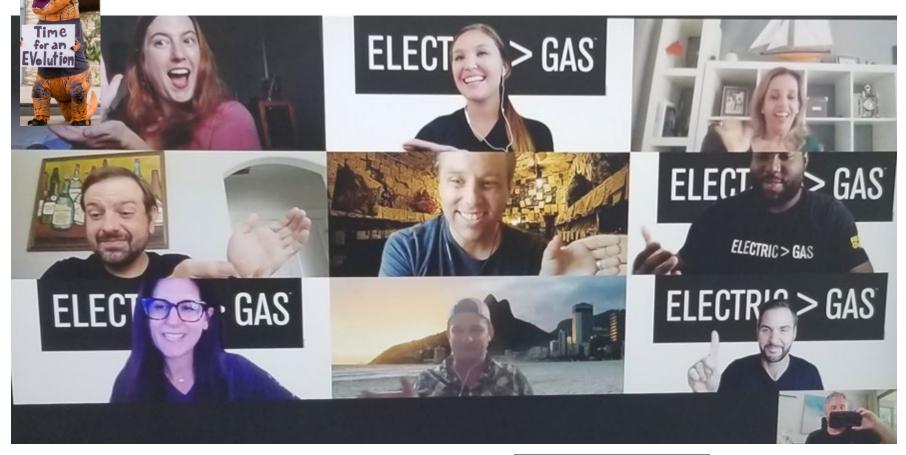
Agenda

- 1. Program Overview
- 2. Austin's EV metrics
- 3. FY20 Highlights
 - DC Fast charging rollout
 - City fleet infrastructure
 - Heavy Duty / Cap Metro electrification
 - EV readiness for commercial buildings
 - Climate Equity Plan update
 - Equity & Inclusion "EVs are for EVeryone"
 - EV online buyer's guide
 - "Customer Moment"





Electric Vehicles & Emerging Technologies Team



















Austin Energy EV Customer Programs

Plug-In EVerywhere[™] Driver Program

- \$4.17/mo unlimited charging at all 1000+ Level-2 ports for members
- New \$0.21/min DC Fast charging connection

Plug-In EVerywhere™ Infrastructure Rebate Program

- Up to \$1,200 rebate for home Level-2 wi-fi enabled (\$900 non wi-fi)
- Up to \$4,000 rebate for commercial/public Level-2 stations
- Up to \$10,000 rebate for public DC Fast stations

Fleet & Public Infrastructure Pilot Tariff

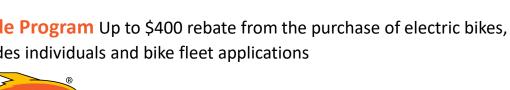
• New optional EV infrastructure commercial tariff promotes efficiency and high usage

EV360 Pilot

Flat rate of \$30/mo for off peak home charging + Plug-In EVerywhere

EVs for Schools

- EV charging stations for staff, students, parents, and visitors
- New curriculum is now available online nationally and in Spanish
- E-Ride Program Up to \$400 rebate from the purchase of electric bikes, includes individuals and bike fleet applications







Akins High School teacher, Jay H., plugs in his EV at an "EVs for Schools" charging station

DC Fast Infrastructure Rollout FY20



DC Fast stations enable corridor traffic, multi-family, and ride-hail/taxi electrification with up to 125kW (paired) fueling 215 miles of range per half-hour.

DC Fast Hubs - Texas TCEQ Alt Fuels Grant Supported

Host / Site	Address	# Stations
PARD-AISD	2001 W Cesar Chavez St.	4
Saltillo-Whole Foods	905 East 5th St.	4
Electric Drive	811 Electric Dr.	4
Mueller Market	1801 E 51st St.	4
Village at Westlake	701 S Capital of Texas	4

DC Fast Stations

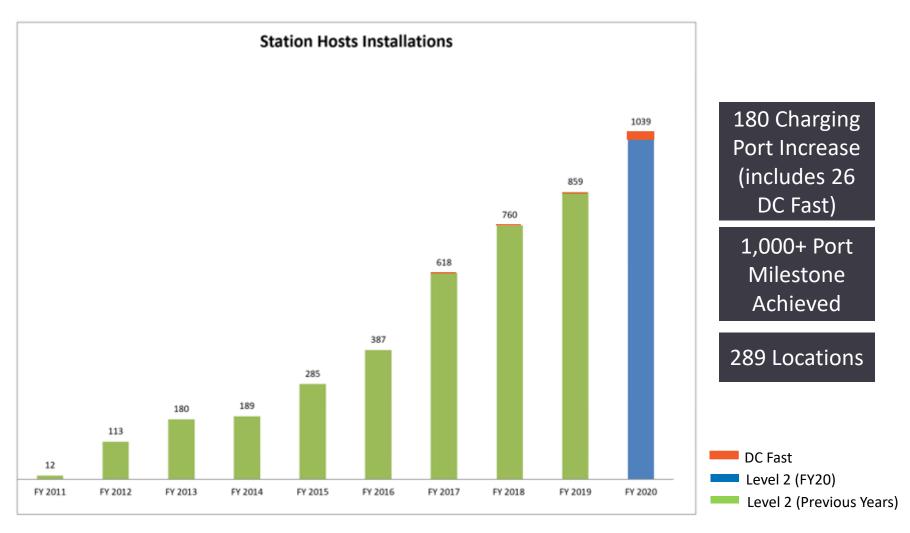
Host / Site	Address	# Stations
Travis County	700 Lavaca Sr.	1
Elektrica	2705 Hwy71	1
ABIA Cell Phone Lot	2716 Spirit of TX Hwy	2
Austin Film Society		2



Up to 125 kW (paired)
DC Fast Charging \$0.21/minute

EV Host Installations

Public Charging Program

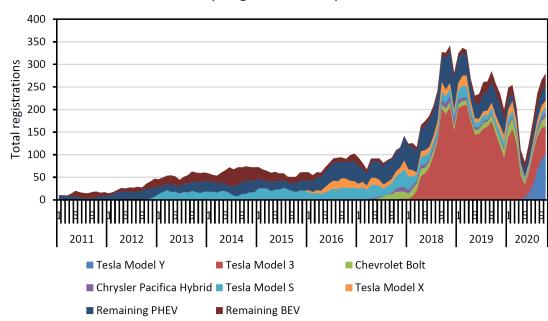




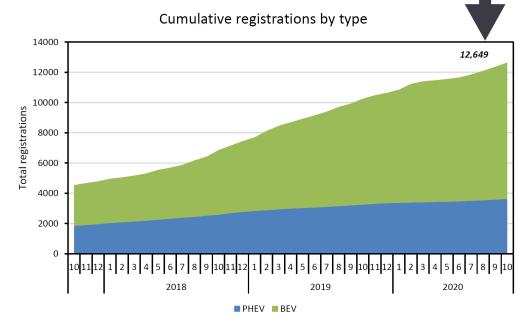
EV Registrations







Data provided quarterly from EPRI for Travis and Williamson County.



12,649 EVs consume approx. 38 GWh/year.
Data provided from EPRI for Travis and Williamson County

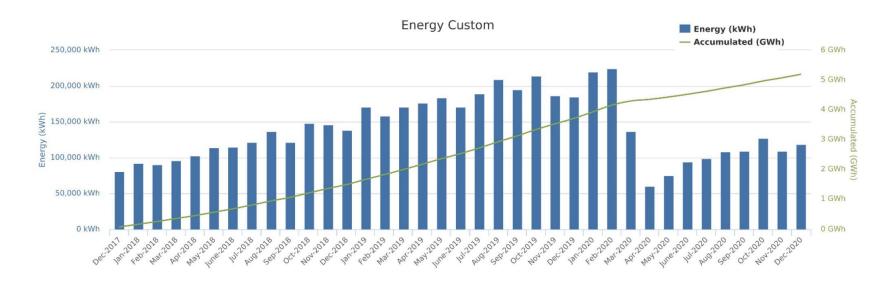
Approximately 26% of regional EV drivers are enrolled in Austin Energy's Plugin Everywhere Plan



Impact of Pandemic Closures on Public Charging

Tracks with Gas Pump Decrease

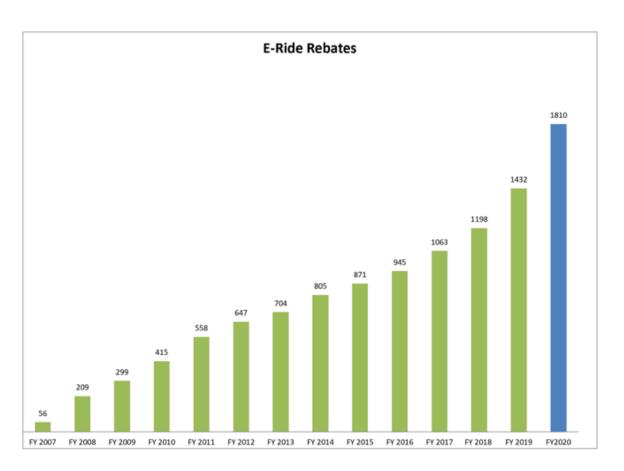
Energy Usage – Plug-In EVerywhere Network (Monthly, 3 Year Rolling)

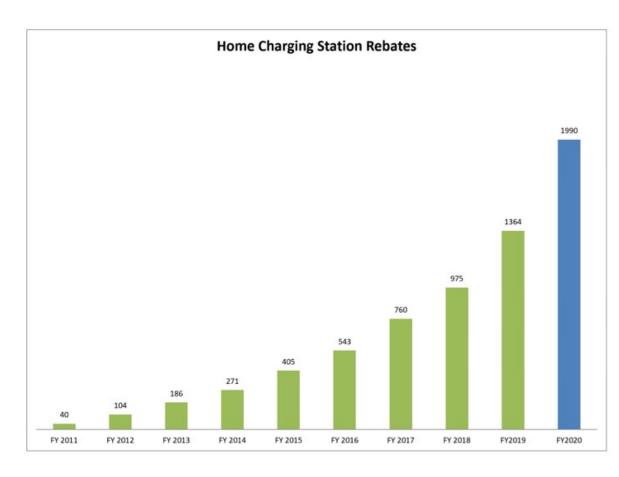


Public Charging: Public Charging: 7.47 GWh consumed through 798,095 charging sessions since program inception, displacing approximately 29.88 M petroleum miles with 100% renewable GreenChoice® energy. Data provided by ChargePoint Station Manager.



Electrification Program Growth – FY20 Surge





Participants from Texas Bicycle Coalition to include 19 e-bikes in FY20 from Austin Energy E-Ride Fleet Program



City of Austin Fleet Electrification



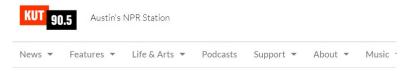
- Over 200 EVs currently in COA fleet, tracking toward 330 goal
- City Fleet EV plan expected to save the city \$3.5M and 12,000 metric tons of CO2 over 10 years
- Deploying charging infrastructure at COA facilities to support electric fleet
 - 93 ports installed at 20 facilities
 - Execution of Indefinite Delivery,
 Indefinite Quantity (IDIQ) contract to expedite future installations
 - Future proofing new COA buildings (DSD Highland, Austin Energy HQ)



Capital Metro Bus Electrification

- Cap Metro collaborated with Austin Energy in the development of their North Ops Bus Depot to build a smart charging facility for over 200 electric buses
- Cap Metro currently has 12 battery-electric buses with plans to buy 19 additional 40-foot electric buses in the next 2 years;
 Passage of Project Connect or additional grant funding could expedite this timeline
- By collaborating early in the process, Cap Metro was able to future proof the electric capacity of their facility to expedite expansion while reducing costs
- Austin Energy has also developed a Fleet & Public Charging Pilot Rate designed to encourage high usage and efficiency while ensuring full cost recovery for Austin Energy





Cap Metro Says This Lot Will House The Electric Bus Facility 'Of The Future'

By MOSE BUCHELE, KUT • 16 HOURS A







EV Readiness

Goals

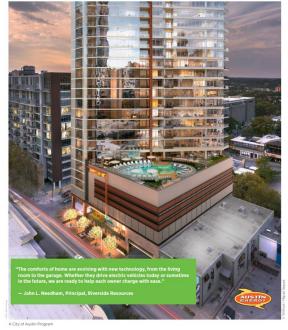
- Make at least 10% of all new parking spaces EV Ready
- Significantly reduce future costs for charging infrastructure

Requirements

- Installation of conduit/raceway
- Service Panel Capacity
- Distribution Transformer Capacity
- Sizing (min 40-amp, 240 Volt)
- Standards based (Includes National Electrical Code Article
 625 and Texas Accessibility Regulation)







Austin case study on 100% EV Ready



Austin Climate Equity Plan - Transportation Electrification

Draft Goals

Goal 1: By 2030, 40% of total vehicle miles traveled in the City of Austin are electrified and electric vehicle ownership is diverse culturally, geographically and economically. This translates to approximately 460,000 electric vehicles on the road.

Goal 2: By 2030, Austin has compelling and equitably-distributed charging infrastructure that is a mix of level 1, 2, and DC fast charging to accommodate 40% of total vehicle miles traveled in the city. This translates to 226 megawatts of electrical load and could mean over 37,000 charging ports.

Goal 3: The Austin-Round Rock-San Marcos MSA will be a global leader in transportation electrification by adopting policies and technologies that maximize the economic and health benefits for all while evolving with and defining the growth of this emerging industry.





Equity & Inclusion – "EVs for EVeryone"

Goal - create a future of mobility that is equitable, affordable, and accessible while helping the environment.

- Provide electric vehicle outreach, program development and deployment with a focus on marginalized communities
- Conducted 100s of e-bike access and safety trainings for underserved community members
- 86+ multifamily communities have charging including Affordable Housing properties that are home to over 27,800 residents.
- New full-time employee program lead hired Jan 4, 2021
- EVs for Schools expansion...





Austinite Maria, participates in an Austin Energy e-Bike demonstration and safety event

Equity & Inclusion – "EVs for Schools" Update

"EVs for Schools" Program, pilot prioritized deployment and outreach for economically disadvantaged students at title-one schools

- 795 teachers at 122 schools in Central Texas are utilizing the EV lessons
- As a response to COVID19, curriculum was made online and free of charge to families locally and nationally to support at home learning
- Now offered in Spanish
- 6,850+ students experiencing the living lab with 65% of those students economically disadvantaged
- Companion Virtual Reality (VR) experience
- Curriculum incorporated by other entities nationwide to include Madison Gas and Electric, Southern California Edison, Metropolitan Area Planning Council of Boston, and Sacramento area schools

Austin American-Statesman

Charging stations at schools to power electric vehicles, student minds

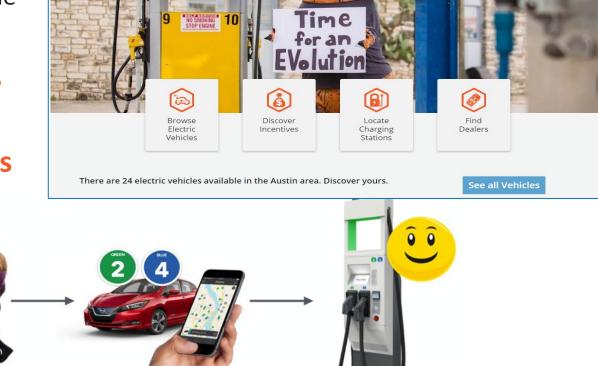




Dealership Engagement & Online EV Buyer's Guide

Online EV Resource & Buyers Guide

- Enhance the EV shopping & charging experience
- Aggregated source of EVs for sale in Austin
- Phase 2 launched in November with "real-time" new/used EV inventory
- Partnerships with local car dealerships
 - Boost EV sales through charging education
- Supported by Bloomberg Climate Cities Challenge





1. Awareness
Utility marketing to create awareness

2. Purchase
Dealer sales and
training tool that
reinforces strategy

3. Ownership
Consumer tool for
every EV brand
simplifying electric fuel

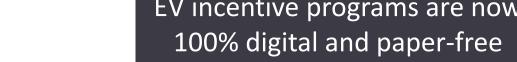
4. Experience
Easy to visualize
fuel branding at
every station

ev.austinenergy.com

"Customer Service Moment"

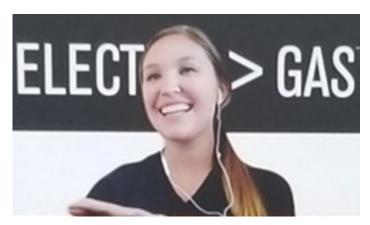
- One of the best customer service experiences I have ever had with any organization – public or private. -Craig L.
- The ease, kindness, understanding and efficiency with which he assisted me was commendable -Stephanie D.
- One more great program from Austin Energy. If only the entire state was served by Austin Energy, Texas would be a better place to live. -EV Program Customer Survey
- Just writing to thank your team for such quick and courteous assistance. Y'all have a great team and service. -Gibrán L.

EV incentive programs are now 100% digital and paper-free









EV Operations Team 17





Karl Popham

Manager, Electric Vehicles & Emerging Technologies
Austin Energy

www.pluginAustin.com & austinenergy.com/go/shines



