



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Charge Fast! Program

(Open to public and non-public entities)

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March 16, 2016



Webinar Information

This webinar is being recorded.

Copies of presentations will be posted to the Program Website after the webinar.

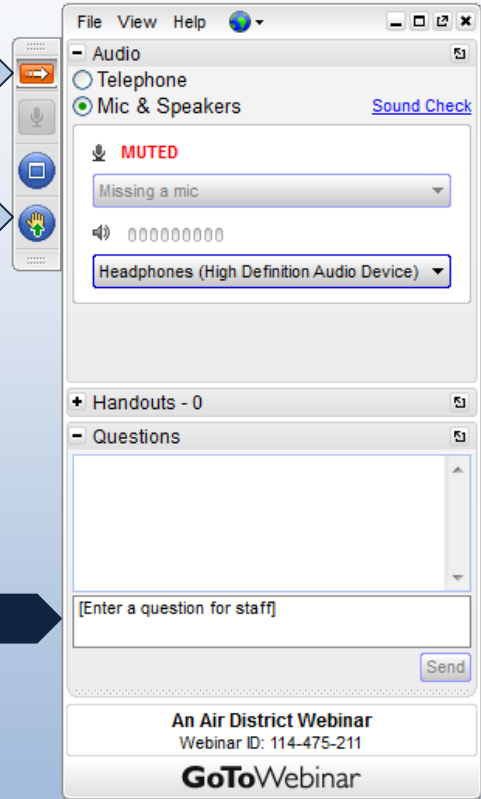
Type in questions using the questions box here.

Questions will be answered at the end of the presentation.

Show/Hide Control Panel

Raise Hand

Questions Box





Introduction & Background

- Bay Area Air Quality Management District (Air District)
- Electric Vehicle (EV) Goals and Incentives

Program Information

- Funding Sources
- Guidance and Requirements
- Application Process
- Evaluation Criteria

Additional Resources

Contact and Questions



Introduction & Background

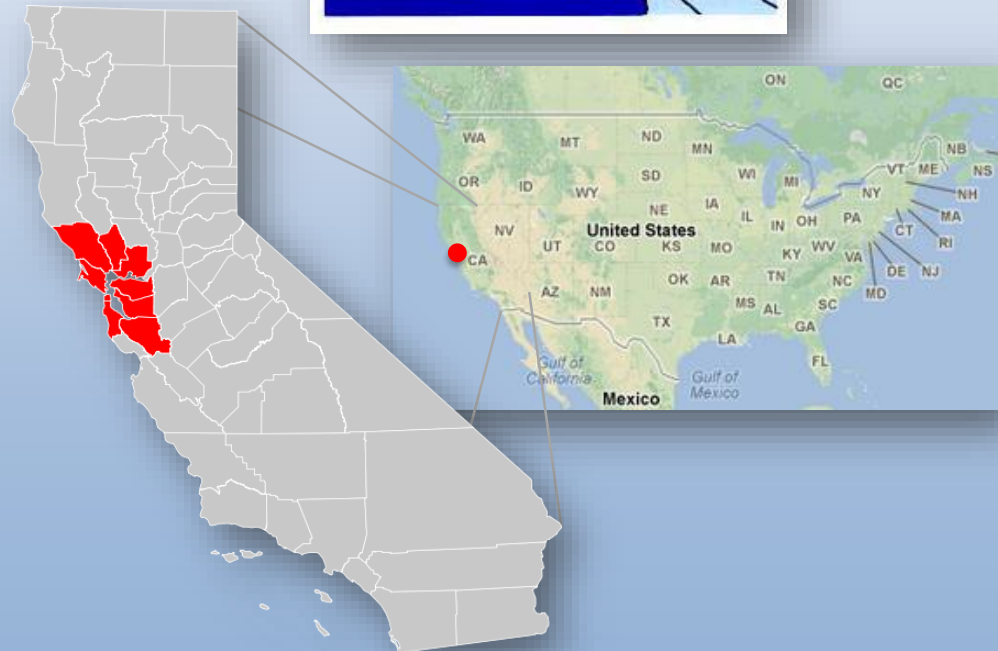
The Air District:

- Established in 1955
- Nine Bay Area Counties
- Seven Million Residents
- 5,340 square miles



Our Mission:

To protect and improve public health, air quality, and the global climate





2020:

- 110,000 EVs (Bay Area)

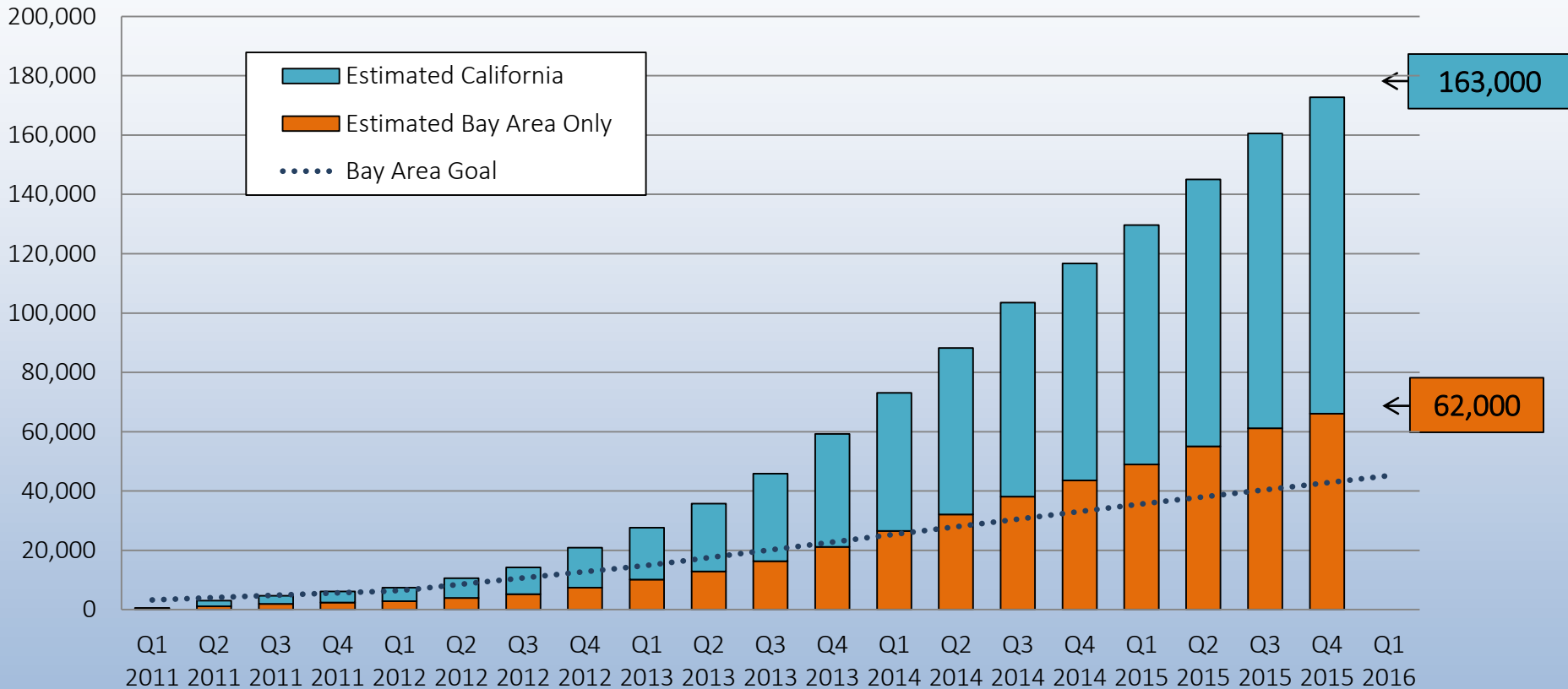
2025:

- 247,000 EVs (Bay Area)
- 1.5 M EVs (Statewide)



EVs: State of the Market

Goals & Current Estimates of Cumulative PEV sales¹ through December 14, 2015²



¹ Estimated using a 76% rebate use rate and data from CARB PEV Rebates Statistics: Center for Sustainable Energy (2016). California Air Resources Board Clean Vehicle Rebate Project, Rebate Statistics. Data last updated January 4, 2016. Retrieved January 13, 2016 from <http://energycenter.org/clean-vehicle-rebate-project/rebate-statistics>.

² Data for Q4 2015 are only available through December 14, 2015.



Vehicles

PEV Rebates (for public agencies)

- Light Duty PEVs
- Neighborhood electric vehicles
- Electric motorcycles

Zero-emission vehicles

- High mileage light-duty vehicles (3 or more)
(In Development)
- Heavy-duty vehicles and buses

Infrastructure

Charge Fast!

- *Remote Destinations*
- *Transportation corridors*

Charge! (closed)

EV Charging Station Demonstration
Program *(closed)*



Purpose of Solicitation:

- **Fill-in gaps** in fast charging network for intra- and interregional travel
- **Participate in forums to share** best practices, challenges, and lessons learned
- **Publish** results and usage in a paper

Examples of Participation

- Present project at EV Coordinating Council
- Participate in speaking engagements at EV conferences
- Provide guidance and information to local community

Transportation Fund for Clean Air (TFCA)

- Purpose: to reduce tailpipe criteria emissions from on-road sources
- \$4 surcharge on motor vehicle registrations

Alternative and Renewable Fuel and Vehicle Technology (ARFVT)

- Purpose: to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies.
- Funding provided by the California Energy Commission (CEC)

Eligible Facility Types

Transportation Corridor



Destination



- Be within [Air District's jurisdiction](#)
- Be **at least 5 miles** away from an existing publicly available DC fast charging station
- **Include at least one:**
 - CHAdeMO – DC Fast
 - SAE Combo – DC Fast
 - J1772 – Level 2 (new or existing)



Charging Station Requirements


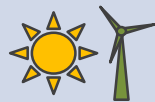


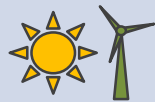
- Deliver electricity at a minimum rate of
 - 40 kW for DC Charging station
 - 6.6 kW for Level 2 (new or existing)
- Use an open communication protocol (if networked)
- Capable of accepting on-demand payment without a subscription or membership (if payment is required)
- Be in a well-lit, secured area
- Available to the general public 24 hrs/day and 365 days/yr



Max. Award Amounts

Minimum: \$10,000 per application/applicant

Maximum: \$250,000 per applicant

Project Scope	Maximum Award Amounts (Usage Requirement ¹)	
	Level 2 (9,000 kWh)	DC Fast (CHAdEMO + SAE Combo) (75,000 kWh)
 Charging Station	\$3,000	\$40,000
 Bonus for Solar or Wind Power	\$0.50 per kWh generated, and up to a maximum of:	
	\$3,000	\$25,000
   Max. Award	\$6,000	\$65,000

¹ The usage requirement for the Project Life will be evaluated on a per Project basis across all funded charging stations



Minimum Usage Requirements and EV miles equivalent

	L2	DC Fast
Usage (kWh)	9,000	75,000
EV Mile Equivalent (Project Life: 3 years)	30,240	252,000
EV Mile Equivalent (per year for 3 years)	10,080	84,000
EV Mile Equivalent (per day for 3 years)	28	230
Charge Duration (hours per day for 3 years)	1.26	1.92*

* Assume charging ~4 vehicles for 30 minutes.



Eligible Project Cost

- Projects must commence after contract execution to be eligible
- Costs eligible for reimbursement & match funding:
 - Charging station hardware (including tax and shipping fees);
 - Installation labor, materials (e.g., trenching, wiring, conduit) and necessary electrical upgrades to meet the demands of the Charging Station (i.e., electrical panels and transformers);
 - Permit fees;
 - Hardware or Equipment used to record kWh dispensed from the Charging Station to PEVs (e.g., separate meter, data logger); and
 - *For projects incorporating solar or wind power generation: Power generation and battery storage hardware (including tax and shipping fees).*



Project Commencement

- Projects that have completed some or all of the items under the Approved Pre-Project Activities are considered “shovel-ready.”
- Projects that have commenced prior to the execution of the contract (see Prohibited Pre-Project Activities) are ineligible for funding and will not be awarded funds/will have their funds cancelled if the Air District discovers that the project have commenced.

Approved Pre-Project Activities

- Planning (drawings)
- Obtaining Permits
- Conducting Environmental Review
- Pre-wiring, **as part of new construction**
- Obtaining cost quotes/estimates

Prohibited Pre-Project Activities

- Pre-ordering equipment
- Purchasing equipment
- Entering into contract/agreement to install chargers
- Beginning construction of charging stations



Schedule (tentative)

DATE	ACTIVITY
March 28, 2016 at 4 PM	Application deadline – Last day to submit deadlines
April 13, 2016 at 4 PM	Deadline to receive Board Resolutions
By May 29, 2016	Air District Board awards highest ranking applicants and issues Notice of Proposed Award to all applicants
By June 30, 2016	CEC considers the highest ranking applicants and Air District issues Notice of Final Award to all applicants
By August 31, 2016	Proposed Funding Agreements sent to awardees
Within 9 months of executing funding agreement	<p>Project Sponsors:</p> <ul style="list-style-type: none"> • All project-funded equipment must be purchased and placed into service; awards funds must be expended • Final Monthly Interim Status Report and Final Invoice sent to Air District <p>Air District’s Initial Payment(s) reimburses grantee 85% of the grant award (not to exceed 63.75% of actual eligible costs)</p>
After all Project equipment has been installed and placed into service	<ul style="list-style-type: none"> • Operating Progress Reports: first report after 6 months of operation data, and annually there after during Project Life • Final Payment: After first operating report has been submitted and funded chargers have dispensed an average 5,000 kWh • Final Inspection: The Air District may conduct a physical inspection of each facility during Project Life



Application Submittal Instructions

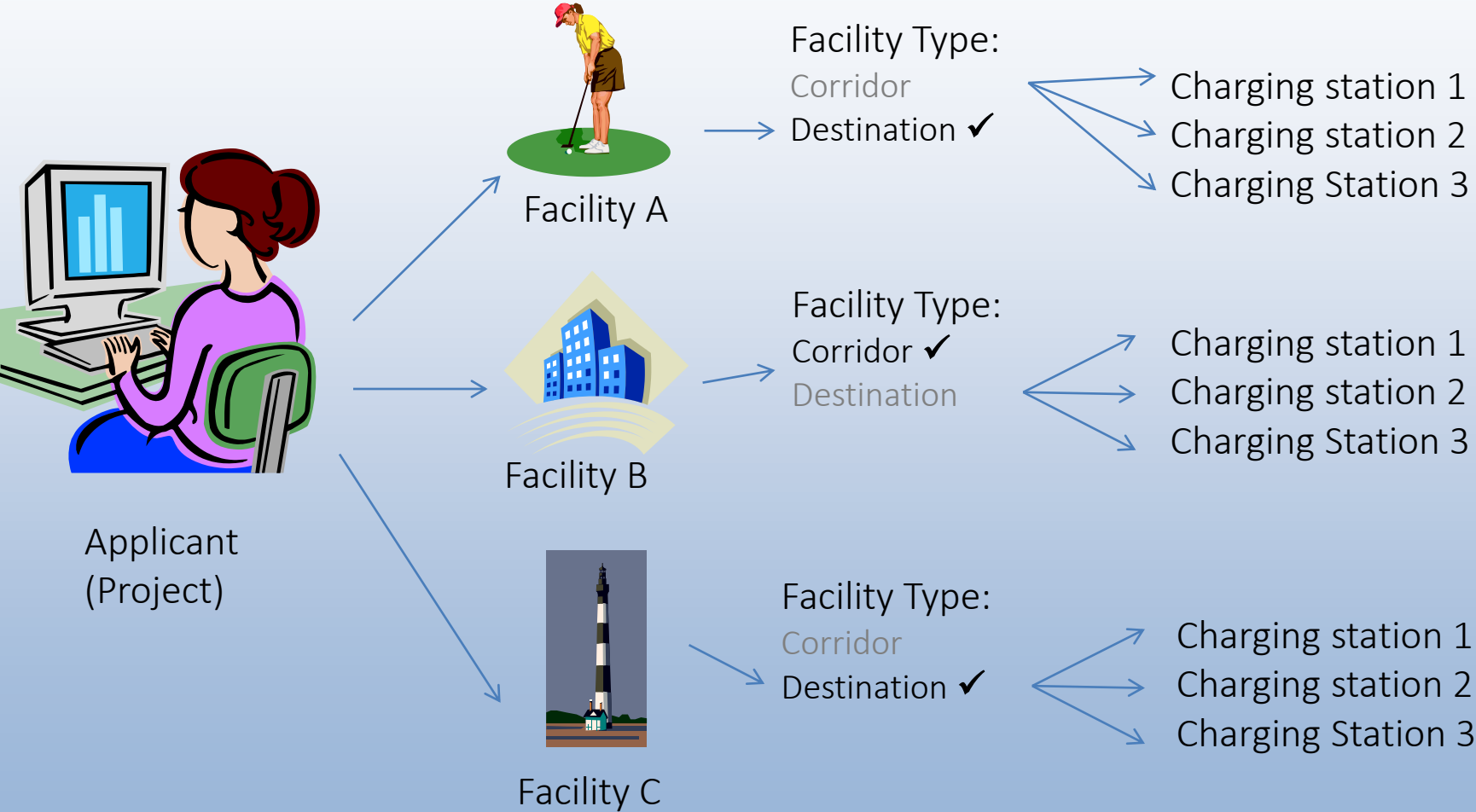
Submit electronically and upload the following:

- Evidence of Authority to Apply & Implement the Project
- Proof of authority to install & operate station
- Map showing each location of each proposed facility and each of the charging stations
- Copy of cost estimate/quote for each facility
- Either a copy of the completed environmental review of the project, or a notice of exemption of environmental review
- Proof of insurance

Submit as a hardcopy only (do not upload):

- W-9

How to Apply?





Example Application

B. CHARGER INFORMATION

Total Eligible Cost

Provide a budget below for this facility broken out by charger type. The Air District will determine your *match requirement (%)* based on cost information provided in this application.

Charger Type	Quantity	# of ports/unit	Request/Unit (\$)	Solar/Wind Bonus Request/Unit (\$)	Total Request/Unit (\$)	Total Request (\$)	Total Eligible Cost (\$)
DC Fast - single unit w/dual connectors	1	2	30000	0	30000	30000	70000
Level 2	1	2	6000	0	6000	6000	10000

[Remove](#)
[Add another charger type](#)

Discounts, Credits, & Non-Air District Grants/Rebates

Provide a list of ALL discounts, credits, and non-Air District grants/rebates by source and by charger type. If these funds are derived from more than a single source, specify each funding source and the amount on a separate line. *Air District will subtract these funds from your Eligible Cost to determine award amount. Refer to the FAQ for more information about how award amount is determined.*

Source	Amount (\$)	Funding Status	Charger Type
DOE	1000	Planned	DC Fast - single unit w/dual connectors

[Add another source](#)

Total Eligible Cost of this Facility: \$ 80000.00

Total Request for this Facility: \$ 36000.00



Criteria

Cost-effectiveness:

- *Request a reduced funding amount to improve cost-effectiveness*

Prioritize

- *projects located either in Highly Impacted Communities/Community Air Risk Evaluation (CARE)*
- *sites greater than 15 miles from the nearest publicly accessible DC Fast Charger*

A contingency list may be created and used by the Air District to provide funding to eligible projects under this or other grant programs.

Additional Funding Sources

Air Resources Board

- Cap & Trade
- Clean Vehicle Rebate Project (CRVP)
- [California Hybrid & Zero-Emissions Truck & Bus Voucher Incentive Program \(HVIP\)](#)
- Voucher Incentive Program (VIP)
- [Goods Movement Program \(Proposition 1B\)](#)



California Energy Commission

- Infrastructure
- Planning
- Renewable Energy



Other

- Federal (e.g., Department of Energy)
- Metropolitan Transportation Commission
- [CPUC Self-Generation Incentive Program](#)
- [CalCAP EV Charging Station Financing Program](#)



Questions



www.baaqmd.gov/grant-funding/businesses-and-fleets/charge-fast

Contact us at grants@baaqmd.gov with the subject line “Re: Charge Fast!”

Resources on EV charging stations: www.pevcollaborative.org