



SF Environment

Our home. Our city. Our planet.

A Department of the City and County of San Francisco

Electric Vehicle Charging Ordinance Workshop

January 12, 2022

Thank you for joining us. The workshop will begin at 10:05am



Your Hosts



Suzanne Loosen
Clean Cities Coalition
Coordinator



Jenny Khanh
Clean Cities Coalition Intern



Housekeeping Announcements

Please use the chat during Q+A portions of the workshop



Leave

Open Chat
Menu

Agenda



Welcome	10 mins
How did we get here?	10 mins
Ordinance Requirements	10 mins
Compliance Process + Q&A	20 mins
EVSP Panel + Q&A	30 mins
Conclusion	10 mins



Poll #1:

What is your role?



Commercial Garage EV Charging Ordinance

- Commercial garages and parking lots with **100+ parking spaces**
- Install Level 2 charging stations at **10% of parking spaces**
 - Or functionally equivalent number of Fast Chargers
- Requires a good faith analysis of financial and technical feasibility
- Must comply by **January 1, 2023**



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Mayor Breed's Electric Vehicle Charging Infrastructure Workshop

January 21, 2020



San Francisco's Bold Climate Goals



Net Zero Emissions

~~2050~~ 2040



Our call to action



SAN FRANCISCO CLIMATE ACTION

0 80 100



San Francisco's Bold EV Goals



2025

Cars: 50% of **new** registrations



2030

Cars: 100% of **new** registrations



2040

100% Emissions-free Trips



Cars:

- 70+ Models Available Now
- 990,000 sold in California as of November 2021
- 170,000 registered in San Francisco by 2030
- Plus commuters, ride-hail drivers, delivery vans

Costs:

- Parity with petroleum vehicles by 2024
- About 1/3 to maintain and operate



Publicly Accessible EV Charging Demand in 2030

Today:

- 1,000 chargers

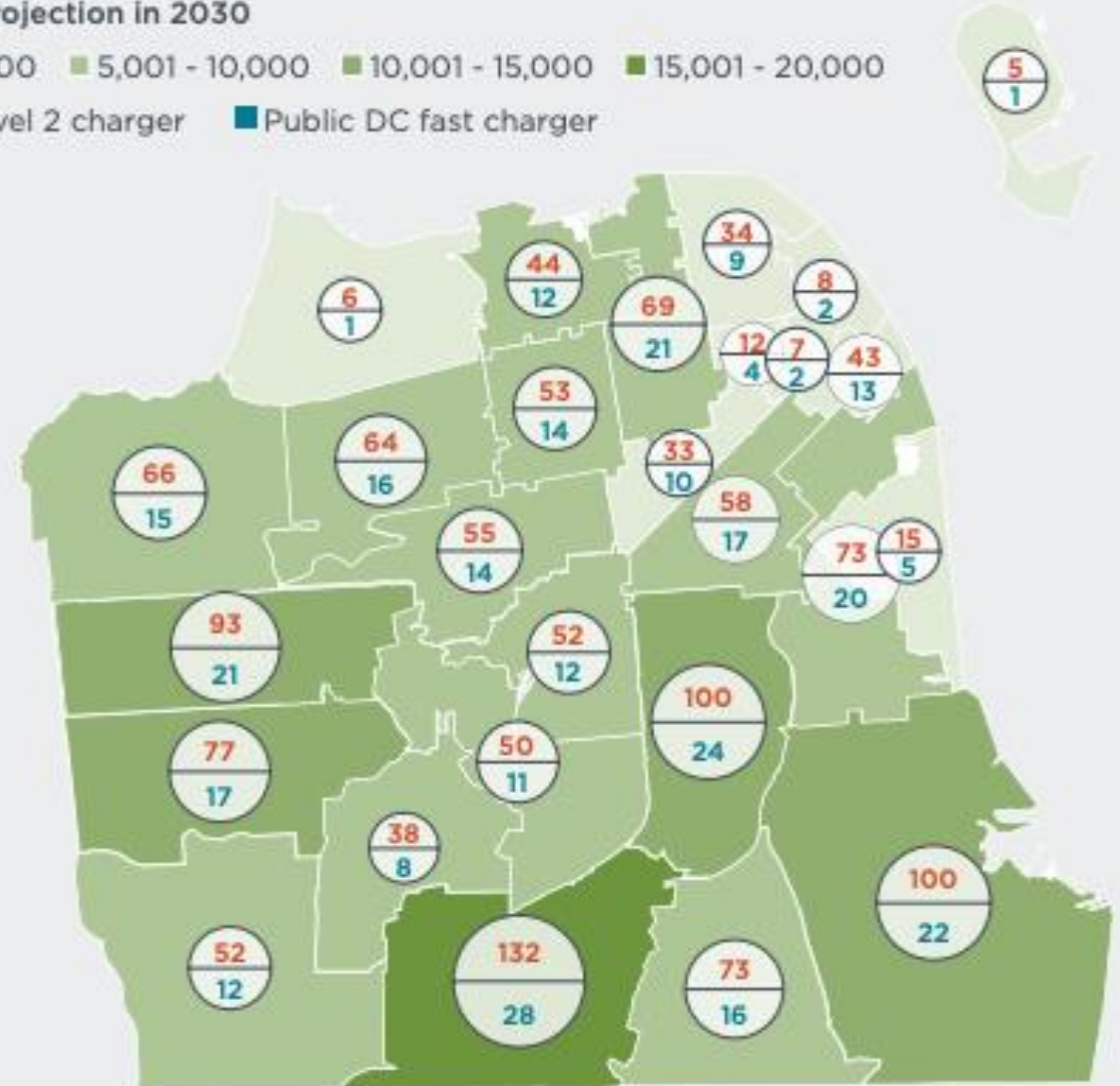
Demand:

- 2025: 2,000 chargers
- 2030: 5,000 chargers

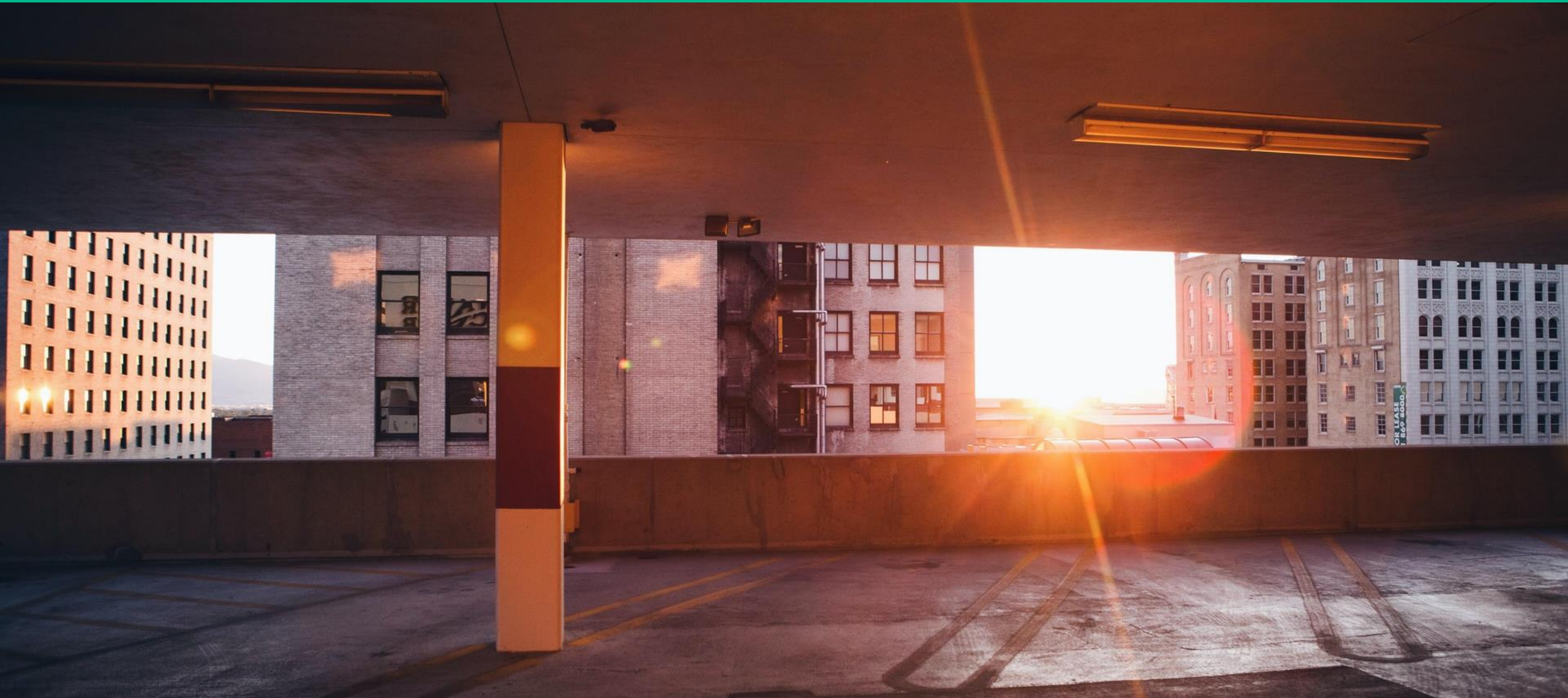
Rate:

- 18% annual growth

EV stock projection in 2030



EV Charging in Commercial Garages & Lots





Ordinance No 244-19 Requirements

1. Install Level 2 charging stations (less than 40 kW) at 10% of parking spaces
 - Maximum required number of Level 2 chargers is 200
2. Install Direct Current (DC) fast charging (over 40 kW) stations that provide a similar volume of charging
 - Minimum of 2 DC fast chargers
 - Additional DC charger for every additional 250 spaces over 750
 - Maximum of 8 DC chargers



Waiver Process

- In some facilities, it will not be technically feasible to comply with the ordinance
- Operators can request a full or partial waiver
- Determination of waiver eligibility is based on:
 - Insufficient existing **electrical capacity**
 - **Site conditions** which technically prevent installation
 - Documentation of **good faith efforts** with at least 2 service providers



Ordinance Mechanisms

Starting January 1, 2022, installation of chargers or successful waiver application are conditions of the commercial parking facility permit issued by the SFPD.

Lack of good faith effort in compliance will result in fines, or suspension or revocation of your permit.



Annual Operating Permit Renewal Process

1. Contact SFPD 6-8 weeks before permit expiration to begin process. SFPD sends you a permit packet including:
 - Commercial Parking Permit Application
 - Permit Application Checklist
 - Site Security Plan Form
 - Commercial Garage Ordinance Fact Sheet
2. Complete Ordinance requirements—Form A or Form B
3. Schedule meeting with SFPD to submit application

Beginning Jan. 1, 2022, SFPD will NOT accept your application without Ordinance Form A or B



Getting Started with the Ordinance Process

1. Contact an EV service provider (EVSP) to arrange consultation and feasibility studies
2. Work with EVSPs to determine next steps around financing, installation, maintenance, and ownership models
3. Complete one of the following ordinance forms:
 - Form A – Statement of Compliance
 - Form B – Request for Full or Partial Waiver
4. Submit Permit Application, Form A or B, and backup documents to the SFPD



Poll #2:

What stage of the process is your site in?



Form A: Statement of Compliance

- Charging Station Provider
- Approximate date the stations will be available to public
- Equipment schedule and site plan for the stations

Section B: Compliance Information and Statement

8. No. of Total Parking Spaces*:

9. Total Number and Output of Public Level 2 Charging Stations*: (enter "NA" if not applicable)

Number of Public Level 2 Charging Stations	Output per Station	Connectors per Station
For example: 4	50 kW	2

10. Total Number and Output of Public Fast Charging Stations*: (enter "NA" if not applicable)

Number of Public Fast Charging Stations	Output per Station	Connectors per Station
For example: 3	100 kW	2



Form B: Full or Partial Waiver Request

Select as many justifications as applicable to your site

Waiver Reasons	Waiver Duration
Utility infrastructure is unable to supply sufficient electrical capacity	5 years
Site conditions make it technically infeasible to install the infrastructure	5 years
Site conditions make compliance financially infeasible	2 years



Form B: Full or Partial Waiver Request

Reason: Existing local utility infrastructure is unable to supply sufficient electrical capacity

Required Information:

- Existing Service Amperage
- Required Service Amperage for Full Compliance
- Estimated Cost for Service Upgrade
- Licensed Electrical Contractor Name
- Contractor License No.
- Supporting Report or Analysis

Expiration: Waiver expires in 5 years



Form B: Full or Partial Waiver Request

Reason: Existing site conditions make it technically infeasible to install the infrastructure

Required Information:

- Description of existing conditions
- Name of company that conducted site analysis
- Contact Info
- Supporting Report or Analysis

Expiration: Waiver expires in 5 years



Form B: Full Waiver Request

Reason: Garage Operator has made good faith efforts to enter an agreement with at least **two** EVSPs, at minimal or no cost to Operator, but the companies declined because the agreement was not financially viable.

Required Information:

- Company 1 Contact info
- Company 2 Contact info
- Supporting Report or Analysis

Expiration: Waiver expires in 2 years



Form B: Partial Waiver Request

Reasons:

- Existing local utility infrastructure is unable to supply sufficient electrical capacity for full compliance

OR

- Existing site conditions make it technically infeasible to install the infrastructure for full compliance

Required Information:

- Number of Level 2 or Fast Charging Stations to meet full requirement
- Number of Level 2 or Fast Charging Stations proposed for partial waiver
- Approximate data the stations will be available to public
- Additional information to support the request
- Equipment schedule and site plan for the station



Next Steps

Go to www.sfenvironment.org for instructions and latest information

Key Dates:

- January 1, 2022 – Ordinance Forms required for annual permit renewal
- March 2022 – Ordinance Forms will be available online
 - To complete the Ordinance Forms before March 2022, please contact us to fill out a PDF version.
- January 1, 2023 – Compliance required

Contact us at ChargingMadeEasy@sfgov.org with any questions



Q+A: Compliance – 8 mins

Please use chat to submit questions

Electric Vehicle Service Providers





Electric Vehicle Service Providers

Electric Vehicle Service Providers (EVSPs) can provide a variety of services and fee structures to meet business needs.

Online resources to find EVSPs:

- [CALeVIP Connects](#)
- [GoElectric Drive](#)

EVSPs can provide:

- Project design
- Permitting
- Installation
- Maintenance
- Billing and finance



Financing and Incentives for EV Charging

BAAQMD'S *Charge! Program*:

- \$7,000,000 available this year
- 15% required cost-share/matching funds
- Competitive solicitation
- Proposals due March 1, 2022
- Details at www.baaqmd.gov

California Low Carbon Fuel Standard (LCFS)

- Incentivizes low carbon alternatives to petroleum fuel
- LCFS funds can greatly reduce the cost of EV Charging Stations
- EVSPs are well equipped to navigate this process

EVSP Representatives



Jared Carson
Enel X



Jim Rohman
Catalyze



Rolf Nygaard
EV Connect

Enel X eMobility Solution Offerings



EVSE Hardware / Software



- Level 2 and Level 3 EVSE Hardware Solutions
- Software to help monitor EV driver charging behavior, real-time charging station status and multiple energy groups, as well as generate revenue

Turn-Key Project Management and Installation Services



- In-house design and Project Management
- Option for sub-contracted Installation Services

Purchase / Operating Model Optionality



- Host Owned
- Owner-Operator
- Cost/Revenue Sharing



EV Connect + Catalyze Energy



Jim Rohman
Director, Finance

Offering - Catalyze partners with real estate owners, energy co-developers, utilities and local communities, to transform buildings from being fossil-fuel consumers into renewable energy power plants.

With our new strategic acquisition of MicroGrid Labs, Catalyze is moving at scale into the EV charging market.



Rolf Nygaard
Director of Enterprise Sales

Offering – EV Connect has a feature rich platform to manage EV chargers and partners with leading hardware vendors to provide a complete turnkey solution.

EV Connect is committed to open standards and is the largest station neutral software platform in North America. We make it easy to future-proof your EV charging investment.

Q&A: Ask an EVSP



Jared Carson
Enel X



Jim Rohman
Catalyze



Rolf Nygaard
EV Connect

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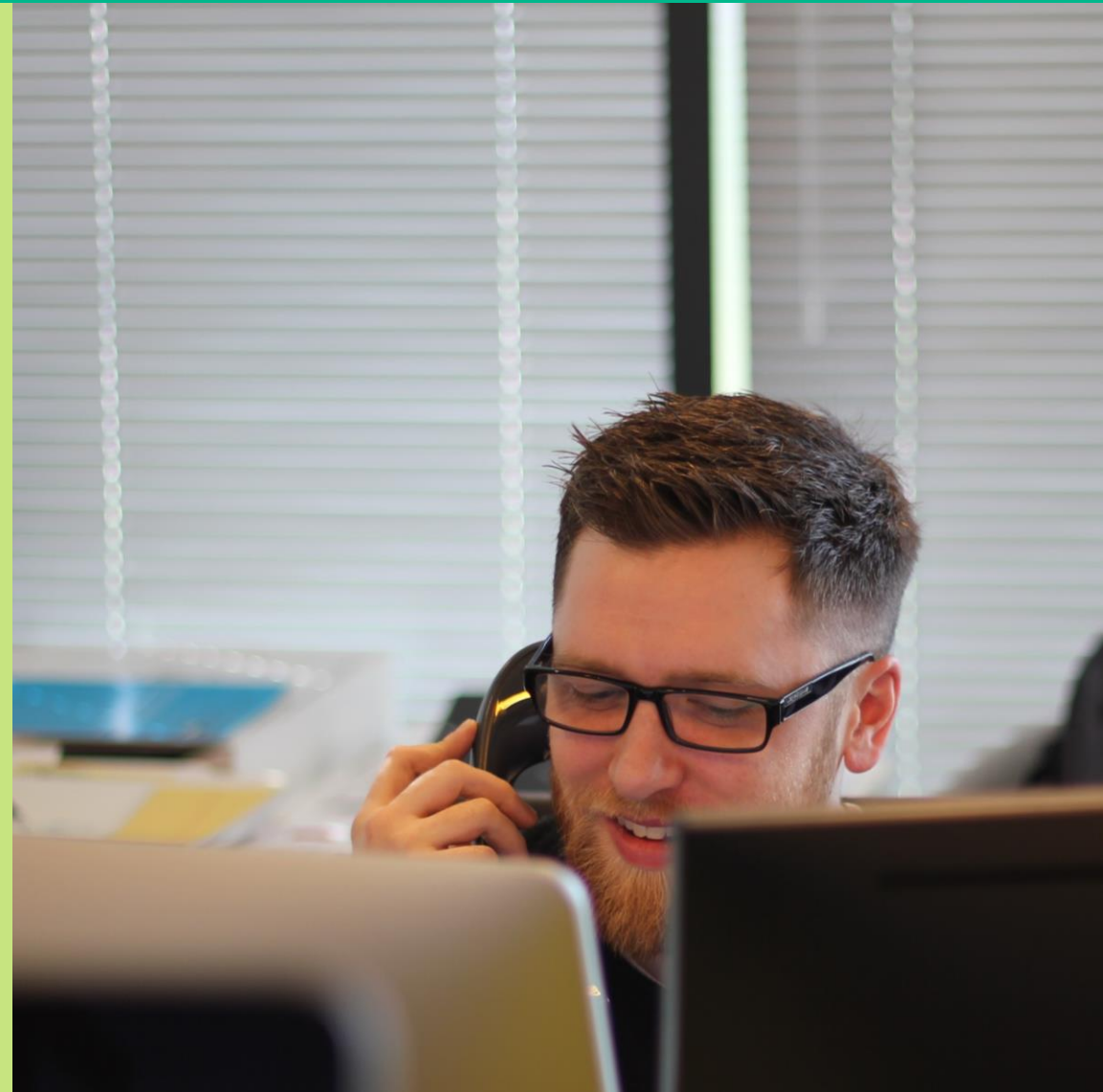
Poll #3:

Are there any areas where you still have questions?
(Select all that apply)



Get Started Early

- Find the right EVSP for you
- Contact your utility early in the process
- Allow plenty of time for
 - Site planning
 - Engineering
 - Permitting
 - Construction





SF Environment is here to help

Following this meeting we will share...

- Workshop recording
- Answers for any questions we did not have time to address
- Information from EVSPs, including many not present for today's workshop
- Commercial Garage Ordinance Fact Sheet

Please contact us at ChargingMadeEasy@sfgov.org with further questions



Thank you for attending!

ChargingMadeEasy@sfgov.org