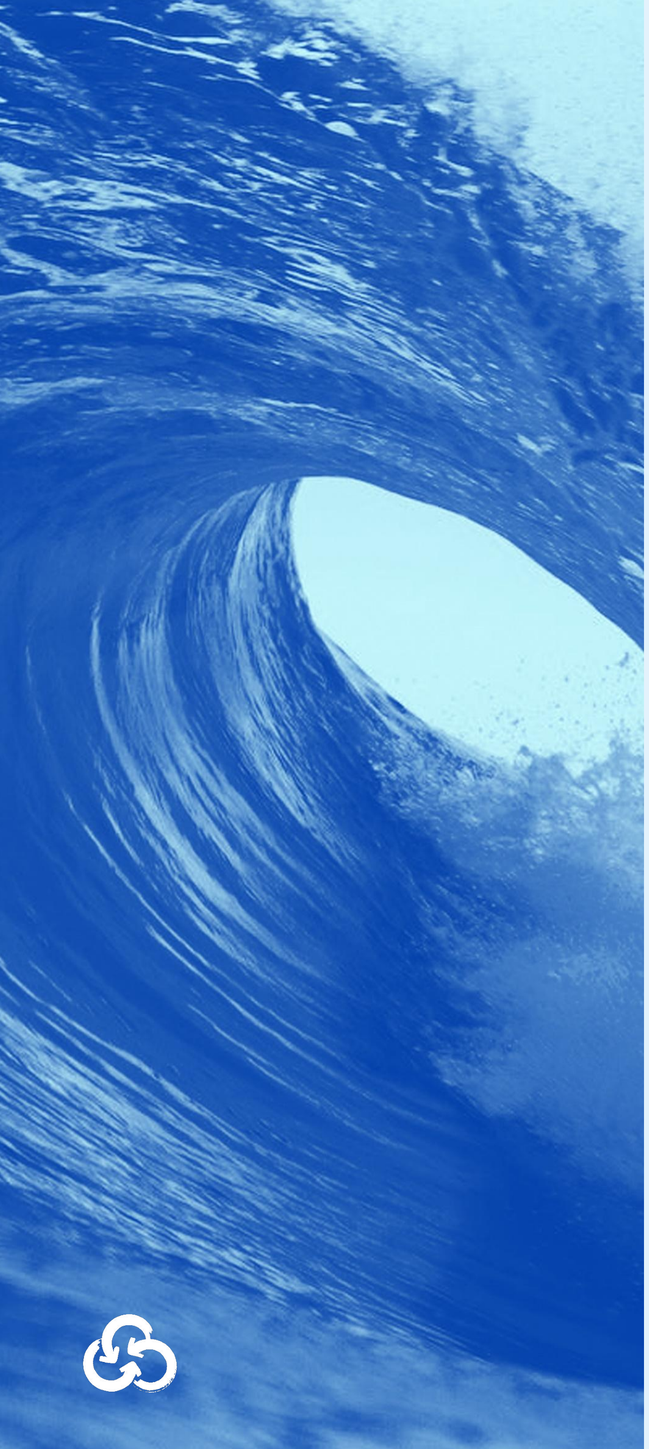
OFFICE OF SUSTAINABILITY
COUNTY OF SAN MATEO

RICAPS Monthly Meeting x Facilities Working Group

January 23, 2024

RICAPS technical assistance is available through the San Mateo County Energy Watch program, which is funded by California utility customers, administered by Pacific Gas and Electric Company (PG&E) under the auspices of the California Public Utilities Commission and additional funding provided by Peninsula Clean Energy.



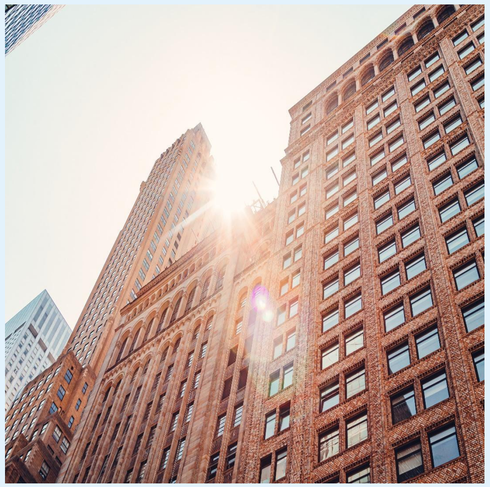
Agenda

1:30-1:50: Welcome, Announcements, Share-Out

- 1:30-1:35: Welcome, Avana Andrade & Laura Wong
- 1:35-1:50: Announcements
- 1:50-1:55: Jurisdiction Peer-to-peer share-out
  - Focus on EV and CIP electrification updates

1:50-2:15 Electrifying Government Fleets & Upcoming ACF Requirements

- 1:55-2:05: ACF Reporting Requirements Overview- Ryan Gardner, Director of Climate Change Mitigation & Adaptation, Rincon Consultants
- 2:05-2:15: How PCE Can Support ACF Compliance with its GovEV program, Phillip Kobernick, Senior Transportation Programs Manager
- 2:15-2:35: Business Model highlight: ChargerHelp! Brett Steudle, Account Executive, Utilities & Government



2:35:3:00: Discussion on Charging Readiness- What's Next for RICAPS?

- 2:35-3:00: Poll- How ready is your city for the ACF?
- Collaboration/ idea discussion
- Q&A for PCE & Rincon

1: Announcements

Berkeley Ruling Update - Blake Herrschaft; Peninsula Clean Energy

BayREN Single Family Feedback Session - Alero Moju

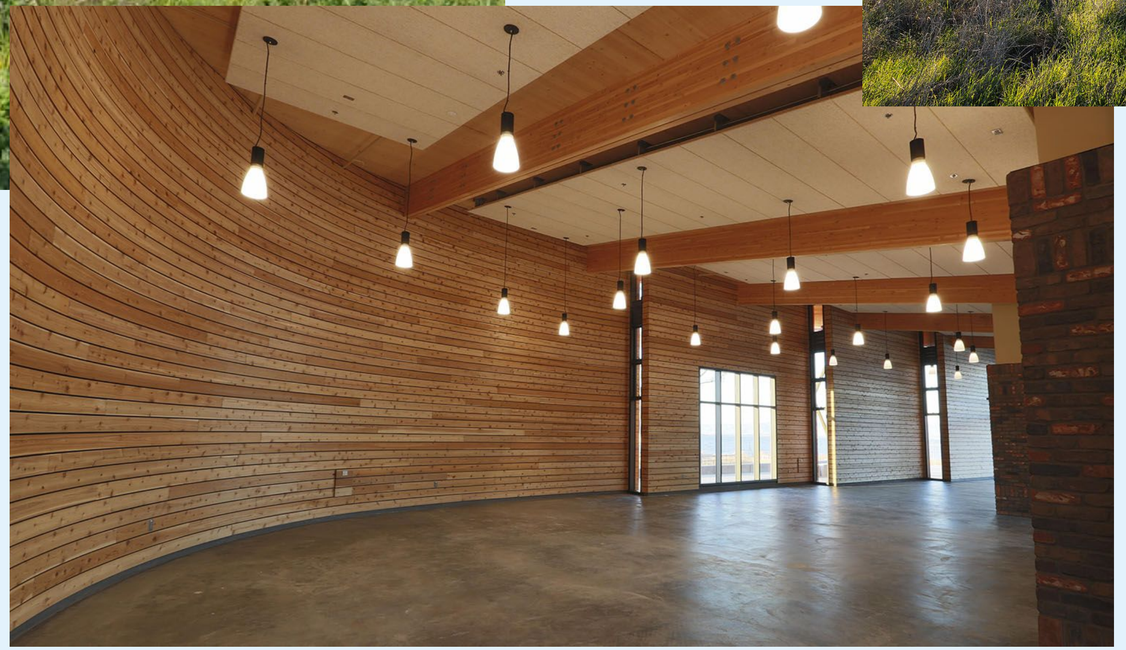
December meeting key takeaways & RICAPS Advisory Group - Avana

- 2023 Year In Review: Success, Challenges, Opportunities

- Highlighted Opportunities:
  - Countywide collaboration on electrification
    - Model reach codes
    - Permitting and enforcement
  - Joint funding opportunities
  - Carbon sequestration bank
  - Staffing capacity/expertise inventory

- Advisory Group:
  - Meeting 1x/quarter
  - First meeting reviewing year-long plan for RICAP

Tuesday, February 27 Meeting - In Person! At Cooley Landing in East Palo Alto



Thanks Fatima!

Rincon Poll ! 2022 GHG Inventory Needs:
https://forms.gle/Mn2LDZ5pWt2cCrLVA

Does your jurisdiction anticipate needing a 2022 GHG Inventory this year?

If so, is there anything you'd like for us to know?

2: Jurisdiction Peer-to-Peer Share-Out

3: Advanced Clean Fleets (ACF) Regulation Local Government Reporting Requirements, Rincon Consultants

Resources Available for ACF Reporting for Local Gov

- Peninsula Clean Energy Advanced Clean Fleets One-Pager
  - Peninsula Clean Energy GOVEV Program

- CARB Webinars & Recordings
  - https://ww2.arb.ca.gov/sites/default/files/2024-01/240117acfslgtraining_ADA.pdf

Both to be sent out post-Webinar

Image source: TerraVerde Energy

Advanced Clean Fleets Recap for Local Gov

ZEV Purchase Schedule

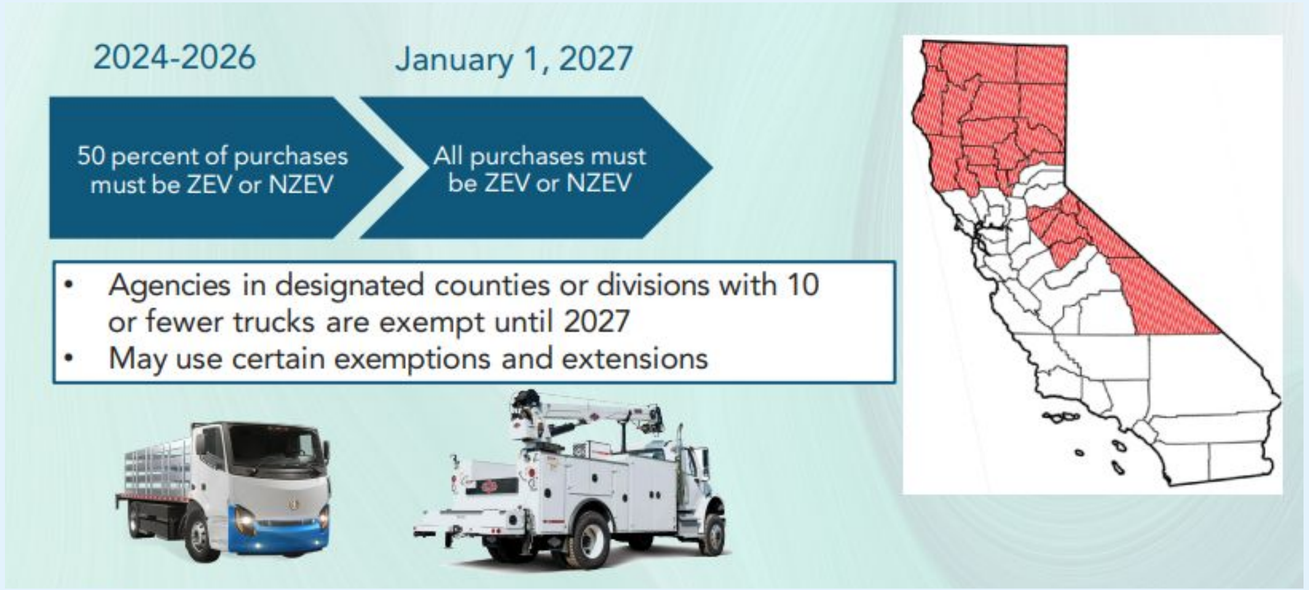


Image source: CARB
https://ssl.arb.ca.gov/trucrs_reporting/login.php

- Applies to state and local government fleets
- Medium- and heavy-duty vehicles (GVWR> 8,500 lbs)
- Fleets must ensure **50%** of affected vehicle purchases are ZEVs beginning in **2024** and **100%** of affected vehicle purchases are ZEVs by **2027**.
  - Small government fleets (≤10 affected vehicles) can start their ZEV purchases beginning in 2027
  - Alternately, state and local government agency fleets may use the ZEV Milestones Option
- No requirement to end use of existing affected vehicles with the Model Year Schedule

ACF Reporting Requirements for Local Gov

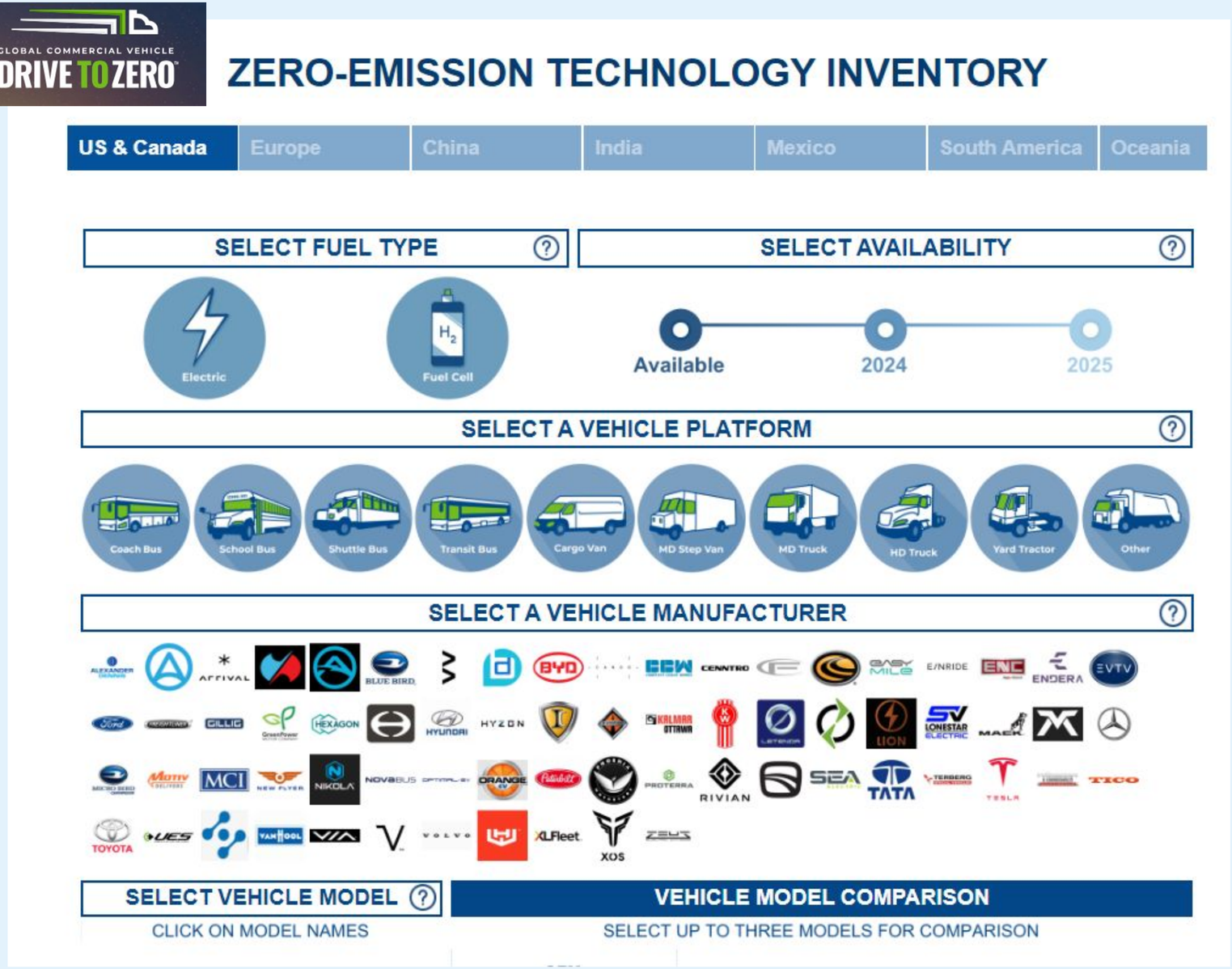
- Submit annual compliance reports for each calendar year
  - Due April 1st each year - first report due April 1, 2024 for calendar year 2023
  - Submit online in the TRUCRS reporting system
  - Include required information on the reporting agency and information on each affected vehicle (VIN, make and model, model year, license plate number, GVWR, fuel and powertrain, date of purchase, odometer readings, funding contracts, etc.)
- Report changes to the existing affected fleet during the calendar year
  - Affected vehicles added to the fleet must be reported within 30 calendar days of being added
  - Affected vehicles permanently removed from the fleet must be reported within 30 calendar days of removal
- Store all information reported to CARB for at least 5 years

Image source: CARB
https://ssl.arb.ca.gov/trucrs_reporting/login.php

Available Vehicles

CARB ZEV Truckstop Resources

- Regulation Requirements
- Infrastructure Information
- Incentives
- Available Vehicles



https://ww2.arb.ca.gov/our-work/programs/truckstop-resources/zev-truckstop/zero-emission-market

4: How PCE Can Support ACF Compliance with its GovEV Program, Phillip Kobernick, Peninsula Clean Energy

Suite of Government Programs

GovEV Program

Program Summary:

1. Help you plan for fleet-wide transition to EVs, install EV charging, maximize savings with energy management
2. Free service from Peninsula Clean Energy
3. Some funding available from Peninsula Clean Energy, in addition to state rebates and federal credits
4. Open to all local public agency fleets
5. Program open until 2025

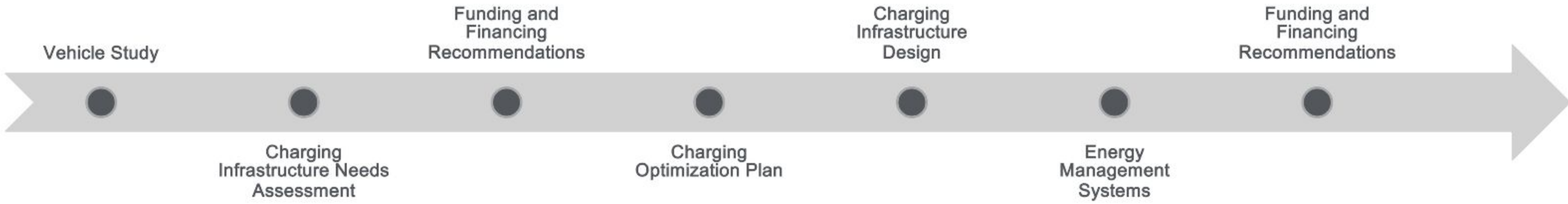
Services

Whole Fleet Assessment

- Fleet Vehicle Study
- Charging Infrastructure Needs Assessment
- Charging Optimization Plan
- Funding and Financing Recommendations

Charging Infrastructure Project

- Charging Infrastructure Design
- Energy Management Systems
- Funding and Financing Recommendations



How Much Charging Do You Need?

How many EV chargers do you need?

Vehicle-to-port ratios for LD/MD vehicles

Average miles/day	Vehicles per Level 2 charging port
0-20	2-3+
20+	1.5-2.5+

Vehicle-to-port ratios can be increased beyond 3:1 if fleets can use a charger multiple times per day such as 1 vehicle charging mid-day when not in use and another vehicle charging overnight.

5 EV chargers supports up to 17 pick-up trucks!

5: Business Model Highlight: ChargerHelp! Brett Steudle, Account Executive, Utilities and Government

Maintaining a charging network and growing the workforce of the future

chargerhelp.com

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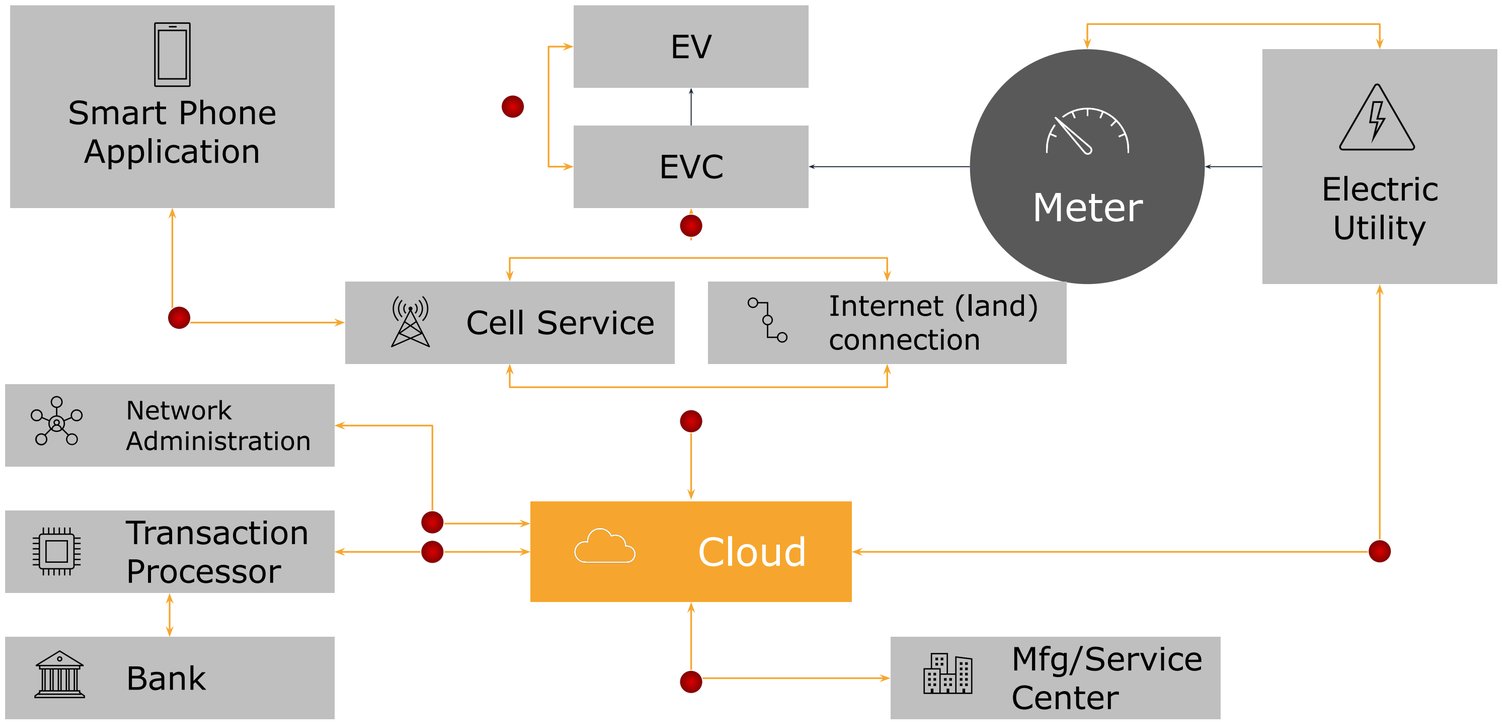
Issues with Reliability

ChargerHelp's core mission is to increase the reliability of EV chargers

Networked charging stations have many failure points



A real-life example of 200 chargers shows that network data has its limitations

	Network Station Status	Physical Station Status	Station Count
False negatives	Offline	Available	15
	Busy	Available	7
False positives	Available	Faulted	2
	Busy	Faulted	1
	Available	Off - station failure	3
	Available	Busy	2

Reliability as a Service (RaaS)

Coupling charger monitoring with field technicians under SLAs to keep chargers functioning

Reliability as a Service delivers True Charger Uptime

Subscription Service Model that provides:

- Reliability management support, including diagnostics and coordination with manufacturer / CMS partners for issue resolution
- Unlimited corrective maintenance, including labor, travel time & mileage
- **Flexible onsite SLAs** to meet customer need and pricing requirements
- **EVSE-certified expert technicians** to support both L2 & DC Fast Charging equipment
- Operations and network performance analysis (e.g., MTTR drivers and spare parts consumption)

RaaS Success: Utility Customer

Major utility customer with over 500 owned and operated EV charging stations faced 130 unresolved issues, some of which had not been addressed for over 12 months

Assess

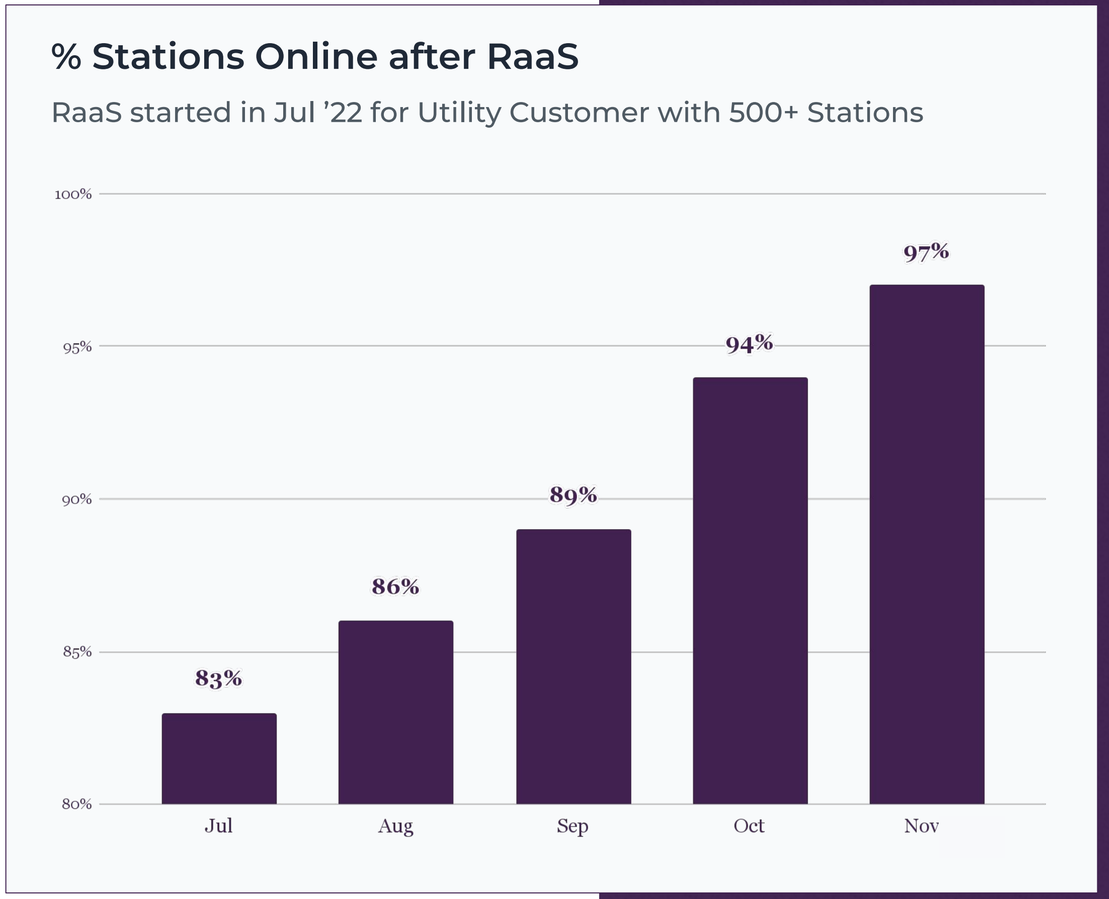
CH! conducted an assessment of 500+ stations and found 30% were completely offline and another 30% suffered from communications issues

Resolve

CH!’s RaaS solution resolved a range of issues, improving stations uptime from 83% to 97% in just a few months

Maintain

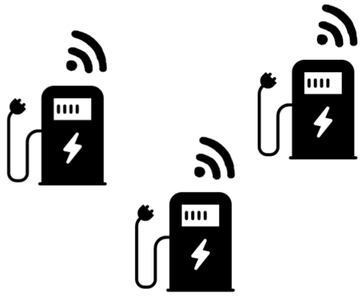
RaaS is providing ongoing technician support for both in-warranty and out-of-warranty stations



Learning & Development

Building a workforce for the EV charger reliability industry

A workforce for jobs of the future powered by partnership



We **secure** the **work**

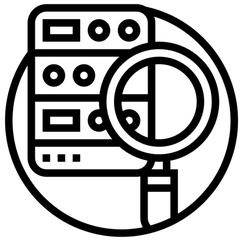
We secure service contracts with Open Charge Point Protocol (OCCP) network providers to receive service tickets in real time

We **train** and **hire** local talent

We partner with local workforce development centers where those stations are located

We offer a **stackable certification**

We provide access to our EVSE maintenance training program as a stackable certification



We **utilize technology** to keep our technicians up to date

The ChargerHelp! app and platform ensures that technicians can easily troubleshoot any network or EVSE manufacturer

Atlanta Technical College Case Study

The utility-leveraged local workforce training to improve service and increase visibility over EV charging stations

Addressing a Major Market Gap

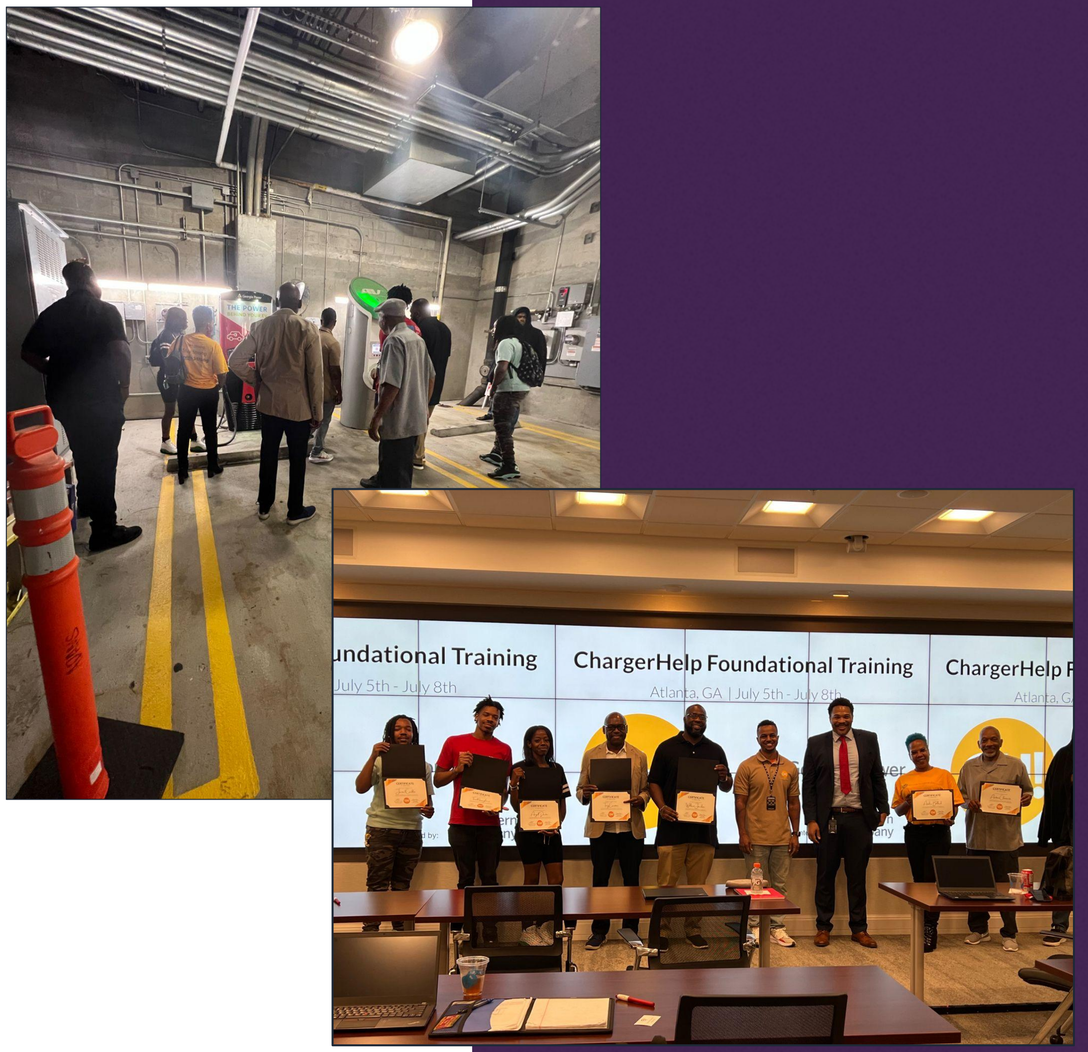
CH! supported to improve customer experience and uptime across different sites within the wide range of service coverage area throughout Georgia. The course prepared students for real world EV charging infrastructure diagnostics, maintenance and repair.

Partners in Training

Leveraged partnership through Georgia Power’s Workforce Development and Education Customer Solutions, Electric Transportation, Supplier Diversity, and Atlanta Technical College and others to train enrolled students in CH’s Foundational EVSE Technician training.

Career Pathways

CH’s EVSE Training gives the skill sets for students to seek job opportunities in the electric vehicle industry, including jobs internally with ChargerHelp.



EVSE Technician training is performed by experts in a variety of settings and domains

Experts

CH! is the first company to solely focus on O&M of EVSE. Our trainers and technicians have worked with over 25 different EV Chargers and Charging networks. Our curriculum and field experience contributed to the development of the SAE EVSE Technician Body of Knowledge.

Access

Online & In-person training programs accessible to participants at least 18 years of age with a high school diploma or equivalent and a 9th grade reading level. Train-the-Trainer model is launching in 2024 to expand the scale of our curriculum.

Skills & Knowledge

EVs and Batteries, Electrical Energy Fundamentals, Electrical Codes & Safety, EVSE, Preventative Maintenance, Corrective Maintenance, Commissioning, Key Terms and Definitions.

Brett Steudle
brett@chargerhelp.com

6: Discuss: What is Next for RICAPS ZEV Programming?

Poll: ACF Readiness

Do you have an EV charging strategy or targets?

Are those fleets, employee, public, or a combination (not determined yet)?

Has your City dedicated any budget to installing EV Charging in the next 1.5 years?

November RICAPS Ideas for RICAPS ZEV Programming

Recap: in November we brainstormed hurdles and solutions to local gov fleet electrification

Potential RICAPS Programs/ Support includes:

- Messaging/ materials to highlight local gov case studies for fleet electrification
  - Combat misinformation & increase internal & external buy-in
- Police department x PD involvement
- Collective funding mechanism to cover O&M
- Best practices for data collection to allow for ACF compliance and (future) full fleet electrification (+ Peninsula Clean Energy GOVEV Program enrollment)

Discuss

Temperature check: will these RICAPS program ideas help you overcome existing hurdles for fleet electrification?

Are there any standouts?

Other reactions? Questions? Comments?

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THANK YOU