

**DOCKETED**

<b>Docket Number:</b>	20-TRAN-04
<b>Project Title:</b>	Electric Vehicle Infrastructure Project Funding
<b>TN #:</b>	238415
<b>Document Title:</b>	Pre-Solicitation Workshop Presentation for MUD and Rural Light-Duty EV Charging Concepts 2021-06-28
<b>Description:</b>	N/A
<b>Filer:</b>	Spencer Kelley
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
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<b>Docketed Date:</b>	6/22/2021



# Pre-Solicitation Workshop

Light-Duty Electric Vehicle Infrastructure Projects for Rural  
and Multi-Unit Dwelling Residents

Fuels and Transportation Division

June 28, 2021 | 9:00 am



# Housekeeping

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- Workshop is being recorded.
- Virtual Participation through Zoom
  - Raise Hand or Q&A feature
  - Telephone participants dial \*9 to raise your hand
- Written Comments to Docket # 20-TRAN-04:  
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=20-TRAN-04>  
**Deadline: July 13, 2021, at 5:00 p.m.**



# Workshop Purpose

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**Stakeholder feedback** on draft solicitation concepts for light-duty electric vehicle (EV) infrastructure projects, including:

- EV charging to serve multi-unit dwelling residents
- EV charging that increases charging access in rural communities



# Workshop Agenda

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- 9:05 am Welcome and Introductions
- 9:10 am Background
- Clean Transportation Program
  - 2021-22 Light-Duty EV Charging Project Objectives
- 9:15 am U.S. EPA Presentation, Eric Byous
- Transforming Brownfields into EV Charging Infrastructure Sites
- 9:25 am Overview of Multi-unit Dwelling Charging Solicitation Concepts
- Purpose and Eligibility
  - Project Requirements
  - Project Evaluation
  - Solicitation Timeline
  - Discussion Questions and Commenting Period



# Workshop Agenda Continued

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- 10:30 am Overview of Reliable Rural Charging Solicitation Concepts
- Purpose and Eligibility
  - Project Requirements
  - Project Evaluation
  - Solicitation Timeline
  - Discussion Questions and Commenting Period
- 11:30 am Public Comments
- 11:55 am Next Steps
- 12:00 pm Adjourn



# Commitment to Diversity

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The CEC adopted a resolution strengthening its commitment to diversity in our funding programs. The CEC continues to encourage disadvantaged and underrepresented businesses and communities to engage in and benefit from our many programs.

To meet this comment, CEC staff conducts outreach efforts and activities to:

- Engage with disadvantaged and underrepresented groups throughout the state.
- Notify potential new applicants about the CEC's funding opportunities.
- Assist applicants in understanding how to apply for funding from the CEC's programs.
- Survey participants to measure progress in diversity outreach efforts.



# Diversity Survey



Scan the code on a phone or tablet with a QR reader to access the survey.

## One Minute Survey

The information supplied will be used for public reporting purposes to display anonymous overall attendance of diverse groups.

Zoom Participants, please use the link in the chat to access the survey or scan the QR code on the left of the screen with a phone or table to access the survey.

Survey will be closed at the end of the day.

### Survey Link:

<https://forms.office.com/Pages/ResponsePage.aspx?id=RBI6rPQT9k6NG7qicUgZTvawHM4nxc9JkRRDFOvjt45URTJEUVIRVIZJSVJNRkZaOVAXM0ZNVWkZEUY4u>





# Find a Partner on EmpowerInnovation.net

Empower Innovation strives to accelerate your clean tech journey with easy access to funding opportunities from the CEC and other funding providers, curated resources and events, and connections to people and organizations.

## **FIND A PARTNER**

Announce your interest in this funding opportunity and message other interested parties to find potential partners.

## **RESOURCES & TOOLS**

Browse the collection of resources for clean tech innovators including Resource Libraries, Funding Sources, Tools, and Databases.

To search for funding opportunities, please go to this link:

<https://www.empowerinnovation.net/en/custom/funding/directory>

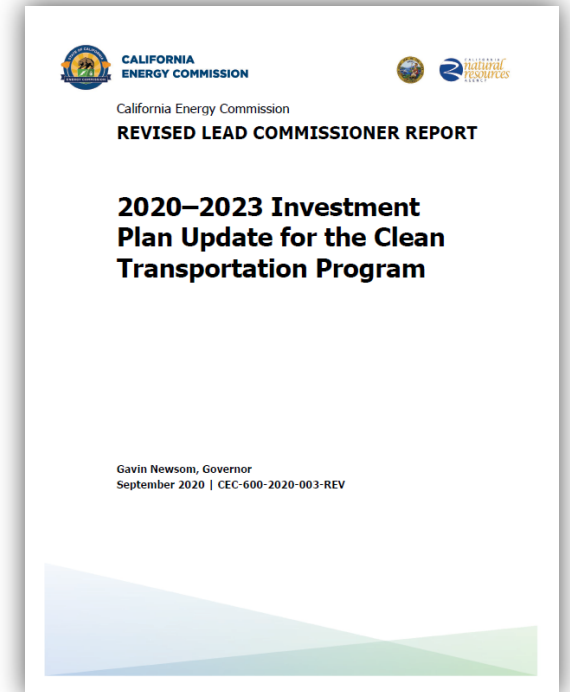
Please direct questions for the Empower Innovation platform to:

[https://www.empowerinnovation.net/en/contact\\_us](https://www.empowerinnovation.net/en/contact_us)



# Clean Transportation Program (CTP)

- Established in 2007 by Assembly Bill 118 (2007).
- Extended to January 1, 2024 by Assembly Bill 8 (2013).
- Provides approximately \$95 million of funding per year through 2023.
- Investment Plan to determine funding allocations across various categories.





# Light-Duty EV Charging Projects

- On December 17, 2020, CEC held a workshop for recommendations on projects to use remaining CTP funds from fiscal year (2020-21)
- \$17.9 million for light-duty EV charging infrastructure projects
- Commitment to equity across all project areas
- Funds applied to four project areas after review of workshop comments
  - EV Charging for Multi-Unit Dwelling (MUD) Residents
  - Reliable Rural EV Charging Solutions
  - Reliable Infrastructure for Drivers Electrifying Shared Services (RIDESS)
  - Advanced Charging Technology (BESTFIT)



# Transforming Brownfields into EV Charging Infrastructure Sites



# **EV Charging for Multi-unit Dwelling (MUD) Residents**



# Purpose of Proposed Solicitation

Deploy EV chargers that prove models that achieve one or more of the following objectives:

- Replicability for specific MUD building types
  - Successful outreach, installation, and use of chargers, particularly in
    - Disadvantaged and/or low-income communities
    - Affordable housing units
  - Reliable and consistent onsite, or nearly onsite, charging access
- Goal: Increase charging access for and EV adoption by residents



# Proposed Funding

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- \$8.5 million total funding available
- Award at least 3 applicants
- Up to \$3 million per application



# Proposed Eligible Projects

- Serve at least 100 dwelling units across multiple buildings.
- Examples:
  - Four buildings of 30 units each.
  - Twelve buildings of 5 units each and one building of 40 units.
  - Two buildings of 75 units each.
  - No single-family dwellings
- The units do not all have to be owned or managed by the same entity. The applicant may recruit unrelated units.





# Proposed Eligible Projects, Continued

- Projects may include one or more of the following types of charger installation locations:
  - Onsite assigned parking spaces
  - Onsite unassigned parking spaces shared across multiple units
  - Offsite curbside or on public/private property within 1/2 mile of the MUD
- Projects may include one or more of the following types of chargers:
  - Level 1
  - Level 2
  - Direct Current Fast Chargers
  - Mobile Chargers



# Proposed Eligible Project Areas

- All MUDs in the state are eligible, at least 50% in disadvantaged or low-income communities
- Funding will be split between three geographic areas:

General Area Description	Counties
Northern California	Alameda, Alpine, Butte, Colusa, Contra Costa, Del Norte, El Dorado, Glenn, Humboldt, Lake, Lassen, Marin, Mendocino, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Francisco, San Mateo, Santa Clara, Shasta, Sierra, Siskiyou, Solano, Sonoma, Sutter, Tehama, Trinity, Yolo, and Yuba
Central California	Amador, Calaveras, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Monterey, Mono, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Santa Cruz, Stanislaus, Tulare, and Tuolumne
Southern California	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura



# Proposed Eligible Applicants

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- Open to all public and private entities.
- Required to be registered and be in good standing with the California Secretary of State, <https://www.sos.ca.gov>, to enter into an agreement with the CEC.
- Want project teams that:
  - Know the local community
  - Have capacity to do outreach to property owners and tenants



# Discussion #1: Proposed Funding and Eligibility

## Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Is a maximum project award of \$3 million and a minimum number of 100 units served in the right ballpark?
  - a. Do potential applicants feel they could develop and manage projects of this size?
  - b. Is the funding level appropriate?
2. Is allowing the various types of installations and equipment the right approach?
3. Should there be a required type of project team member (public entity, CBO)?



# Discussion #2: Match Funding

## Zoom Participants

- Use the “raise hand” feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. What would be a fair and reasonable match share requirement?
2. Should the match share requirement differ based on:
  - a. The type of applicant?
  - b. The type of installation or business model?
  - c. The locations of project sites in disadvantaged/low-income communities?



# Proposed Project Readiness

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- Sites for charger installations must be identified and have letters of intent.



# Discussion #3: Proposed Project Readiness

## Zoom Participants

- Use the “raise hand” feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. What is a reasonable requirement for projects of this size?
2. Does a longer application submittal timeline allow applicants to secure site locations through signed agreements with site owners?



# Proposed Technical Requirements

- Projects with DC fast charging must have SAE CCS connectors and may include CHAdeMO or Tesla connectors.
- All Level 2 chargers must have SAE standard J1772 connectors and may have Tesla connectors.
- All Level 1 chargers must be equipped with SAE standard J1772 connectors.
- All chargers installed must be network capable.
- If installed outside, chargers must be able to withstand extreme weather associated with the deployment area.





# Proposed Operations Requirements

- Applicants must submit an Operations and Maintenance Plan.
- Projects must have an uptime goal of 95 percent.
- Applicants must provide customer service support via a toll-free telephone number at project sites during all hours of operation.
- Applicants must maintain and operate all funded equipment for a minimum of 5 years.
- The project must have networking agreements and warranties for at least 5 years.
- If chargers will require payment, the chargers must be able to support multiple payment methods. Applicants may propose alternatives to credit cards and smartphone-based payment methods.



# Discussion #4: Proposed Technical and Operations Requirements

## Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Does equipment need to be network capable and be networked (i.e., have a networking agreement)?
2. Are we missing any important technical requirements?
3. What is the appropriate level of customer service?
4. Do sites and the chargers need to be available 24/7?



# Proposed Evaluation Criteria

Scoring Criteria	Points
Project Location	30
Project Readiness and Implementation	35
Innovation and Sustainability	10
Team Qualifications	15
Project Budget	10
<b>TOTAL POSSIBLE POINTS</b>	100
<b>MINIMUM PASSING SCORE (70%)</b>	70



## Discussion #5: Proposed Evaluation Criteria and Reaching Underserved Populations

### Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

### Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Is there anything missing from the proposed scoring criteria?
2. Is the evaluation point allocation appropriate?
3. How can we encourage projects that keep charging rates low for the MUD residents being served?
4. What other tools could be employed to ensure chargers are installed in disadvantaged communities, low-income communities, and affordable housing units?



# Proposed Data Collection Requirements

- Applicants must have a plan for data collection, including, but not limited to, data on usage, payment, emissions savings, and job creation.
- Applicants must collect a minimum of 12 months of data and provide data electronically to the CEC on a regularly scheduled basis.
- Data collection includes, but is not limited to:
  - Charge and session duration and cost
  - Energy delivered (kWh)
  - Power delivered (kW)
  - Payment method
  - Type of vehicle charged
  - Number of unique vehicles and frequency of "repeat vehicles"
  - (Bidirectional charging use case) Energy delivered back to the grid or facility (kWh)
  - **Rate of EV adoption in MUDs served**
  - **Success rate of building recruitment and outreach strategies**



# Discussion #6: Proposed Data Collection

## Zoom Participants

- Use the “raise hand” feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. What data would be most useful for others to learn from and replicate these projects?



# Proposed Schedule

<b>Activity</b>	<b>Action Date (Tentative)</b>
Solicitation Release	November 2021
Pre-Application Workshop	November 2021
Deadline to Submit Applications	January/February 2022
Anticipated Notice of Proposed Awards Posting	March 2022
Anticipated CEC Business Meeting Approval	May 2022



# Submit Comments to Docket 20-TRAN-04

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## Electronic Commenting System

Visit the comment page for this docket at:

<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=20-TRAN-04>

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## Comment by E-mail

E-mail: [docket@energy.ca.gov](mailto:docket@energy.ca.gov)

Subject Line: "Electric Vehicle Infrastructure Project Funding"

**All comments due by 5:00 pm on July 13, 2021**





**We are on break until 10:30 a.m.**



# Reliable Rural Charging Solutions

Start at 10:30 am



# Purpose of Solicitation

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Explore models that support large-scale EV charger deployment that:

- Supports daily rural travel and charging behavior, particularly for rural drivers in low-income and disadvantaged communities
- Expands the network of chargers and fill charging gaps
- Increases charging access for and EV adoption by rural drivers
- Proves replicability for unique rural areas



# Proposed Funding

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- \$4.8 million total funding available
- Award approximately 3 to 5 applicants
- Up to \$1,600,000 per applicant
- Minimum of \$500,000 per applicant



# Proposed Applicants

- Open to all public and private entities
- Required to be registered and be in good standing with the [California Secretary of State](https://www.sos.ca.gov), <https://www.sos.ca.gov>, to enter into an agreement
- Project teams **must** include one or more of the following:
  - Community-based organization, or
  - City or county government agency, or
  - California Native American Tribe, or
  - Related organizations (e.g., regional transportation planning organization, joint power authorities)
- Applicants may submit multiple applications under CEC Clean Transportation Program light-duty EV charging infrastructure solicitations
- Applicants are encouraged to pursue co-funding opportunities and provide match



# Discussion #1: Goals and Proposed Funding

## Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Should the CEC focus on any additional goals to serve rural drivers?
2. Are the minimum and maximum award amounts per applicant sufficient?
  - Is a minimum of \$500,000 per applicant too much?
  - Is a maximum of \$1,600,000 per applicant too little?
3. Should minimum and maximum award amounts be based on applicants or projects?



# Discussion #2: Applicant Eligibility and Match

## Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Are the criteria for eligible applicants sufficient or too broad?
2. What would be a fair and reasonable match share requirement?
  - Should the CEC require match for rural areas?
  - Should match requirements differ for lead applicants?
  - Should match requirements be based on applicant or type of business and technology model?



# Proposed Project Area Eligibility



- Projects may be located outside of rural areas along travel corridors to support daily travel by rural drivers.
- However, projects may not be located within densely populated cities and counties.
- Proposed DC fast charging sites are strongly encouraged to be at least 10 miles from an existing or planned DC fast charging site.
- Please refer to Plugshare (<https://www.plugshare.com/>) and the Department of Energy's Alternative Fuels Data Center (<https://afdc.energy.gov/stations/#/find/near>) for up to date existing and planned charger site information.





# Proposed Project Regions

- Applicants may request up to \$1,600,000 per project region with one award expected per region, based on the current budget for this solicitation
- At least 50% in Disadvantaged or Low-Income Communities



Project Regions	Counties
Northern California	Del Norte, Siskiyou, Modoc, Humboldt, Trinity, Shasta, Lassen, Mendocino, Tehama, Plumas, Lake, Glenn, Colusa, Butte, Sierra, Nevada
Central California	Yolo, Sutter, Yuba, Placer, El Dorado, Sacramento, San Joaquin, Amador, Alpine, Calaveras, Stanislaus, Tuolumne, Mono, Inyo, Merced, Mariposa, Madera, Fresno, Kings, Tulare
Southern California	Santa Cruz, Monterey, San Benito, San Luis Obispo, Kern, Santa Barbara, Ventura, Riverside, San Bernardino, Imperial



# Discussion #3: Project Area Eligibility and Regions

## Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Are proposed eligible project areas sufficient or too broad?
  - Should eligible project areas be more targeted?
2. Is the proposed proximity suggestion to existing and planned DC fast chargers appropriate?
3. Are there better ways to break out project regions across the state?



# Proposed Project Requirements

## Project Sites and Equipment:

- Sites with DC fast charging must have SAE CCS connectors and may include CHAdeMO and Tesla connectors. There must be a Level 2 backup charger available.
- All Level 2 chargers must have SAE standard J1772 connectors and may include Tesla connectors.
- All Level 1 chargers must be equipped with SAE standard J1772 connectors.
- Sites must be well-lit, highly-visible, secure, and publicly available.
- Chargers must be able to withstand extreme weather associated with the deployment area.



# Proposed Project Requirements

## Project Implementation and Operation:

- Applicants must demonstrate their ability to have projects become operational no more than 2 years after agreement execution.
- Applicants must have a maintenance plan for projects.
- Applicants must provide customer service support via a toll-free telephone number at project sites during all hours of operation.
- Applicants must install signage for easy identification of charging station locations
- Applicants must maintain and operate all funded equipment for a minimum of 5 years.



# Discussion #4: Project Requirements (Project Sites and Data)

## Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. What kinds of sites best support rural daily travel and charging?
2. With the goal to expand the charging network and fill charging gaps, should the CEC consider a minimum number of sites per applicant?
3. What are ways to minimize charger vandalism at sites?
4. What data would be most useful for others to learn from and replicate these projects?



# Discussion #5: Project Requirements (Equipment)

## Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Should the CEC require minimum charging rates (in kW) for chargers deployed in and around rural areas?
  - What are reasonable minimum rates requirements for DC Fast and Level 2 chargers in and around rural areas?
2. Does equipment need to be network capable and be networked (i.e., have a networking agreement)?



## Discussion #6: Project Requirements (Project Implementation and Operation)

### Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

### Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. What is a reasonable level of public access to a rural charging site?
2. What are reasonable minimum requirements for maintenance plans in rural areas?
3. What are reasonable minimum requirements for data collection if chargers are non-networked?



# Examples of Eligible Projects

- Direct Current Fast Chargers (DCFCs) at gas stations, rest areas, travel centers, and/or truck stops along major rural corridors
- Level 2 chargers at shopping plazas, "mom and pop" shops, healthcare facilities, educational institutions, and/or places of worship that serve rural residents
- Mobile chargers, including solar-powered chargers
- Mixes of chargers with on-site battery storage at shared mobility hubs, including at existing neighborhood vanpooling and ridesharing locations





# Proposed Evaluation Criteria

Scoring Criteria	Points
Project Readiness and Implementation	25
Project Innovation and Sustainability	20
Environmental and Economic Benefits to Rural, Disadvantaged, and Low-Income Communities	35
Team Qualifications	10
Project Budget	10
<b>TOTAL POSSIBLE POINTS</b>	<b>100</b>
<b>MINIMUM PASSING SCORE (70%)</b>	<b>70</b>



## Discussion #7: Application Evaluation Criteria

### Zoom Participants

- Use the "raise hand" feature to make verbal comments
- Use the Q&A feature to type in your question

### Telephone Participants:

- Dial \*9 to raise your hand
- Dial \*6 to mute/unmute your phone line.

1. Is there anything missing from the proposed scoring criteria?
2. Are the evaluation criteria appropriate?
3. How can we encourage projects that keep charging rates low for rural drivers?



# Proposed Schedule

<b>Activity</b>	<b>Action Date (Tentative)</b>
Solicitation Release	December 2021
Pre-Application Workshop	December 2021
Deadline to Submit Applications	February 2022
Anticipated Notice of Proposed Awards Posting	April 2022
Anticipated CEC Business Meeting Approval	June 2022



# Public Comment/Discussion Period

## Zoom Participants

- Use the “raise hand” feature to make verbal comments
- Use the Q&A feature to type in your question

## Telephone Participants:

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## Written Comments

<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=20-TRAN-04>

Deadline for comment: Tuesday, July 13, 2021 by 5:00 pm .



# Submit Comments to Docket 20-TRAN-04

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Subject Line: "Electric Vehicle Infrastructure Project Funding"

**All comments due by 5:00 pm on July 13, 2021**



Thank you for participating!