

DRIVER TRAINING

California Electric School Bus Working Group

December 7th, 2022 | 11:00 AM PT



DECEMBER 7, 2022

WORKING GROUP AGENDA

- Intro to Electric School Bus Network
 - Jared Schnader
- EnergIIZE Update
 - Tesi Bravo
- Guest Speaker Presentation: Driver Training
 - Nancy Jensen
 - Jason Francisco
- Q+A with Speakers
- Summary + Closing



MEET THE TEAM



Jared Schnader Senior Director, Bus Initiative Lead



Michelle Hanson Program Manager, Bus and Innovative Mobility



Juan Espinoza Project Manager



Liza Walsh Associate Project Manager



Chrystal Ales Project Manager







ESB NETWORK

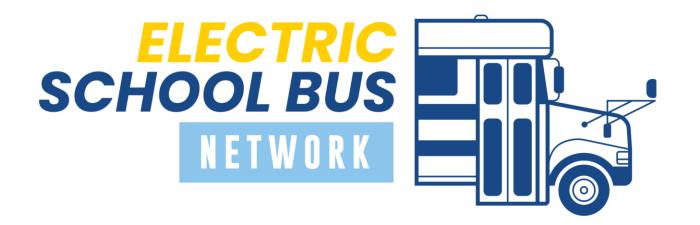
The Electric School Bus Network accelerates nationwide school bus fleet electrification through peer-to-peer networking and dialogue-driven working group meetings for school districts, advocacy organizations, government organizations, and industry representatives. The ESB Network provides access to educational tools, resources, and subject matter experts to help support the electric school bus fleet transition.

In Partnership With:



+ CALIFORNIA HVP

ELECTRIC SCHOOL BUS NETWORK



TESI BRAVO

Lead Project Manager

EnergIIZE





EnergIIZE - Update





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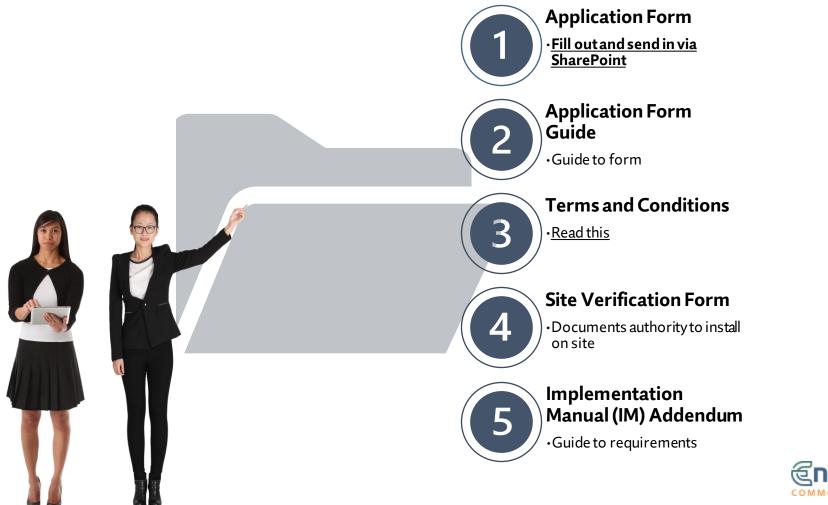
Let's go: applications in by Jan 17th

- Check your email for the Application Kit
- Send in your applications
- Date due: 1/17/2022

Pay attention 2023 cohort!

You'll follow these steps if you want infrastructure funding next year

Application Kit Elements





EnergIIZE Funds

- Application form
 - Big Excel sheet
 - With companion guide



	EnergIZE School Bus Set Aside Application 12/2/2022	EnerglIZE Public School Bus Set Aside
	10.58 AM	Application Form Guide
Energ IIZE		Release date: October 14, 2022, Revision Date: October 12, 2022
Application:	EnergilZE Public School Bus Set Aside Application	
Version of application:	Released 10/14/2022, Updated 10/14/2022	verview
Participants will complete each item and section below, unless indicated otherwise. Inst (between paragraphs).	ructions are given and specific recommendations for entry are given	is guide is a quick and easy overview of everything you, the potential program participan ed to fill out in the Application Form for the Energy Infrastructure Incentives for Zero-Em
comment paragraphine. Consult the Guide to this document for an easy-to-follow instructions and lips on gathering material. If any assistance or further information is needed, do not healtaft to contract EnergiDE staff at the email address below. Our goal is to have responses back to you by 48 hours. Finally, when complete, save this document and upload it to our secure SharePoint site linked below. If you have issues, please reach out:		mmercial Vehicles (EnergilIZE) program supporting the Public School Bus Set-Aside for hall and Medium Air Districts. ¹
		u have expressed interest in infrastructure when applying to HVIP and answered questi arding your needs. The purpose of this form, the first step in the five-step process
If you need assistance or information, contact the following: Or phone us at the following number:	SchoolBusInfrastructure@calstart.org (877) 367-4493	ceiving incentives for commissioning infrastructure, is to onboard you to the
Our goal is to have responses back to you by 48 hours.	(01) 001-400	rastructure side of the work and start tracking and detailing your infrastructure ne
Primary Contact Information (your information)		short, the application form will document:
1. First Name 2. Last Name		short, the application form will document:
Participant Information (e.g.: your School district)		Who you are
 Organization name (your Applicant Name in HVIP forms) Organization type (your Applicant Type in HVIP forms) 		
3. Mailing Address:		Where the infrastructure will be installed
4. City: 5. State:		
6. Zip Code:		What details you know about the site's ownership
7. Website:		
8. Primary E-mail: 9. Phone:		Who the project partners are (e.g. if you have a vendor)
9. Phone: 10. Tax ID Number:		The the project partners are (e.g. in you have a venuor)
Site Information (your project)		what the equipment is and initial cost estimates
 How many sites (with distinct addresses) are you anticipating installing the infrastructure on (this can be an estimate)? (enter a number) 		Whether you have read the Terms and Conditions for
2. What is the address (street address, city, state, zipcode) of the site that the		EnergilZE participation
infrastructure will be installed at? If there is more than one site (able to be designated		
by different addresses), you can list the most priority site here and also list them in the		
text field below. (enter site address)		
 List additional addresses. (Enter site addresses separated by semicolons; include street address, city, state, and zipcode). 		tos://californiahvip.org/purchasers/#SchoolBus
sueer auress, ony, state, and approve).		tps://caitorniahvip.org/purchasers/#SchoolBus
		1 P
5. Does the participant own the site? (enter Yes or No)		
o bola ne paragan om ne ana (enter rea o rea)		
6. If the participant owns the site, can proof of ownership be provided? (enter Yes or		
No) 7. If someone other than the participant owns the site(s), or some of the sites, provide		Guide
7. In administration or personal name here if you know it. (enter name if known, or "I don" know")		Guide
 What electricity provider services your location? (enter name if known, or "I don't know") 		
 Enter the utility customer number or numbers for the sites you have selected, if known. (enter number if known, or "I don't know") 		
10. Enter the utility ticket number or numbers for the sites you have selected, if known. (enter name if known, or "I don't know")		
11. Are you participating in your utility provider's make-ready program? (enter Yes or No).		
ing.		





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Timeline

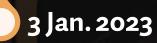


Reminder Application form Walkthrough



Step 1 close

Timeline reminder Instructions for completion



Step 2 close **1 Mar. 2023**





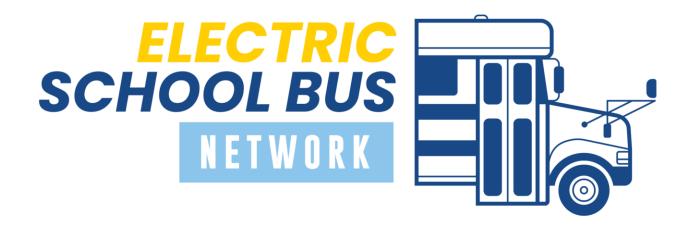
Keep Up with Infrastructure!

- Educate yourself
- Contact your utility
 - Check if they have a make-ready program
- Consider your needs and the costs
- Understand the timelines
- Track the work going on, talk to each other, share knowledge
 - <u>energy.ca.gov/data-reports/energy-</u> <u>almanac/zero-emission-vehicle-and-</u> <u>infrastructure-statistics</u>









NANCY JENSEN

Retired Certified School Bus Driver Instructor Twin Rivers Unified School District





Driver Training for Electric Buses

Drive your ESB

Training program

- Develop driver EV training program based on how your vehicle is designed. Include your entire operations team in any classroom you provide.
 - Telematics (Dashboard)
 - Brake system Air or Hydraulic?
 - How does the regenerative braking system operate.
 - Safety features for the electrical systems and batteries.
 - Anticipating and/or calculating turtle or derate mode. What to do if it happens.
 - No Roll back This varies from vehicle to vehicle.
 - Defensive driving review
 - Use the behind the wheel guidelines the Office of School Transportation distributed 1/23/2020.
 - Develop an inhouse checklist for your trainers to use specific to your equipment
 - CHP testing
 - Learning to drive electric efficient takes practice.

Learn your ESB and its features



Ask your manufacturer for training on how to efficiently drive your vehicle. Takes notes and get phone numbers.

Develop a training route that allows your drivers and/or trainees to use the EV features efficiently and effectively. Focus on:

- Using and interpreting the ESB Telematics and how this will ease range anxiety
- No rollback
- Regenerative braking and how it helps them maximize range (Hypermiling)
- How to not overheat the batteries or motor with aggressive acceleration and deacceleration.
- Understanding the Environmental factors that play into the overheating of electrical system

Plug it in

- Charging procedures.
 - When to plug in.
 - Fast charging procedures.



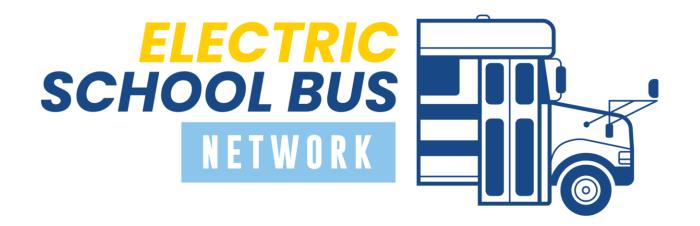
Reporting problems

- "It didn't charge" is not enough. Teach everyone to participate in the EV success story and ask them to help learn "why or what failed"
- Focus on symptoms. "The charger had default code 847 on the display", "the motor indicated it was overheating and then shut down"
- Code? Lights blinking in a specific order? Strange noise? Blue light on the dash?
- It does help the mechanics and/or manufacturer fix and improve the EV if you tell them what you experienced or saw.
- Driver feedback is valuable. Encourage drivers' honest feedback bad or good.

Have fun!

The first electric school bus TRUSD received and had CHP inspected in December of 2017.





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THE LEADERS IN SIMULATION FOR TRAINING AND RESEARCH

PRESENTED BY

JASON FRANCISCO, TRANSPORTATION BUSINESS MANAGER



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BACKGROUND ON FAAC INCORPORATED









HEADQUARTERED IN ANN ARBOR, MI

SATELL









SIMULATION TRAINING BENEFITS



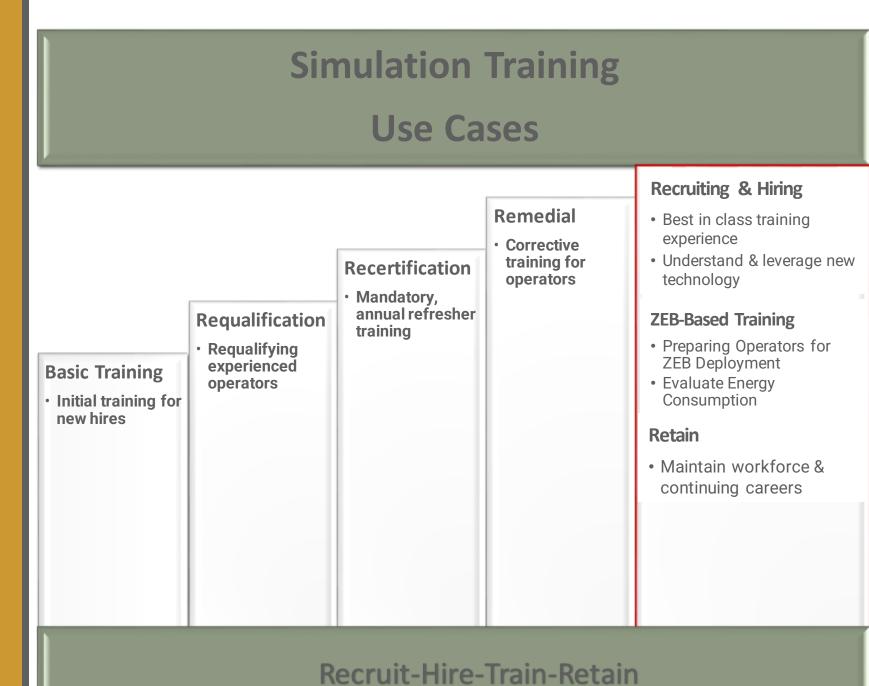
IMMERSIVE EXPERIENCE Practice until perfect.



MEASURABLE RESULTS Through equitable evaluations.



WORKFORCE DEVELOPMENT Advance together.





MB1000

OCCUPANT CENTRIC TRAINING SIMULATORS











Workforce Development

Recognizing the Importance of Personnel Training and Development

Basis for Active Learning

Integrate New Information

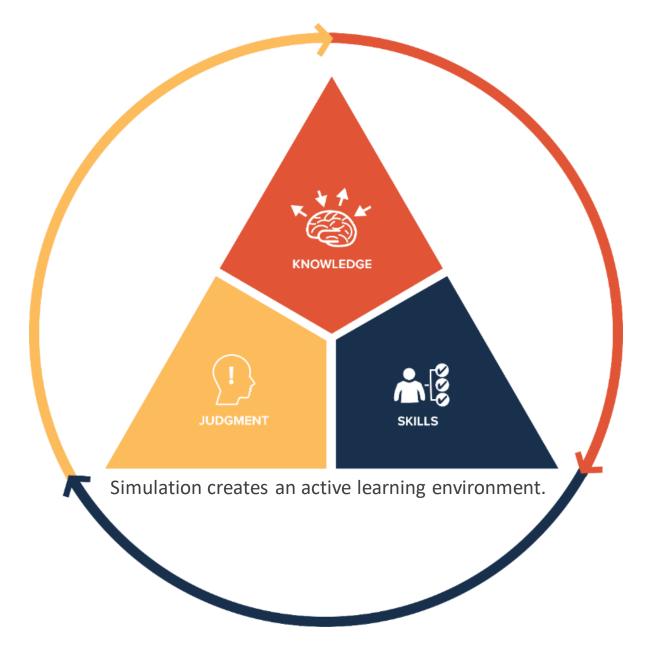
Generate Connections & Questions

Strengthen Organizations Reputation

Facilitate Accident Reduction

Identify Bad Driving Practices

THREE ELEMENTS OF ENGAGEMENT TRAINING



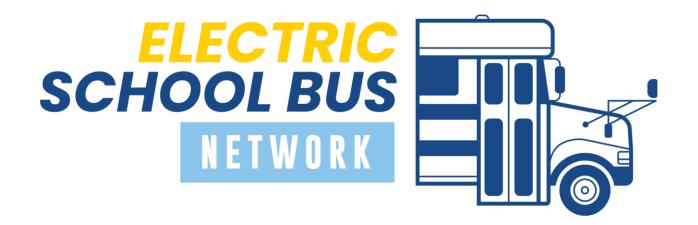


SAVE THE DATE!

- The Thank You Email Will Include:
 - Recording of the meeting
 - Copy of slides
- Next Meeting: February 1st, 2023 at 11:00 AM PT
 - Note: You are already registered! Save the date on your calendar.
- Questions?
- Email SchoolBusTeam@calstart.org
- Email SchoolBusInfrastructure@calstart.org







Thank You For Your Time!



