DOCKETED		
Docket Number:	21-TRAN-04	
Project Title:	Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles (EnergIIZE Commercial Vehicles)	
TN #:	243629	
Document Title:         CALSTART Comments - EnergllZE Hydrogen Application           Process Overview Workshop Slides and Recording		
Description: N/A		
Filer:	System	
Organization:	CALSTART	
Submitter Role:	Public	
Submission Date:	6/21/2022 12:37:37 PM	
Docketed Date:	6/21/2022	

Comment Received From: CALSTART Submitted On: 6/21/2022 Docket Number: 21-TRAN-04

#### EnergIIZE Hydrogen Application Process Overview Workshop Slides and Recording

EnerglIZE Commercial Vehicles Project Hydrogen Application Process Overview PowerPoint slides below from June 2, 2022 presentation.

A recording of the Workshop is viewable at the link below. https://www.youtube.com/watch?v=qOR35YITIVg

Additional submitted attachment is included below.

## **Energize** Commercial vehicles

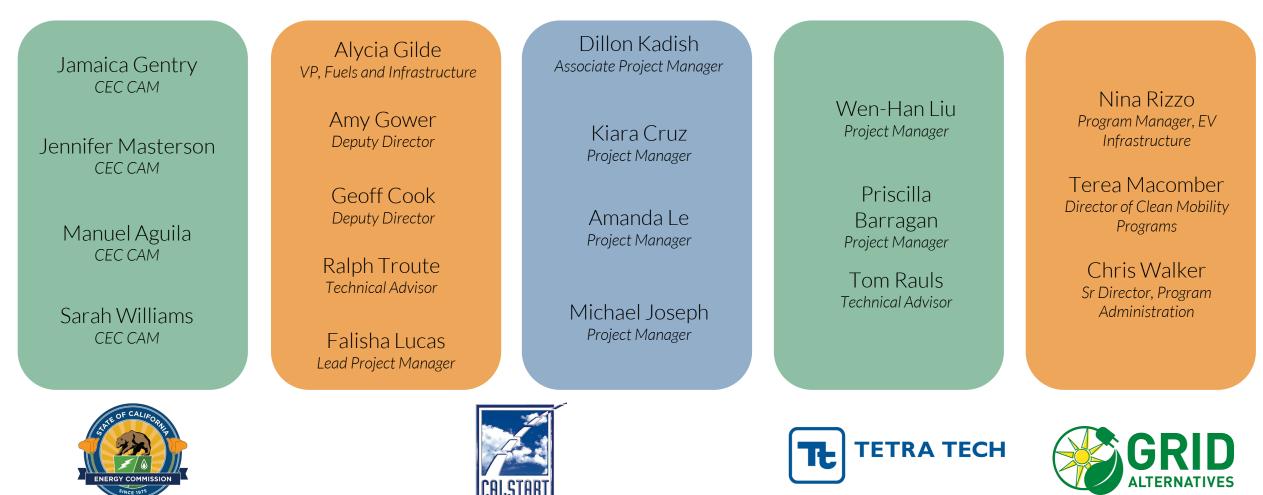
EnergIIZE Workshop

Application Process Hydrogen Fueling

June 2, 2022

### **EnergIIZE Commercial Vehicles**

Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles Accelerating fueling infrastructure deployment for zero-emission trucks, buses and equipment





### **Zoom Logistics**

Mute Start Video All participants will be unable	+ 1 Invite Manage Participants Share Screen Chat Record
to share their video. All participants (web and dial- in) are automatically in listen-	If you have questions, you can use the chat function. You may send messages to the whole meeting or individual participants
Only mode.  Choose ONE of the audio conference options ×  Phone Call Computer Audio Call Me	meeting ID and passcode from Meeting ID: 874 0547 7856
Join with Computer Audio	invite Passcode: 781641
Test Speaker and Microphone	Mobile: +16699006833,88217044786# US (San Jose) +12532158782,88217044786# US (Tacoma)
Automatically join audio by computer when joining a meeting	Dial by your location +1 929 205 6099 US (New York) +1 253 215 8782 US (Tacoma)

COMMERCIALVEHICLES

### Agenda

1

#### Walkthrough of EnergIIZE Hydrogen Application Process

- Overview of Application Process
- Step 1 Submitting Application
- Step 2 Providing Supporting Materials
- Step 3 Planning the Project
- Step 4 Initiating Construction
- Step 5 Commissioning the Project

2

#### Q&A



**COMMERCIAL VEHICLES** 

## **Application Process**

An overview on documentation you will submit as a Hydrogen Fueling Applicant

### **Hydrogen: Application Checklist**



EnergIIZE Application Form

Site Verification Form

Signed Copy of EnergIIZE Applicant and Vendor Terms and Conditions



Confirmation from the local utility that the project site is adequately prepared to receive the necessary energy for the planned infrastructure installation.



### **Hydrogen: Application Checklist**



5 Proof of completion of Critical Milestone 1 (Proof of control of site).



Jump Start Certification Form (if applying for additional incentive funding).



Answers to three qualitative questions in the application form (if applicable).

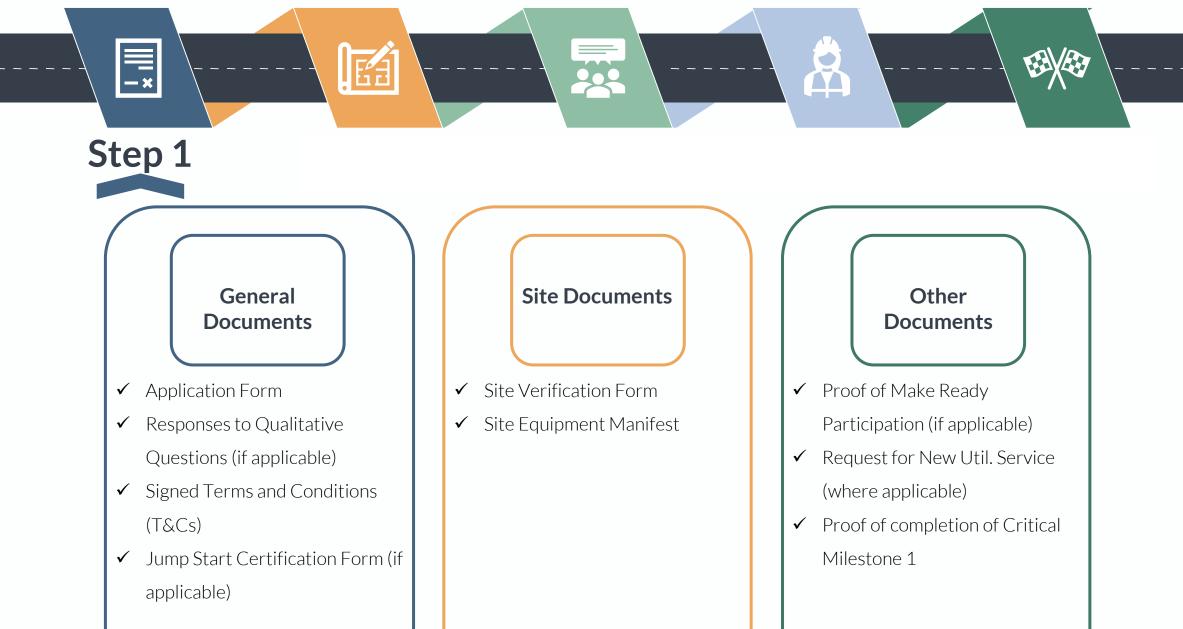


**COMMERCIAL VEHICLES** 

## **Step 1: Submit Application**

Hydrogen Funding Lane

### **EnergIIZE Application Roadmap**



### **Step 1: Submit Application**

EnergIIZE Application Form

# What's Inside the Document?

- Vendor information
- □ Applicant information
- □ Site information
- □ Site Equipment Manifest

## What You Need to Complete It:

- Primary Contact Phone and Email of Fleet Operator.
- ✓ Primary Contact Phone and Email of Vendor.
- ✓ Address of Infrastructure Project.
- ✓ Name of Property Owner.
- ✓ Make, Model, Description, and Anticipated Quantity of Eligible Equipment to be Installed.
- ✓ Name, Type, and Supplier of Software (if applicable).





#### **EnergIIZE Incentives Application**

Application Category check all that apply:

- Hydrogen Fueling
- Meets Jump Start Equity Criteria (applying for 75% reimbursement of equipment and one-time software costs) Note: For mixed fuel applications, please contact EnergIIZE staff for more information.

Are you a fleet applying on behalf of your organization?

If Yes, fill out section A for Fleet Information. You may skip section B for Vendor Application. If you are an Approved Vendor applying for a fleet, fill out section B for Vendor Information. Note: Approved Vendors must be veted by EnergIIZE staff.

#### A. Fleet Information (Please fill in the required information below.) Are

Are you the applicant?		Yes		No	Not Appli	icable (I'm deploying a public cha	rging station.)
Primary Contact:*							
Organization/Company Name:							7
Organization Type:							7
Mailing Address:							7
City:							_
State:					_		
Zip Code:		1					
Website:							7
Primary E-mail:							-
Phone:							
Tax ID Number:							
	*'Primary	Contact	' will be the p	orimary (	int of contact (POC) for	EnerglIZE related outreach. This	contact should be chosen carefully

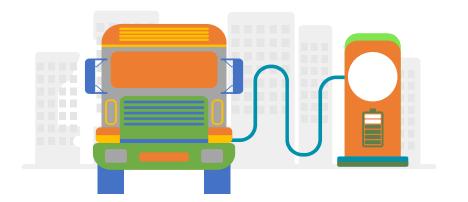
B. Vendor Information (Please fill in the i	required information below.)
Are you the applicant?	Yes No
Primary Contact:	
Company Name:	
Parent Company:	
Mailing Address:	
City:	
State:	
Zip Code:	
Website:	
Primary E-mail:	
Phone:	
Tax ID Number:	
C. Project Site Information	
Name of Property Owner:	
DBA of Property Owner:	
Project Site Address:	
City:	
State:	
Zip Code:	
Is Applicant Site Owner? Mark one:	Yes No**
Electric Utility Service Area:	
Utility Customer Number:***	
Utility Ticket Number:***	
	**Attach a signed copy of the Site Verification Form which can be found in the Implementation Manual, and a copy of the
	easement or right of access agreement (if applicable).
	***The local utility will issue this information as part of the request for a new or upgraded service.

## EnergIIZE Application Form

### **Step 1: Submit Application** *Terms and Conditions – The Fine Print*



#### **Time Commitments**



- Operate this equipment in California for a minimum of five (5) years from the date of commissioning.
- Three (3) year minimum Keep written records of the equipment purchased and provide records within ten days of request.
- Complete the semi-annual usage survey and questionnaire for three
  (3) years after the commissioning of my project.



### **Step 1: Submit Application** *Terms and Conditions – The Fine Print*

Equipment/Insurance Terms

- Equipment will be utilized for the charging, or fueling of Class 2b – Class 8 commercial vehicles, operated and maintained as recommended by the manufacturer
- Carry Worker's Compensation Insurance for all of its employees who will be engaged in the performance of this Agreement and must provide satisfactory evidence
- Must comply with all federal, state and local rules and regulations
- EnergIIZE staff may ask for proof at anytime



#### **Other Terms**

- All projects receiving funds through an EnergIIZE incentive comply with the payment of prevailing wages
- Failure to comply with the terms of this agreement may result in repayment of incentive funds received to EnergIIZE Staff



### **Step 1: Submit Application**

Site Verification Form

# What's Inside the Document?

- □ Lessee information
- □ Property owner or landlord information
- □ Signatures of both parties

## What You Need to Complete It:

- ✓ Applicant/Organization Name.
- ✓ Applicant Project ID.
- ✓ Installation Site Address.
- Authorization that the installation work is authorized by the property Owner and the Applicant.



### Site Verification Form

#### Appendix F – EnergIIZE Site Verification Form

#### **Site Verification Form**

EnerglIZE Commercial Vehicles Project participants that do not own the property where the proposed infrastructure installation site is located, must provide authorization, to the satisfaction of EnerglIZE Staff that the installation work is authorized by the property owner and the lessee. Each Owner and each Applicant (Fleet or Approved Vendor applying on behalf of a fleet) must complete, sign, and submit this form to EnerglIZE Staff. EnerglIZE Staff reserve the right to require that Applicant and Owner provide such further information as may be required to review and approve an Applicant's application.

EnergIIZE Commercial Vehicles promotes the acceleration of zero-emission medium- and heavy-duty vehicle adoption through incentives for electric vehicle recharging and hydrogen fuel cell fueling equipment and associated software. For more information about EnergIIZE or how to participate, please visit <u>www.EnergIIZE.org</u>.

LESSEE. Please complete as follows:					
Organization Name:	Enter Applicant/Org. Name				
Enter Applicant ID.Installation Site	Enter Address				
Address:					
City: Enter City State: Enter StateZip Code:Enter Zip Code					
Applicant hereby represents and warrants to EnergiIZE Staff: (i) that all the foregoing information is true and correct; and (ii) that the undersigned has been duly authorized by Applicant to execute and submit this Site Verification Form. Applicant acknowledges and agrees that EnergiIZE Staff is relying on Applicant's foregoing certifications in reviewing and approving of Applicant's application.					
Signature of Authorized Applicant or					
Representative of Applicant:					
Print Name: Print Name	Title:Click or tap here to enter text.				
Date:	Click or tap to enter a date.				

#### PROPERTY OWNER (landlord). Please complete as follows:

The undersigned, on behair or <u>Click or tap here to enter text</u>, ("Owner"), hereby represents and warrants to EnergiIZE Staff (I) that Owner is the property Owner located at <u>Click or tap here to enter text</u>, ("Property") where infrastructure will be installed; (II) that Owner has consented to Applicant's installation of certain EV charging station equipment and/or hydrogen fuel cell refueling equipment at the property; and (III) that the undersigned has been duly authorized to execute and submit this Site Verification Form to EnergiIZE Staff. Owner acknowledges and agrees that EnergiIZE Staff is relying on Owner's foregoing certifications in reviewing and approving of Applicant's application.

 Installation Site Address:
 Enter Address

 City: Enter City State: Enter State Zip Code:Enter Zip Code
 Signature of Property Owner or

 Signature of Property Owner or
 Representative of Property Owner:

 Print Name: Print Name
 Title: Click or tap here to enter text.

 Date:
 Click or tap to enter a date.

### **Step 1: Submit Application**

Confirmation from local utility that project site is prepared to receive the energy for the infrastructure installation

# What's Inside the Document?

Copy of Request for new service

- □ Steps to Request New Service.
- Guidelines and Restrictions.
- Proof of participation in available utility programs for make-ready
  - Customer Agreement Form signed by site operator.

# What You Need to Complete It:

- $\checkmark$  Copy of Request for new service
  - Contact your local utility company to confirm what is needed for new service.
  - $\checkmark$  Review local utility resources and guides.
  - ✓ Consult with a licensed electrician to determine whether your panel is appropriately rated for the increased load.



### **Step 1: Submit Application**

Jump Start Certification Form

# What's Inside the Document?

Description of entities eligible for additional incentive funding.

## What You Need to Complete It:

✓ Documentation proving your status as one of more of the entities described under Jump Start (Appendix M of Implementation Manual).





### Jump Start Certification Form Screenshot



infrastructure@calstart.org

www.EnergIIZE.org

48 S Chester Ave Pasadena, CA 91106

#### **Jump Start Certification Form**

Applicants must demonstrate their status as an equity Applicant if they are applying for additional incentives or if they are applying through the Jump Start funding lane. Where applicable, use one of the approved methods of self-certification listed.

Check the box next to the category(ies) below for which your fleet applies and attach the requested documentation. If the category selected has multiple options for documentation, please check the box of the option for which you will be providing documentation. Technical assistance is available to Applicants who need support in putting together the required documentation.

- Applicant is a small business as recognized by the California State Legislative Code, Section 14837(d) meaning annual revenue less than \$15 million per year. Attached is documentation of the Applicant's Small Business (SB) certification by the California Department of General Services, Procurement Division (DGS-PD), Office of Small Business and Disabled Veteran Business Enterprise Services (OSDS). Certification must be current.
- Applicant is a Certified Minority Business Enterprise as defined by California Public Contract Code, Article 12; Woman-Owned Small Business; or a Veteran-Owned Small Business; or a LGBT-Owned Small Business. Attached is documentation of one of the following:
  - Documentation of the Applicant's Small Business (SB) or Disabled Veteran Business Enterprise (DVBE) certification by the California Department of General Services, Procurement Division (DGS-PD), Office of Small Business and Disabled Veteran Business Enterprise Services (OSDS). Certification must be current.
  - Documentation of the Applicant's certification as a Disadvantaged Business Enterprise (DBE) from CALTRANS, the US Department of Transportation, or another DBE Certifying Agency. Certification must be current.
  - For Applicants who meet the underlying criteria of one of the categories above but lack the resources to secure official certification, documentation via a self-certification narrative, written on company letterhead, that explains in detail the company's ownership structure and how that meets the relevant requirements. EnergIIZE staff reserves the right to ask for follow-up information as needed to satisfy this criteria. Narratives are limited to a maximum of 500 words.
- Applicant is a Public Transit Agency installing infrastructure in a designated Disadvantaged Community, defined as having a CalEnviroScreen 4.0 score in the top 25 percent, or in a Low-Income Community, as defined by AB 1550. Attached is documentation of one of the following:
  - The address of the infrastructure to be built using EnerglIZE funds that is located within a Disadvantaged Community or Low-Income Community census tract.

### **Step 1: Submit Application**

Responses to Qualitative Questions from Rubric

# What's Inside the Document?

- Scoring criteria for application submittal.
- □ Three qualitative questions.
- Scoring criteria for Hydrogen projects only.

## What You Need to Complete It:

✓ Answers to the three qualitative questions listed in the rubric (only applicable for applicants seeking more than \$150,000 incentives for competitive funding lanes).



For the EnergIIZE Commercial Vehicles (Energy Infrastructure Incentives for Zero- Emission Commercial Vehicles) Project's competitive funding lanes (EV Jump Start, Hydrogen, and EV Public Charging), Applicants will be evaluated on items 1-3 below.

For applicants seeking more than \$150,000 in incentives for competitive lanes, Applicants will be evaluated on items 1-6 below upon the close of the application windows. Please monitor <a href="https://www.EnergllZE.org">www.EnergllZE.org</a> for opening and closing dates of each funding lane.

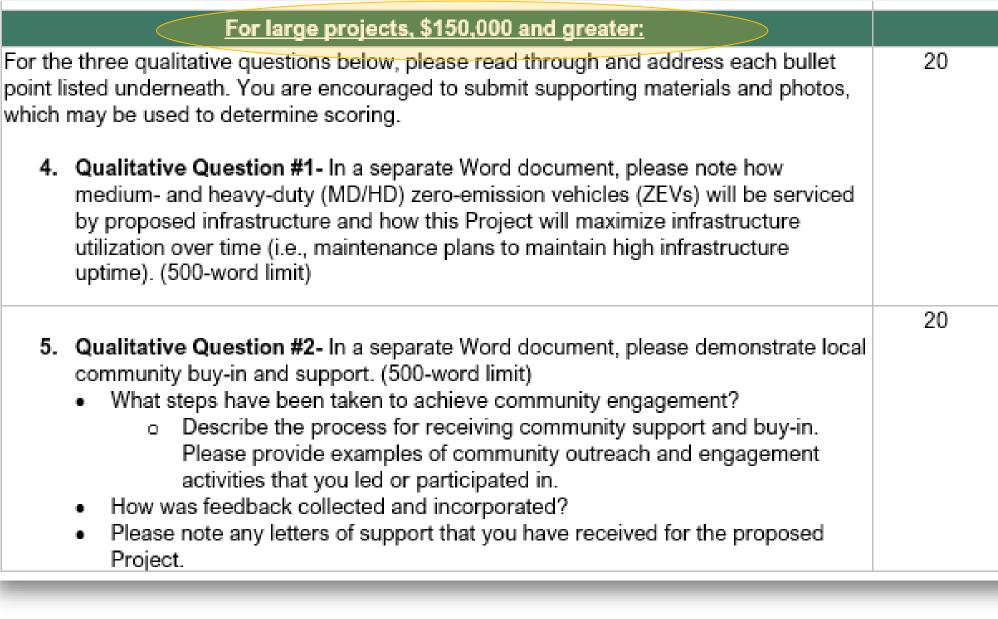
All **Hydrogen** applicants will be evaluated on items 7-9 as well. Applicants participating during funding lanes other than Hydrogen will not be evaluated on items 7-9.

All applications must obtain a **minimum of 50 points** to be recommended for funding. All Projects must submit the required application documents. For competitive lanes, funding will be awarded to Projects in ranked order until all available funds in each wave are exhausted. Tie scores will be broken as needed by random lottery.

Criteria					
1. Submissi	on of all required application documents required in Step 1.	50			
<ul> <li>For Al</li> </ul>	Lanes:				
0	EnergIIZE Application Form				
0	Site Verification Form- to authorize builds on leased land. If new or				
	upgraded equipment is provided by the utility, then proof of Easement				
	is required.				
•	Signed copy of EnergIIZE Terms and Conditions				
0	Confirmation from the local utility that the project site is adequately				
	prepared to receive the necessary energy for the planned				
	infrastructure installation.				
<ul> <li>For E\</li> </ul>	Fast Track: Vehicle Purchase Order or proof of ownership				

#### **Rubric Screenshot**

### Required section



#### **Rubric Screenshot**

<ul> <li>Applicants should include letters of support for the proposed Project from community organizations representing residents in the area where the Project is proposed.</li> <li>Letters of support from appointed or elected officials are allowed, but letters from community-based organizations (e.g. neighborhood associations, environmental justice groups, faith based organizations, Parent Teach Associations, etc.) will be given greater weight in scoring.</li> <li>If the Applicant is a community group, Tribal government, or other entity that already represents local residents, briefly note that in this question response and describe the organization's structure in the project narrative.</li> </ul>			
TOTAL POSSIBLE POINTS FOR QUALITATIVE SECTION	60		

### **Rubric Screenshot**

EHICLES

COMMERCIAL V

#### For Hydrogen projects only:

- Hydrogen Refueling Station Design and Performance (6 points each) -Applications will be evaluated on the degree to which:
  - The Applicant justifies the appropriateness of the fueling capacity and number of fueling positions at the location.
  - The Applicant justifies the appropriateness of the fueling capacity and number of fueling positions at the location.
  - The Applicant demonstrates that the proposed station location sites will have sufficient space for all vehicles using the station including fuel delivery vehicles, pedestrians, and equipment.
  - The nozzles selected for the proposed stations are designed to minimize the frequency of freeze-lock.
  - The Operation and Maintenance Plan presents credible plans and methods to optimize station "up-time."
  - The Applicant provides a credible plan for staying current with industry standards and maintaining optimal hydrogen refueling station performance over the life of each station.
  - The Applicant's project includes station(s) that will have purpose-built equipment to optimally serve commercial fuel cell vehicle fleets or fuel cell transit buses.

#### **Rubric Screenshot**



42

#### **Qualitative Questions – Scoring Rubric**

Qualitative Question #1 – Maximizing MD/HD Infrastructure Utilization- Total Max Score = 20 points

#### Primary Components Criteria Max Effective Purpose Weighting (bullet points) Score 50% 10 Description of how EnergIIZE intends to 10 - Project has a clearly established MD/HD nature of MD/HD ZEVs will be fund MD/HD vehicles being served by serviced by proposed infrastructure; please infrastructure. briefly describe how infrastructure. 0 - Project has NOT clearly your project meets established MD/HD nature of that criteria. vehicles being served by infrastructure. Description of how EnergIIZE intends to 10 - Project has well defined 10 50% maintenance plan, extended infrastructure use will fund highly utilized product warrantees, and engages be maximized over infrastructure and with contractors who will focus on time, including seeks to avoid quality work performed. maintenance and infrastructure that 5 – Project does not adequately will be out of service plans to avoid describe maintenance plans broken infrastructure. commission before and/or little description of quality the end of the of work to be performed. product's life. • 0 – Maintenance plans are absent and there is little to no mention of quality and longevity in project description.

#### **Rubric Screenshot**

EHICLES

#### **Rubric Screenshot**

	Hydrogen Funding Lane Only – Scoring Rubric								
ł									
	Possible Points	Interpretation	Explanation for Points						
	0	Not Responsive	Response does not include or fails to address the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable.						
	1	Minimally Responsive	Response minimally addresses the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable.						
	2	Somewhat Responsive	Response addresses the requirements being scored, but there are one or more omissions, flaws, or defects or the requirements are addressed in such a limited way that it results in a low degree of confidence in the proposed solution.						
	3	Good	Response better than adequately addresses the requirements being scored. Any omission(s), flaw(s), or defect(s) are inconsequential and acceptable.						
	4	Great	Response fully addresses the requirements being scored with a high degree of confidence in the Applicant's Response or proposed solution. No identified omission(s), flaw(s), or defect(s).						
	5-6	Excellent	All requirements are addressed with the highest degree of confidence in the Applicant's Response or proposed solution. The Response exceeds the requirements in providing multiple enhancing features, a creative approach, or an exceptional solution.						



### **Step 1: Submit Application**

Proof of Completion of Critical Milestone 1 (Proof of Control of Site)

# What's Inside the Document?

Proof of an easement agreed to and signed by the property owner at which the hydrogen fueling station is to be constructed.

## What You Need to Complete It:

- ✓ Documentation of site control and possession. Example:
  - ✓ Executed lease for the land on which the station will be constructed.



#### **EnergIIZE Hydrogen Fueling Station Critical Milestones**

Should an Applicant pursuing incentives be deemed eligible for participation in EnergIIZE, they must submit proof of having completed the following Critical Milestones. EnergIIZE incentives will not be awarded for a hydrogen fueling station unless the Applicant meets all four Critical Milestones outlined below.

Critical Milestone 1 Description (Proof of Control of Site)

**Critical Milestone 1**: The Applicant (for station address submitted with the application) must have control and possession of the site or provide proof of an easement agreed to and signed by the property owner at which the hydrogen fueling station is to be constructed.

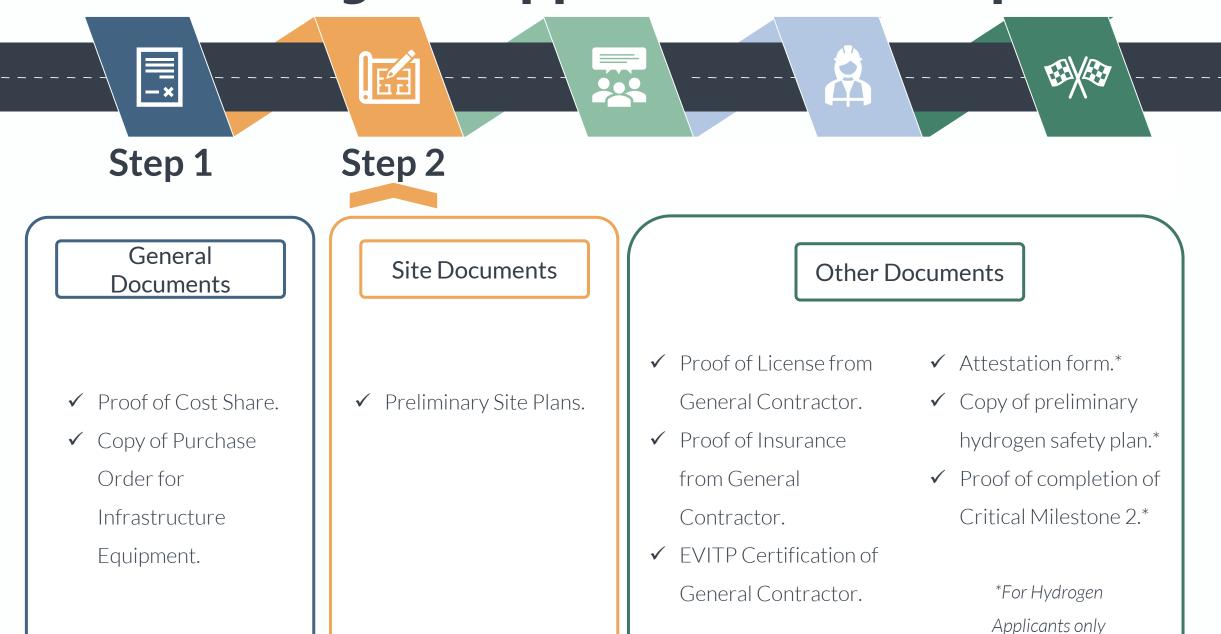
The Applicant must provide to EnergIIZE Staff proof of having met this Critical Milestone by submitting adequate documentation of site control and possession. Documentation of site control and possession may include, but is not limited to, an executed lease for the land on which the station will be constructed. EnergIIZE staff will determine whether the documentation submitted by the Applicant is sufficient to show that this Critical Milestone has been met.

**COMMERCIAL VEHICLES** 

## Step 2: Provide Supporting Documents

Hydrogen Funding Lane

### **EnergIIZE Application Roadmap**



### **Step 2: Provide Supporting Documents**

Contractor Proof of License/Insurance

# What's Inside the Document?

- Contractor's License Number.
- Business Name.
- Business Address.
- □ Status of License.
- Contractor's Bond and Insurance Information.

# What You Need to Complete It:

- ✓ Coordinate with the General Contractor.
- ✓ Visit the Department of Consumer Affairs Website and Verify License Number with Contractors State License Board (CSLB).



#### Contractor's License Detail for License #

DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

- CSLB complaint disclosure is restricted by law (B&P 7124.6) If this entity is subject to public complaint disclosure click on link that
  will appear below for more information. Click here for a definition of disclosable actions.
- Only construction related civil judgments reported to CSLB are disclosed (B&P 7071.17).
- Arbitrations are not listed unless the contractor fails to comply with the terms.
- > Due to workload, there may be relevant information that has not yet been entered into the board's license database.



#### Contractor Proof of License/Insurance

This license is current and active.

### Preferred Vendors

Name of Organization	Primary Contact	Primary Email	Primary Phone	Supports EV, Hydrogen, or Both	Website URL
Air Products and Chemicals, Inc.	John Chimenti	h2fm@airproducts.com	(503) 710-0514	Hydrogen	https://www.airproducts.com/
Baker Electric Inc.	Mark Rogers	mrogers@baker-electric.com	(760) 703-8805	EV	https://www.baker- electric.com/
Beard Electric EV	Brett Beard	bwbeard@beardelectric.com	(844) 438-8326 (844) 4EV-TEAM	EV	NA
Black & Veatch - dba Overland Construction Inc	Keith Dickerson	dickersonk@bv.com	(770) 238-9154	Both	https://www.bv.com
ChargePoint, Inc.	Margaret Larson	Margaret.larson@chargepoint.com	(707) 210-6277	EV	https://www.chargepoint.com /
Clean Fuel Connection, Inc.	Enid Joffe	enidjoffe@cleanfuelconnection.com	(616) 445-1445	EV	NA
Electro Construction Corp.	Rune Jensen	ru@electroconstruction.com	(323) 660-4141	EV	https://www.electroconstruct on.com/
Enel X North America, Inc.	Shauna Barnes	shauna.barnes@enel.com_	(617) 224-9900	EV	https://www.enelx.com/
EnTech Solutions	Joseph Zulewski	joseph.zulewski@faithtechinc.com	(920) 225-6737	Both	https://energybyentech.com/
In-Charge Energy, Inc.	Terry O'Day	terry.oday@inchargeus.com	<mark>(</mark> 818) 697-4638	Both	https://inchargeus.com/
Integrated Cryogenic Solutions, LLC	Felipe Bezerra	fmenezes@NikkisoSolutions.com	(760) 504-6948	Hydrogen	https://www.nikkisoceig.com, product-categories/integrated solutions/
Johnson-Peltier, Inc.	Greg Kelley	gkelley@johnson-peltier.com	(562) 201-5074	Both	http://www.johnson- peltier.com/
Net Electric Inc.	Nathan Tyler	info@netelectric.biz	(866) 224-2400	EV	https://netelectric.biz/
Phil Haupt Electric	Phil Haupt	info@philhauptelectric.com	(916) 782-3128	EV	https://philhauptelectric.com
Proterra Operating Company, Inc.	Lesley Fonokalafi	dg bids@proterra.com	(864) 214-7080	EV	https://www.proterra.com/
Schneider Electric	Raquel Treichel	Raquel.Treichel@se.com	(702) 759-6596	EV	https://www.se.com/ww/en/
Shell Recharge Solutions	Joe Dowling	idowling@greenlots.com	(619) <mark>4</mark> 10-7090	EV	https://greenlots.com/
Trillium USA Company LLC	Kim Okafor	Kimberly.okafor@trilliumenergy.com	1(800) 920-1166	Both	https://www.trilliumenergy.c
Veteran Power Infrastructure (VPI)	Jason Yohn	info@VPIcharge.com	(888) <b>4</b> 37-4294	EV	https://chargeepc.com/veter n-power-infrastructure/
Zero Impact Solutions	Spiro Azkoul	spiro@zi.solutions	(657) 247-0000	EV	http://zi.solutions/

### Approved Vendors

Name of Organization	Primary Contact	Primary Email	Primary Phone	Supports EV, Hydrogen, or Both	Website URL
Air Products and Chemicals, Inc.	John Chimenti	<u>h2fm@airproducts.com</u>	(503) 710-0514	Hydrogen	https://www.airprod ucts.com/
FirstElement Fuel, Inc.	David Yanagisawa	daisuke.yanagisawa@firstelementfuel.com	(347) 556-1691	Hydrogen	<u>https://www.firstele</u> <u>mentfuel.com/</u>
Gladstein, Neandross & Associates LLC.	Patrick Couch	patrick.couch@gladstein.org	(310) 314-1934	Both	<u>https://www.gladstei</u> <u>n.org/</u>
Integrated Cryogenic Solutions, LLC	Felipe Bezerra	fmenezes@NikkisoSolutions.com	(760) 504-6948	Hydrogen	https://www.nikkisoc eig.com/product- categories/integrated- solutions/
Johnson-Peltier, Inc.	Greg Kelley	gkelley@johnson-peltier.com	(562) 201-5074	Both	<u>http://www.johnson-</u> peltier.com/
Trillium USA Company LLC	Kim Okafor	Kimberly.okafor@trilliumenergy.com	1-(800) 920-1166	Both	https://www.trilliume nergy.com/

33

# Step 2: Provide Supporting Documents *Preliminary Site Plan*

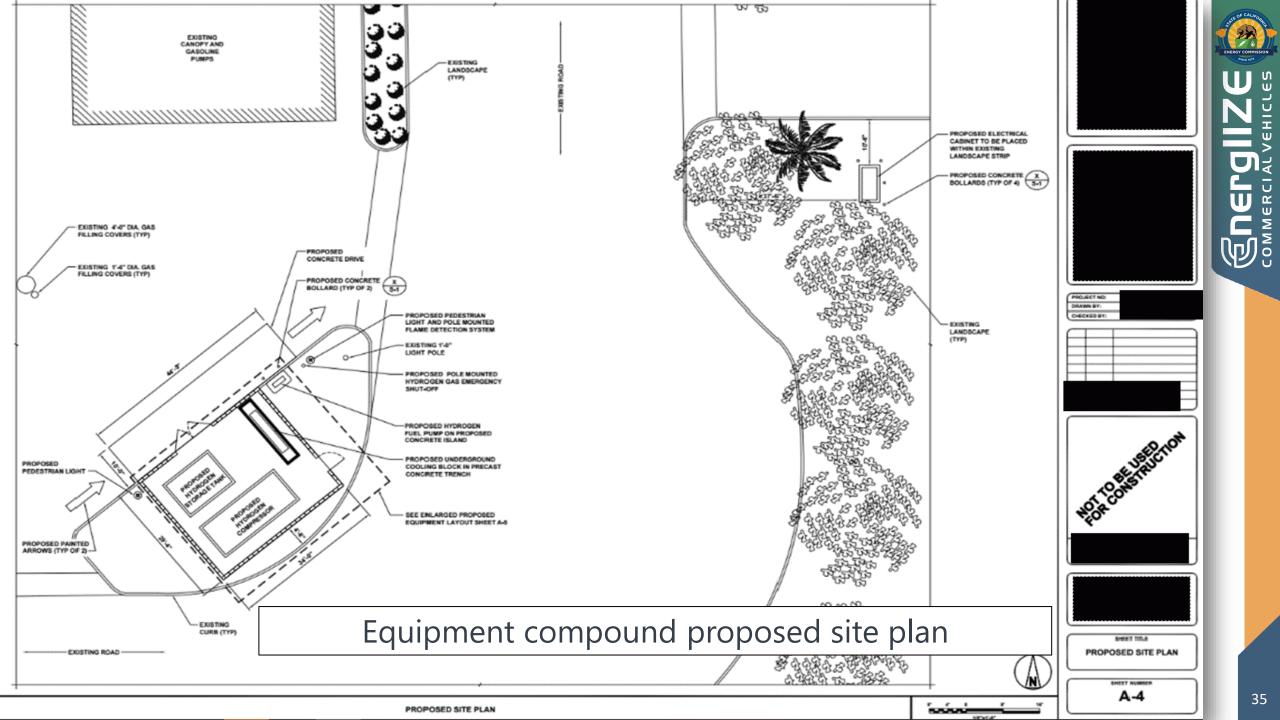
# What's Inside the Document?

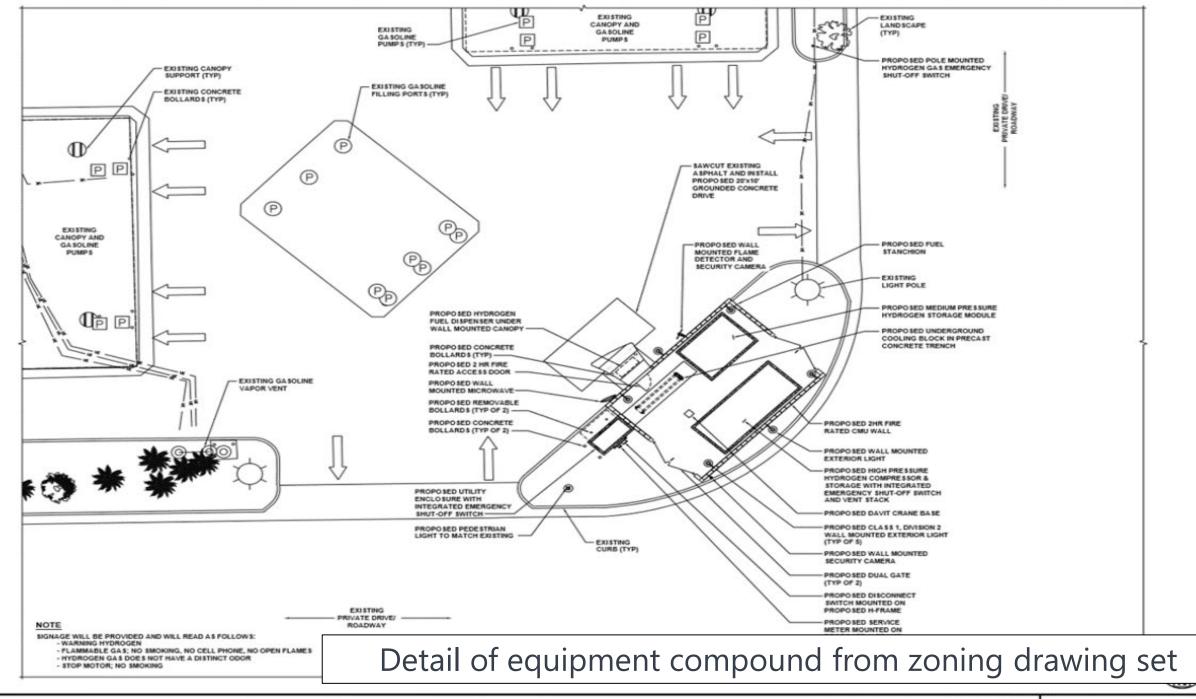
- □ Address of Infrastructure Site.
- Diagram in Site Plan of Charging Infrastructure.

# What You Need to Complete It:

- ✓ General Contractor and Architect Signature.
- ✓ Signed Easement or Right of Access documents.







PROPOSED SITE PLAN

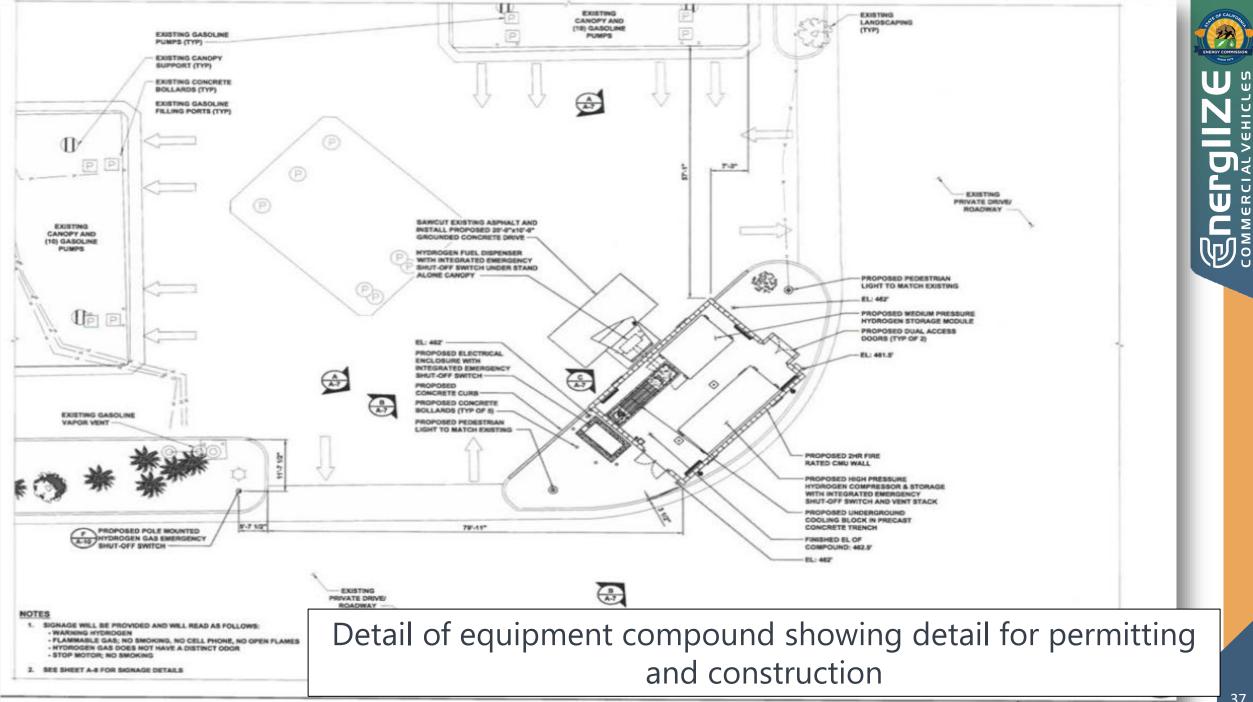
36

٦ I Ψ

Ū

٩L

Π ۲



-

37

U

Т Ψ

٩L

ົບ

۲

#### **Step 2: Provide Supporting Documents** *Proof of Cost Share – Cover Letter and Supporting Documents*

## What's Inside the Document?

- Disclosure of all public funding sources awarded.
- Demonstrated proof of cost coverage for any non-incentivized project costs.
- The sum of make-ready funding, selfcontributions, other external funding sources, and potential EnergIIZE incentive funds.

- ✓ Notices of proposed award.
- ✓ Notice of grant award.
- ✓ Other official documentation indicating an award of funding.



#### **Cost Share Cover Sheet**

Proof of cost share and supporting documentation is required for participation in EnergIIZE. This supplemental information may include such documents as notices of proposed award, notice of grant award, and other official documentation indicating an award of funding. Please use the table below to outline total proposed project costs and attach to this cover sheet supporting documentation including but not limited to:

- Disclosure of all public funding sources awarded.
- Demonstrated proof of cost coverage for any non-incentivized project costs. The sum of make-ready funding, self-contributions, other external funding sources, and potential EnergIIZE incentive funds must be clearly shown as meeting (though not exceeding) total project costs.

Funding Source	Funding Amount		
Funding Source 1	Amount of Funding		
Funding Source 2	Amount of Funding		
Funding Source 3	Amount of Funding		

Funding Disclosure Subtotal:

Total Proposed Project Cost: \_\_\_\_\_

#### Cost Share Cover Sheet

### **Step 2: Provide Supporting Documents**

Copy of the Hydrogen Safety Plan

# What's Inside the Document?

- Detailed description about how the Applicant will adhere to the most recent public guidelines throughout the life of all the stations.
- Detailed description about how the Applicant will conform to the NFPA 2, Hydrogen Technologies Code 2020 edition.
- Detailed description about how the Applicant will provide ongoing safety training for station's operation and over station's life.

- ✓ Prepare (a) preliminary Hydrogen Safety Plan(s) for the PNNL HSP.
- ✓ Work directly with the PNNL HSP to submit the Applicant's preliminary Hydrogen Safety Plan to the PNNL HSP.





#### **Example Safety Plan for** Hydrogen and **Fuel Cell Projects**

#### Attachment A – Example Safety Plan

#### 2.0 Description of Work

#### 2.1 UEU Research

Laboratory-scale effort will be conducted at UEU's Easton Hall research laboratory within a ventilated and third party inspected walk-in fume hood. The work will involve the consumption of hydrogen and oxygen gases, and venting of the same gases during purging. During fuel cell testing, up to 0.5 SLPM of hydrogen gas and up to 0.3 SLPM of oxygen gas at 15 psig will be allowed to flow through the fuel cell from commercial highpressure cylinders. A maximum of two cylinders will be located in the standard chain-secured cylinder rack outside of the fume hood, within the laboratory; one each of hydrogen and oxygen.

This example plan only describes the two entities in a few sections for brevity: Description of Work, Identification of Safety Vulnerabilities, and Risk Planning.

The hydrogen cylinder will contain about 200 cf of hydrogen gas at 2000 psig, equipped with a CGA350 two-stage pressure reducing regulator. Testing will occur during day shift on intermittent days during the first three weeks of September, by the principal investigator and two students. The system will be shut down, when testing for the day is completed, and purged from the primary cylinder connection with nitrogen from the university-supplied central system, utilizing manually connected nitrogen supply hoses and isolation valves. Refer to Appendix A for the test system laboratory diagram showing flow, exhaust, and control systems. Refer to Appendix B for a corresponding process parameter table summarizing process safety limits/shutdown values for temperature, flow, pressure, and power.

2.2 SAT Prototype Evaluation

Prototypic testing will construct a fuel cell stack in the primary testing warehouse at SAT headquarters, fed from SAT's proprietary liquid hydrogen system maintained outside of the warehouse. The fuel cell stack will be process up to a maximum 4 SLP of both hydrogen and oxygen gases, at pressures ranging from 20 psig to 45 psig. Oxygen will be supplied through a cylinder bank maintained at the north end of the warehouse, containing up to ten staged industrial pressurized

oxygen cylinders from Gas Products Company. The fuel cell stack will be located in an isolated walled area of the warehouse, containing its own exhaust fan system, hydrogen gas sensors, and fire/smoke detection system. Automatic (fail to close) valves on both the hydrogen and oxygen gas supply into the warehouse are interlocked to close upon detection of 0.1% hydrogen in the warehouse airspace, from activation of the fire/smoke sensors, or shut down of the exhaust system. Oxygen and hydrogen piping

This high level of detail best supports the application of safety described in the ISV or Risk Planning section.

enter the warehouse through the wall of the enclosed test area, and are not contained in any other portion of the warehouse. Testing will be conducted at all hours of the day over a 3-month period. Pipe purging from nitrogen cylinders will occur prior to testing, after completion of testing, and during any incidents or equipment failures. Refer to Appendix C for the prototype system process flow piping and fuel cell stack apparatus, warehouse area diagram including liquid hydrogen system, and safety controls. Refer to Appendix D for a corresponding process parameter table summarizing process safety limits/shutdown values for temperature, flow, pressure, and power,

#### 3.0 Organization Policies and Procedures

The most relevant safety-related program policies and procedures are described in the UEU Laboratory Safety Manual, which are located at the University ES&H Foster Building and accessible at this link. New projects undergo a peer review process where potential hazards are recognized, and controls or plans are set in place to eliminate or mitigate the hazards. After peer review, the

#### **Example Safety Plan**

September 2020 PNNL-30457

CIAL VEHICLES

U

U P

#### **Step 2: Provide Supporting Documents**

Hydrogen Project Attestation of Codes and Standards

# What's Inside the Document?

Inventory of relevant safety and regulatory codes by which infrastructure must comply.

## What You Need to Complete It:

✓ Read the document in its entirety.✓ Sign form.



#### Attestation Form Screenshot

#### Appendix P – Hydrogen Project Attestation of Codes and

#### Standards

Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles (EnergIIZE) aims to increase the market acceleration of infrastructure to support medium and heavy duty (MHD) zero emission vehicles (ZEVs). EnergIIZE incentivizes infrastructure projects to support hydrogen fuel cell vehicles which are compliant with all relevant safety codes and regulatory standards.

ZEV infrastructure deployment can be a complex endeavor involving an array of safety and regulatory codes in which infrastructure must comply. To help applicants navigate these requirements, EnergIIZE staff have create this inventory of relevant requirements. Applicants are encouraged to check relevant websites for the latest information; this list is intended for instructional purposes only and may not be comprehensive for your specific project.

To ensure EnergIIZE incentives safe, reliable technologies, we require all vendors to comply with the following codes listed below. This attestation form must be filled out by hydrogen infrastructure developers in order to be considered eligible for EnergIIZE incentives.

#### **Company Information**

Name of project point of contact (Last name,	
First name):	
Email address:	
Phone number:	
Vendor Company Name:	
Parent Company (if applicable):	
Project Site Address:	

#### **Required Codes and Standards**

All hydrogen projects must meet the requisite in including but not limited to those listed below or	stallation, construction, and safety standards, the most up-to-date version of these standards:
SAE Standards	<ul> <li>One or more of the following fueling protocols or an equivalently accepted industry standard         <ul> <li>J2601 – 1 Category D (greater than 10 kg tank sizes)</li> <li>J2601 – 2 HD fueling</li> <li>J2601 – 4 Ambient Temperature refueling</li> <li>J2601 – 5 MC Method for HD fueling</li> <li>JPEC-S 0003 Japanese Bus fueling protocol</li> </ul> </li> <li>J2600 or an equivalently accepted industry standard. Note: Fast fills, (up to 7.2kg/min) require a different nozzle with a different standard (ISO 27268:2012) and are permitted for heavy duty vehicles only.</li> <li>SAE International J2719</li> <li>The open retail hydrogen refueling station shall conform to the most recent version of</li> </ul>

#### **Step 2: Provide Supporting Documents** *Proof of Critical Milestone 2 (Proof of Meeting with AHJ)*

## What's Inside the Document?

- Discussion of the purpose and design of the hydrogen fueling station
- The entitlement and permit application process
- Zoning requirements
- Aesthetics notes
- AHJ's CEQA process
- □ Project timeline

- Meeting for permits to build and operate each proposed hydrogen fueling station with the AHJ over the project and entitlement process.
- Meeting with a representative of the Office of the Fire Marshal, or other similar fire control office, in the AHJ. The meeting should include but not be limited to discussion about how to obtain compliance with local fire code requirements.
- Meeting with representative of the PNNL HSP to establish a common understanding of the Hydrogen Safety Plan and station design review process that will be required of Applicants.



#### Step 2: Provide Supporting Documents Copy of Purchase Order(s)

# What's Inside the Document?

- List of Purchased Equipment.
- Amount of Equipment.
- Cost per Unit.
- Date of Purchase.
- Overall Total.

- ✓ Itemized Receipts of Purchases.
- ✓ Invoice Numbers.



COMMERCIAL VEHICLES

### **Step 3: Plan Project**

Hydrogen Funding Lane

#### **EnergIIZE Application Roadmap**



#### **Step 3: Plan Project** *California Environmental Quality Act (CEQA) Filing*

# What's Inside the Document?

- □ Overview and purpose of CEQA.
- □ Information regarding if CEQA review is necessary for your project.
- If project is exempt, Notice of Exemption (NOE) form contains address of infrastructure project and exempt status.

- ✓ Determine if your infrastructure project falls under any exemptions from CEQA.
- ✓ If the project does <u>not</u> fall under any exemptions, the applicant will undertake an initial study to determine if the project will result in a significant environmental impact.
- ✓ If project <u>is</u> exempt, complete Office of Planning and Research (OPR) NOE form.



#### Office of Planning and Research Notice of Exemption

	Appendix E
<ul> <li>Office of Planning and Research P.O. Box 3044, Room 113 Sacramento, CA 95812-3044</li> </ul>	From: (Public Agency):
County Clerk	
County of:	(Address)
roject Title:	
roject Applicant:	
roject Location - Specific:	
roject Location - City:	Project Location - County:
escription of Nature, Purpose and Benefic	
lame of Public Agency Approving Project:	
lame of Person or Agency Carrying Out P	
xempt Status: (check one):	
<ul> <li>Ministerial (Sec. 21080(b)(1); 1526</li> <li>Declared Emergency (Sec. 21080(b)</li> <li>Emergency Project (Sec. 21080(b)</li> <li>Categorical Exemption. State type</li> <li>Statutory Exemptions. State code</li> </ul>	(b)(3); 15269(a)); )(4); 15269(b)(c)); and section number:
Declared Emergency (Sec. 21080)     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code	(b)(3); 15269(a)); )(4); 15269(b)(c)); and section number:
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type	(b)(3); 15269(a)); )(4); 15269(b)(c)); and section number:
Declared Emergency (Sec. 21080)     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code	(b)(3); 15269(a)); )(4); 15269(b)(c)); and section number:
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code leasons why project is exempt:	(b)(3); 15269(a)); )(4); 15269(b)(c)); a and section number: number: Area Code/Telephone/Extension: tion finding.
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code Reasons why project is exempt:	(b)(3); 15269(a)); (d)(4); 15269(b)(c)); (e) and section number: number: Area Code/Telephone/Extension: tion finding. ed by the public agency approving the project? Yes No
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code leasons why project is exempt:	(b)(3); 15269(a)); )(4); 15269(b)(c)); a and section number: number: Area Code/Telephone/Extension: tion finding.
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code Reasons why project is exempt:	(b)(3); 15269(a)); (d)(4); 15269(b)(c)); and section number: number: Area Code/Telephone/Extension: tion finding. ad by the public agency approving the project? Yes No Date:
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code leasons why project is exempt:	(b)(3); 15269(a));         (d)(4); 15269(b)(c));         (e) and section number:         number:         number:         Area Code/Telephone/Extension:         tion finding.         ad by the public agency approving the project?         Yes         No         Date:         Title:         igned by Applicant         lesources Code.         Date Received for filing at OPR:
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code teasons why project is exempt:  ead Agency contact Person:  filed by applicant: 1. Attach certified document of exempt 2. Has a Notice of Exemption been file tignature:  Signed by Lead Agency =	(b)(3); 15269(a));         (d)(4); 15269(b)(c));         (e) and section number:         number:         number:         Area Code/Telephone/Extension:         tion finding.         ad by the public agency approving the project?         Yes         No         Date:         Title:         igned by Applicant         lesources Code.         Date Received for filing at OPR:
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code teasons why project is exempt:  ead Agency contact Person:  filed by applicant: 1. Attach certified document of exempt 2. Has a Notice of Exemption been file tignature:  Signed by Lead Agency =	(b)(3); 15269(a));         (d)(4); 15269(b)(c));         (e) and section number:         number:         number:         Area Code/Telephone/Extension:         tion finding.         ad by the public agency approving the project?         Yes         No         Date:         Title:         igned by Applicant         lesources Code.         Date Received for filing at OPR:
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code teasons why project is exempt:  ead Agency contact Person:  filed by applicant: 1. Attach certified document of exempt 2. Has a Notice of Exemption been file tignature:  Signed by Lead Agency =	(b)(3); 15269(a));         (d)(4); 15269(b)(c));         (e) and section number:         number:         number:         Area Code/Telephone/Extension:         tion finding.         ad by the public agency approving the project?         Yes         No         Date:         Title:         igned by Applicant         lesources Code.         Date Received for filing at OPR:
Declared Emergency (Sec. 21080(     Emergency Project (Sec. 21080(b)     Categorical Exemption. State type     Statutory Exemptions. State code     deasons why project is exempt:	(b)(3); 15269(a));         (d)(4); 15269(b)(c));         (e) and section number:         number:         number:         Area Code/Telephone/Extension:         tion finding.         ad by the public agency approving the project?         Yes         No         Date:         Title:         igned by Applicant         lesources Code.         Date Received for filing at OPR:



50

### **Step 3: Plan Project**

**Building Permit** 

# What's Inside the Document?

- Applicant name, address, contact information.
- Contractor name, address, contact information, license.
- Property owner name, address, contact information.
- Architect name, address, contact information.
- Description of work and property.

- Coordination with property owner, architect, and contractor.
- ✓ Site Plans.
- Best Practice: have utility involved in permitting process.



#### Example Building Permit

		ommer	cial Building	g Permit Ap	plication	
	y issuing agency)		Dennik Manufactur		Intelle	D
Parcel #: Project Address &	& Name:		Permit Number:		Intake	Person:
Street:			Suite/Ap	t #: City:		Zip Code:
Nearest Cross St	reet:					
Name of Apr	olicant:					
	ess:			City/State/2	Zip:	
Phone:		Fax:	E	-mail:	*	
Name of Con	itractor:					
	ess:			City/State/2	Zip:	
Phone:		Fax:	E			
Contractor's 1	License Numb	er:		Classific	ation:	
Name of Ow	ner:					
Mailing Addr				City/State/2	Zip:	
Phone:		Fax:	E	-mail:		
Name of Arc	hitect/Engine	er:			License #	£:
Mailing Addr					Zip:	
Phone:		Fax:	E	-mail:	•	
Nature of Work:	New Construction	n 🔲 Shell (New)	Alteration Demo	olition Misc. PM&	&E T.I. (First Time)	Commercial Coach
Inspection Disc	iplines: 🗖 Build	ing 🔲 Mecha	nical 🔲 Plumbin	g 🔲 Electrical	Engineering (C	heck all that apply)
Description of V	VOIA.					
Number of	Number of	Type of	Fire Sprinklered?	Existing Use?	Proposed Use?	Is Building Conditioned
Stories?	Units?	Construction?		_	-	-
Course Footogos	New Added	Office Severe	Yes No	Warehouse Square	Roofing Squares?	Yes No
Square Footages →	Square Footage?	Office Square Footage?	Retail Square Footage?	Footage?	Rooting Squares?	Square footage Other:
-						
/aluation: \$		The applic	cant for a permit shall pro	↓ vide an estimated perr	hit value at time of application	i ation. Permit valuations sh
clude total value of	work, including ma	terials and labor,	for which the permit is k	eing issued, such as	electrical, gas, mechanic	al, plumbing equipment a
rmanent systems, I	r, in the opinion of the	ne building official	, me value is underestim	ated on the application	i, the permit shall be den	ied, unless the applicant of

#### **Step 3: Plan Project**

*Proof of Completion of Critical Milestone 3 (Proof of Meeting with Utility Company)* 

# What's Inside the Document?

Meetings notes, including date, time, location, names and titles of meeting participants, a summary of the topics discussed, and any open issues and next steps.

## What You Need to Complete It:

✓ Meet with representatives of the utility company that will serve each proposed station to arrange the utility connection.



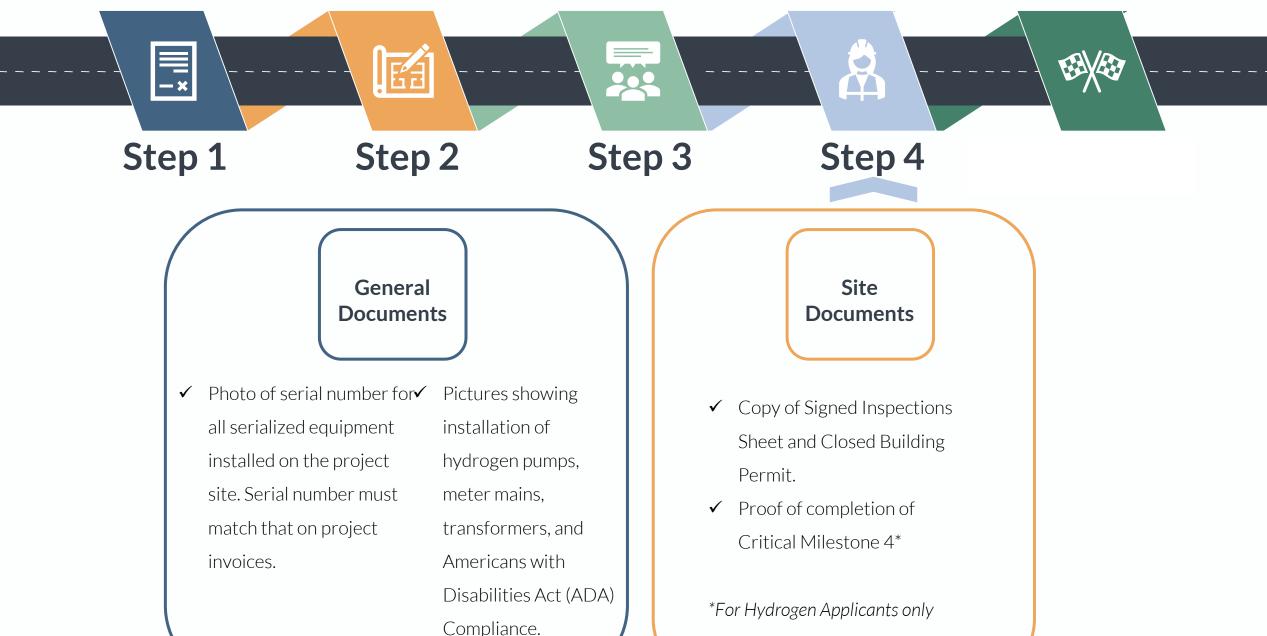
**Critical Milestone 3:** For stations that will be serviced by a utility, the Applicant must meet with representatives of the utility company that will serve each proposed station to arrange the utility connection. The Applicant must provide proof to EnergIIZE staff of having met this Critical Milestone by submitting meeting notes, including date, time, location, names and titles of meeting participants, a summary of the topics discussed, and any open issues and next steps. EnergIIZE staff will determine whether the documentation submitted by the Applicant is sufficient to show that this Critical Milestone has been met.

Critical Milestone 3 Description **COMMERCIAL VEHICLES** 

### **Step 4: Initiate Construction**

Hydrogen Funding Lane

#### **EnergIIZE Application Roadmap**



### **Step 4: Initiate Construction**

Photo of serial number for all serialized equipment installed

# What's Inside the Document?

Photo of serial number.

Serial number must match that on project invoices.

What You Need to Complete It:

✓ Camera.



### **Step 4: Initiate Construction**

Photographic evidence of the site

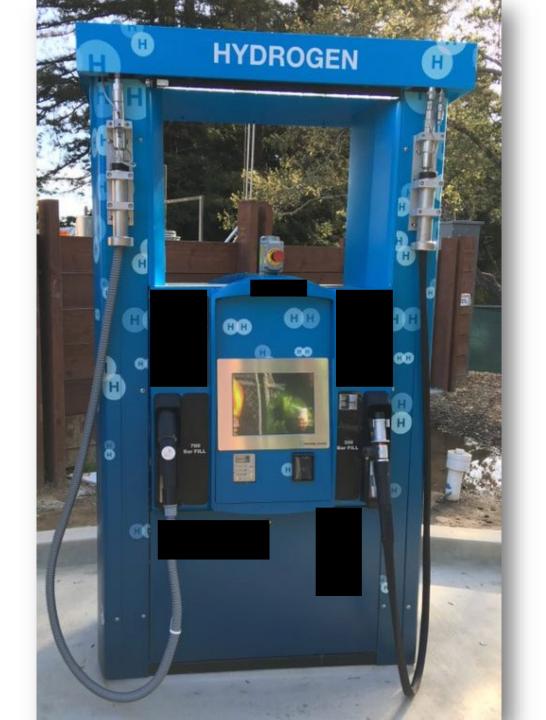
# What's Inside the Document?

Photos of installed equipment.

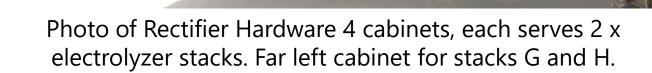
- ✓ Pictures showing
  - ✓ Installation of hydrogen pumps
  - ✓ Meter Mains
  - ✓ Transformers
  - ✓ Americans with Disabilities Act (ADA) Compliance



#### Example Hydrogen Station









12

THERMAL CARE

PROPERTY.

#### **Step 4: Initiate Construction**

Copy of Signed Inspections Sheet and Closed Building Permit

# What's Inside the Document?

- Parcel Number.
- Permit Number.
- □ Address of Infrastructure Site.
- □ Contractor Information.
- □ Architect/Engineer Information.
- Description of Work.

# What You Need to Complete It:

 Coordination with property owner, architect, and contractor.



#### **Step 4: Initiate Construction**

*Proof of Completion of Critical Milestone 4 (Proof of Meeting with Hydrogen Fuel Supplier)* 

# What's Inside the Document?

- Hydrogen Supplier Agreement (recommended)
- □ Site plans
- □ Spec sheets
- Developer assurances that installation shall adequately serve the demand of each proposed dispenser at that station.
- □ HyStEP or equivalent certification

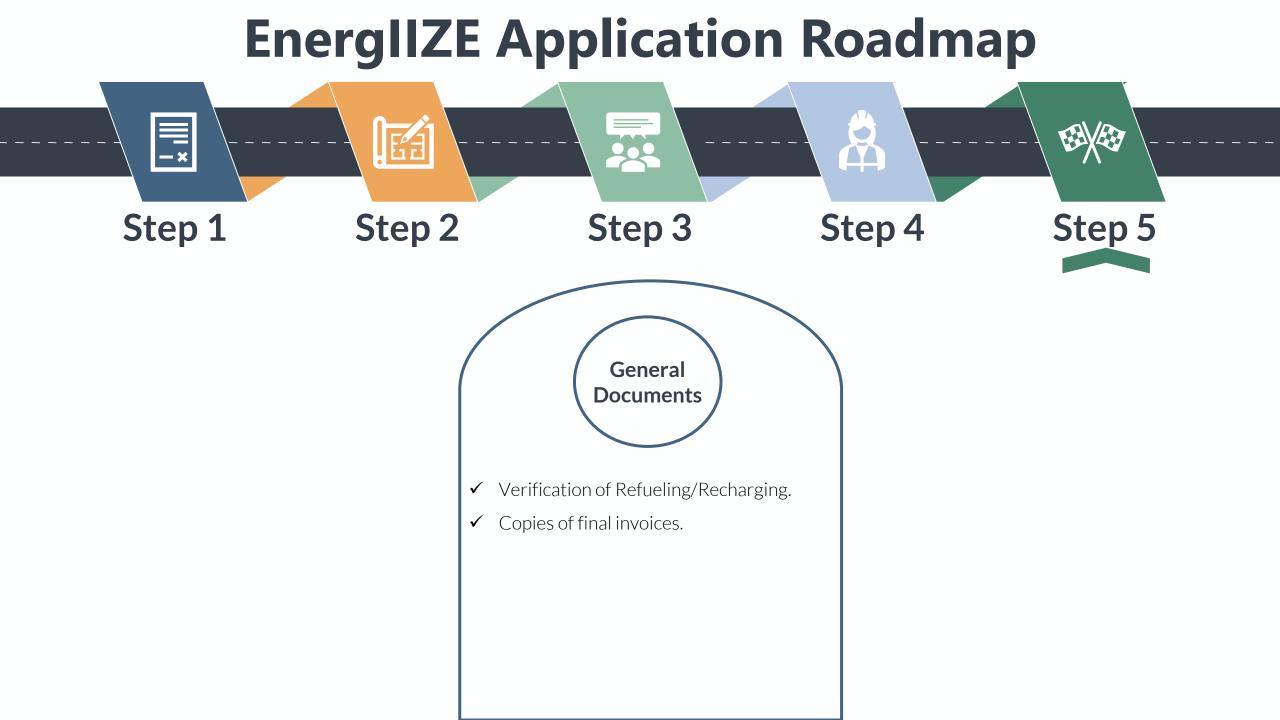
- ✓ Meeting with Hydrogen Suppliers
- ✓ Contact with a representative with CARB members to coordinate HyStEP testing or equivalent



**COMMERCIAL VEHICLES** 

### **Step 5: Commission Project**

Hydrogen Funding Lane



#### **Step 5: Commission Project**

Verification of Refueling

## What's Inside the Document?

Confirmation dispensers are in working order.

# What You Need to Complete It:

✓ The owner / operator shall refuel a hydrogen fuel cell vehicle as part of the site equipment verification process.



### **Step 5: Commission Project**

Copies of All Invoices Are Submitted

## What's Inside the Document?

- □ Address of Infrastructure Site.
- Date of transaction.
- □ Installed Infrastructure.

# What You Need to Complete It:

✓ Complete invoices.



### **Hydrogen: Application Checklist**



EnergIIZE Application Form

Site Verification Form

Signed Copy of EnergIIZE Applicant and Vendor Terms and Conditions



3

Confirmation from the local utility that the project site is adequately prepared to receive the necessary energy for the planned infrastructure installation.



### **Hydrogen: Application Checklist**



5 Proof of completion of Critical Milestone 1 (Proof of control of site).



Jump Start Certification Form (if applying for additional incentive funding).



Answers to three qualitative questions in the application form (if applicable).



#### You Might Have These Questions

**Q:** When does the Hydrogen funding lane open for applicants?

**A**: Applications will be accepted starting at 9:00AM Pacific Time on June 30, 2022 through 5:00PM Pacific Time on July 14, 2022.

**Q**: How much time do I have to gather documents?

**A**: Once Hydrogen applicants have been provided with their notice of conditional award after completion of Step 1, they will then have 60 days to provide the information in Step 2.

**Q**: If I have questions before launch of Hydrogen, what is best way to get these questions answered?

A: Contact infrastructure@CALSTART.org.



COMMERCIAL VEHICLES

Q&A

### **Contact Us**



#### 877-ENR-GIZE 877-367-4493



infrastructure@CALSTART.org



EnergIIZE.org



48 S Chester Ave Pasadena, CA 91106