

DOCKETED

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CaISHAPE Ventilation Program HVAC Upgrade and Repair Grant Workshop

California Energy Commission
January 12, 2023



Virtual Housekeeping

- Workshop is being recorded on Zoom
- Virtual Participation via Zoom or telephone during the Public Comment period:
 - Use the “raise hand” feature in Zoom
 - Over the telephone: dial *9 to “raise hand” and *6 to mute/unmute your phone line
 - Type your question in the Q&A window
- Written comments due at 5:00 p.m. on January 26, 2023
 - Submit through the e-commenting system at:
<https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=20-RENEW-01>



Welcome and Opening Remarks

California Energy Commission

- Commissioner Andrew McAllister, Ph.D.
- Commissioner Kourtney Vaccaro



Workshop Agenda

Purpose: Request participant's feedback on key topics presented in workshop.

Agenda:

- **HVAC Upgrade and Repair Grant Overview**
 - Eligibility
 - Project Scope
 - Project Costs
 - Award Limits
- **Next Steps**
- **Public Comment**



Status - Implementation Progress

Milestone	Date
AB 841 Signed Into Law	September 2020
Adopted Program Guidelines	June 2021
Assessment and Maintenance (A&M) Grant Applications	Fall 2021
Adopt Revised Program Guidelines	June 2023
HVAC Upgrade and Repair (U&R) Grant Applications	Summer 2023



Ventilation Program Update

Progress Report

Funds Available	\$546 M
Funds Requested	\$374 M
Applications Submitted	605

NOPAs and Grants Update

NOPAs Issued	573
Grants Reserved	\$242 M



HVAC Upgrade and Repair Grant Overview





We Need Your Help!

Participant input is essential

- Success is dependent on:
 - Open conversations.
 - Answers to questions.



Goals:

- Leverage the Assessment and Maintenance Grant process.
- Easy to understand.
- Reasonable and workable requirements.



CalSHAPE Ventilation Guidelines

Chapter 1, Section B: Keywords/Terms

A category of potential awards for a future phase of the CalSHAPE Ventilation Program for HVAC repairs, upgrades, or replacements.

Chapter 3: Grant Applications and Awards

CEC anticipates that in subsequent phases of program awards, LEAs may be able to submit applications for grants addressing upgrade, repair, or replacement costs above the 20 percent contingency amount, referred to as HVAC Upgrade and Repair Grants.



Statutory Requirement

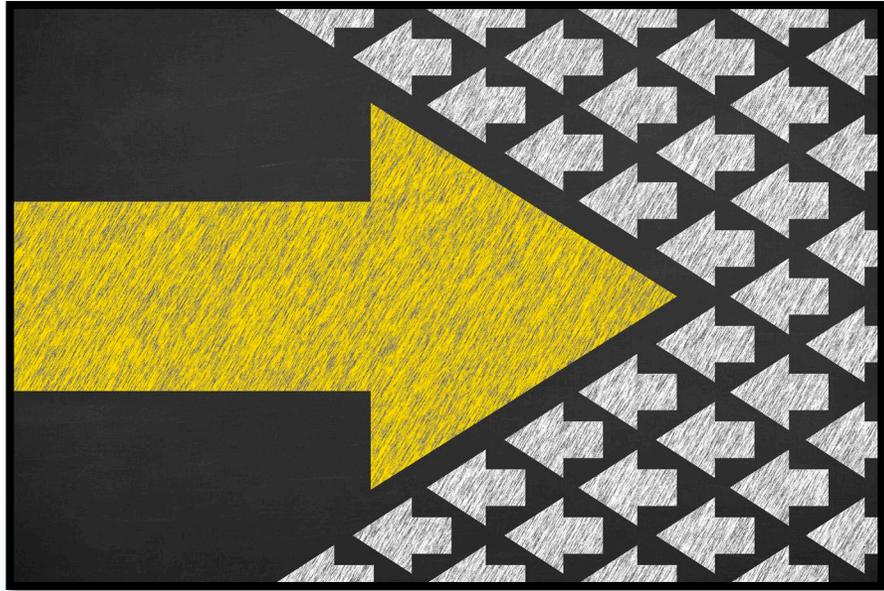
Public Utilities Code (PUC) Section 1626

If the cost of recommended repairs, upgrades, or replacements are greater than the contingency amount provided in the grant, then the licensed professional and the local educational agency shall submit an application for additional funding pursuant to this article.



Program Constraints

Constraints on program design:



- **Available funds**
- **Time**
 - Utility funds must be returned by 12/1/2026.
 - Projects need to be completed by 6/1/2026.



Program Budget

Funds derived from:

- **IOUs' energy efficiency (EE) rolling portfolio funds**
 - **Estimated** Ventilation Program budget is \$546 M
 - IOU service territories: PG&E, SCE, SDG&E, SCG
 - Funds must be awarded to projects in the service territory of the utility from which it was derived
- ***NEW* - Greenhouse gas reduction fund (GGRF)**
 - \$20 M from GGRF
 - HVAC system replacement
 - Near-zero emission building technology



Estimated Budget

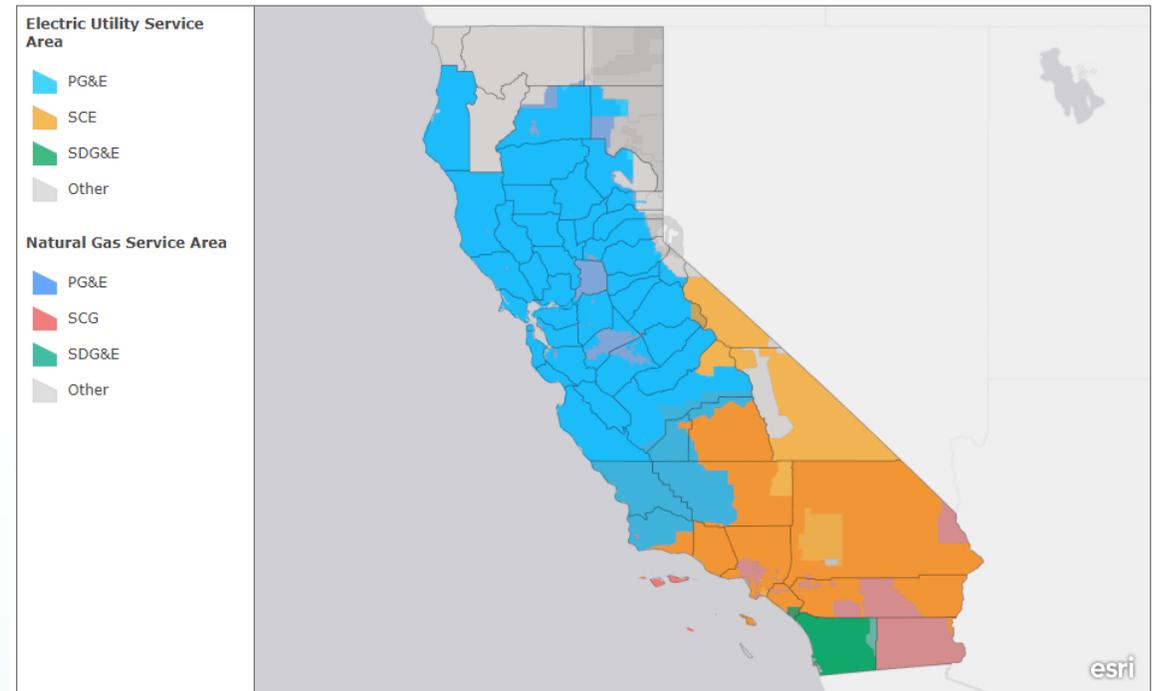
CalSHAPE Ventilation Program	
Total Utility Funds Available:	\$546 M*
Total Ventilation Funds Requested	\$374 M
Remaining Utility Funds	\$172 M*
GGRF Funds	\$20 M

*Total Funds Available does not include 2022 Unspent and Uncommitted Funds



Estimated Budget by Funding Category

IOU	Estimated Funding*
PG&E	\$67 M
SDG&E	\$74 M
SCE	\$31 M
SoCal Gas	\$0
Total	\$172 M



CEC GIS Unit, Energy Assessments Division, City of Palo Alto Utilities, City of Susanville, City of Vernon Gas System, Los Beach Gas & Oil, Pacific Gas & Electric, San Diego Gas & Electric, Southern California Gas, Southwest Gas Corp., Tuscarora | The American Indian Reservations / Federally Recognized Tribal Entities dataset was compiled using USGS 7.5' quadrangle maps (1:24,000), Bureau of Census 1995 TIGER data sets (1:100,000), Bureau of Census 2000 TIGER data sets (1:100,000), Bureau of Census 2004 TIGER data sets (1:100,000), BIA Pacific and Alaska Regional Office coverages (1:24,000) and the GDSC-developed Land Title Mapper (LTM) (1:24,000). | Esri, HERE, NPS

*Amounts do not include 2022 Unspent and Uncommitted Funds



Estimated Project Costs

- **Eligible applicants (current program participants)**
 - 3,643 schools
 - 169,000 HVAC systems
- **Estimated Cost (average school)**
 - \$1 M - \$2 M for school site HVAC system replacement
- **Estimated Budget**
 - \$192 M available for grant awards
 - 80-190 school projects funded (estimate)



HVAC Upgrade and Repair Grant

Topic #1: Eligibility



Eligible Sites

- LEAs may apply for HVAC Upgrade and Repair Grants for sites that completed:
 - HVAC Assessment and Maintenance Pathway project
 - Limited or No Mechanical Ventilation Pathway project

Scheduled for Replacement Pathway projects are not eligible for HVAC Upgrade and Repair Grants



Priority Eligibility

Eligibility for first funding round may be limited to sites located:

1. In an **underserved community** – a site in a community meeting one or more of the five criteria described in the guidelines.
 2. Near a **busy roadway** – a site with a boundary within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor.
 3. Near a **Title V facility** – a site with a boundary within 1,000 feet of a facility holding a permit pursuant to Title V of the Clean Air Act.
- Identify eligible sites: **[CalSHAPE Public GIS Webmap](https://caenergy.maps.arcgis.com/apps/webappviewer/index.html?id=cfdb017f69b84d47adcdf1d120d6ea73)**
(<https://caenergy.maps.arcgis.com/apps/webappviewer/index.html?id=cfdb017f69b84d47adcdf1d120d6ea73>)



HVAC Upgrade and Repair Grant

Topic #2: Project Scope





HVAC Assessment Report

- Eligible HVAC system repairs and replacements must be:
 - Noted as deficiencies in HVAC Assessment Report.
 - Recommended as cost-effective energy efficiency upgrades or repairs by Licensed Professional.
- HVAC Assessment Report Process:
 - Deficiencies documented in HVAC Assessment Report.
 - HVAC Assessment Report reviewed by Licensed Professional.
 - Licensed Professional makes recommendation for additional work to correct deficiencies.



U&R Project Scope

Project Scope Options:

- Site deficiencies noted in HVAC Assessment Report
 1. All deficiencies must be corrected by project work.
 2. Not all deficiencies need to be corrected by project work. LEA may prioritize deficiencies and select project work.

Project Term

- Two-year term
- Project terms will not end any later than June 2026.
- Project work and final reporting must be completed by term end date.



HVAC System Replacement

No grant funding provided for the purchase or installation of gas equipment.

- Goal of carbon neutrality by 2045.
- Near-zero emission building technology equipment required with the use of GGRF funds.





HVAC System Replacement Options

HVAC system replacement options:

1. HVAC system replacement with gas equipment not eligible for grant award.
2. Two tiers of grant awards based on equipment type.
 - Tier 1: All electric equipment
 - Grant funds cover entire HVAC system replacement including converting gas equipment to all electric equipment.
 - Tier 2: Electric and gas equipment
 - Grant funds only provided for the electric equipment replacements.



Project Scope Proposal

Proposed Project Scope

- Not all deficiencies need to be addressed by project work
- LEA may prioritize deficiencies and select project work
- Two-year term for projects to be completed
- HVAC system replacement with gas equipment not eligible for grant award



HVAC Upgrade and Repair Grant

Topic #3: Project Costs





Project Costs

- HVAC U&R projects may require more planning and management than the Assessment and Maintenance Grant projects.

Assessment and Maintenance Grant costs:

- Eligible costs
 - Costs directly related to project
- Ineligible costs
 - Consultants or project management
 - Other costs not directly related to project



Eligible Costs

1. Hard costs – construction costs directly related to project
 - Materials and labor costs for HVAC system repair or replacement
 - Electrical, mechanical, or structural upgrades
 - Duct work

 2. Soft costs – all other non-construction project expenses
 - Project management
 - Permitting
 - Engineering and design fees
 - Building automation
- **Invoices itemized by materials and labor for hard and soft costs will be required.**



HVAC Upgrade and Repair Grant

Topic #4: Award Limits



Award Limits

- Maximum award
 - Project costs
 - Not to exceed limits
- Application limits
 - Sites
 - Applications





Project Cost Award Option

Maximum Award Calculation

$$\begin{array}{ccccccc} \text{Fixed} & & \text{Variable} & & \text{Fixed} & & \text{Award} \\ \text{Parameter} & \times & \text{Cost} & + & \text{Cost} & \geq & \\ (\#) & & (\$) & & (\$) & & (\$) \end{array}$$

Parameter such as:

- HVAC tonnage
- Number of units
- Number of classroom
- System type

Amount for allowable soft costs



Project Cost Award Example

Maximum Award Calculation Example

$$\begin{array}{l} 20 \text{ HVACs, } 5 \\ \text{tons each} = \\ \mathbf{100 \text{ tons}} \\ \text{(Fixed} \\ \text{parameter by} \\ \text{HVAC tonnage)} \end{array} \times \begin{array}{l} \mathbf{\$5,000} \\ \text{(Variable} \\ \text{cost)} \end{array} + \begin{array}{l} \mathbf{\$20,000} \\ \text{(Fixed} \\ \text{amount for} \\ \text{soft costs)} \end{array} \geq \begin{array}{l} \mathbf{\$520,000} \\ \text{(Award)} \end{array}$$



Not to Exceed Award Options

1. School Type

- Elementary School – \$ 1 M
- Middle School – \$ 1 M
- High School – \$ 1.5 M

2. Tier – based on LEA student enrollment

- Tier 1 (Less than 1,000 students) – \$ 500 K
- Tier 2 (1,000 – 5,000 students) – \$ 1 M
- Tier 3 (More than 5,000 students) – \$ 1.5 M

3. Fixed amount: \$2 M per LEA



Application Limits

Limit on number of sites and applications per Funding Round

Options:

- No limit
- 1 application with up to 5 sites.
- 2 applications with 4 sites each.
- 3 applications with 3 sites each.

Staff Proposal

- 3 applications with 3 sites each.



Next Steps





Anticipated Schedule

Next Steps (subject to change)	Date
Workshop Comments Due	January 26, 2023
Draft Guidelines Posted	March 2023
CEC Business Meet to adopt Guidelines	June 2023
Upgrade and Repair Grant Funding Round Start	September 2023
Upgrade and Repair Grant Funding Round End	January 2024
Utility Funds Returned	December 2026



Public Comments

- Limited to 3 minutes per comment
- 4 ways to comment:
 - Use the “raise hand” feature in Zoom
 - Type your question in the Q&A window
 - Over the telephone: dial *9 to “raise hand” and *6 to mute/unmute your phone line
 - Submit your comments in writing during the 10-day public comment period



Written Comments

- **Written comments due 5:00 pm on January 26, 2023**
- Comments may be submitted directly to the CalSHAPE docket (20-RENEW-01) through the e-commenting system at:
<https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=20-RENEW-01>

Thank you!

The CalSHAPE webpage provides program information, application help, and a form to submit docket comments!

Scan the QR code to get started.

Contact: CalSHAPE@energy.ca.gov

