

# Department of Community Services and Development

## Low-Income Weatherization Program

### Draft Program Guidelines

FISCAL YEAR 2021-22 APPROPRIATION PROCUREMENT

SINGLE-FAMILY ENERGY EFFICIENCY  
AND SOLAR PHOTOVOLTAICS PROGRAM:  
**FARMWORKER HOUSING**

March 18, 2022



**CONTENTS**

I. Introduction ..... 2

II. California Climate Investments & LIWP Mandates ..... 3

III. Program Goals ..... 4

    A. Goal #1: Reduce Energy Usage and GHG Emissions ..... 4

    B. Goal #2: Provide Co-Benefits ..... 4

IV. Farmworker Housing Administrator Procurement ..... 5

    A. Eligibility for The Farmworker Housing Administrators ..... 5

    B. Procurement Process ..... 6

    C. Scope of Procurement ..... 6

V. Service Delivery Model ..... 7

VI. Service Territories ..... 7

    A. Regions and Allocations ..... 7

    B. Direct and Indirect Allocations ..... 9

    C. Regional Coverage and Priority Populations ..... 9

VII. Household and Property Eligibility ..... 10

    A. Dwelling Types ..... 10

    B. Farmworker Verification ..... 10

    C. Income or Categorical Eligibility Verification ..... 11

    D. Customer Consent ..... 12

VIII. Eligible Measures ..... 12

    A. Warranties ..... 13

    B. Marketing guidelines ..... 14

IX. Reporting and Record Retention ..... 14

X. Quantification of Outcomes and Co-Benefits ..... 14

    A. Method for Quantifying Energy Savings and GHG Emission reductions ..... 15

    B. Method for Quantifying Renewable Electricity Generation ..... 15

    C. Methods for Quantifying Other Co-Benefits ..... 15

    D. Method for Quantifying Project Outcomes ..... 16

XI. Monitoring and Quality Assurance ..... 16

XII. LIWP Future ..... 17

Exhibit I: Map of Building Climate Zone ..... 18

Exhibit II: Eligible Measures ..... 19

# DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT

## LOW-INCOME WEATHERIZATION PROGRAM (LIWP) DRAFT PROGRAM GUIDELINES

Fiscal Year 2021-22 Appropriation Procurement:  
Single-Family Energy Efficiency and Solar Photovoltaics Program  
Farmworker Housing

### I. INTRODUCTION

These Fiscal Year (FY) 2021-22 Program Guidelines for the Low-Income Weatherization Program (LIWP) outline the framework for the LIWP Single-Family Energy Efficiency Program and Solar Photovoltaics (PV) Program component focused solely on farmworker housing.

The Department of Community Services and Development (CSD) has been serving low-income communities for more than 50 years. A State department under the California Health and Human Services Agency, CSD has traditionally partnered with a network of non-profit and local government organizations, dedicated to reducing poverty by helping low-income individuals and families achieve and maintain economic security, meet their home energy needs, and reduce their utility costs through energy efficiency upgrades and access to clean renewable energy.

In addition to LIWP, CSD administers the following federal programs intended to reduce poverty and improve the lives of low-income Californians:

- U.S. Department of Health & Human Services Community Services Block Grant (CSBG)
- U.S. Department of Health & Human Services Low Income Home Energy Assistance Program (LIHEAP)
- U.S. Department of Energy Weatherization Assistance Program (DOE WAP)
- U.S. Department of Health & Human Services Low Income Household Water Assistance Program (LIHWAP)

For LIWP service providers who received prior funding from CSD's various FY appropriations, the following Program Guidelines applied to those previous awards:

- FY 2014-15 awardees offered services as outlined in the 2014-15 Single-Family Program Guidelines.
- FY 2015-16 awardees (Regional Administrators selected through a competitive procurement process to administer and implement the combined Single-Family Energy Efficiency and Solar PV Program components) offered services as outlined in the 2015-16 Single-Family Program Guidelines.
- FY 2017-18 awardees (Farmworker Housing Administrators selected through a competitive procurement process to administer and implement the Single-Family Energy Efficiency and Solar PV Farmworker Housing Program component) offered services as outlined in the 2017-18 Single Family Farmworker Program Guidelines.

Services under LIWP's Multi-Family Energy Efficiency and Renewables Program, which also includes a focus on farmworker housing, are outlined in Multi-Family Program Guidelines. The LIWP Multi-Family Program Guidelines are available at:

<https://www.csd.ca.gov/Pages/Multi-Family-Energy-Efficiency-and-Renewables.aspx>.

With program oversight and direction provided by CSD, competitively procured Farmworker Housing Administrators will offer services to reduce energy burden, increase comfort, increase building longevity, reduce greenhouse gas (GHG) emissions, and provide specified co-benefits to qualifying low-income farmworker households, unless otherwise authorized or required by law.

Program Guidelines are prepared in accordance with California Government Code Section 12087.5 through a public process to establish principles, guidelines, policies, and procedures for the program. All program awardees must adhere to Program Guidelines as established and as amended throughout the life of the project.

## **II. CALIFORNIA CLIMATE INVESTMENTS & LIWP MANDATES**

The 2021-22 appropriation for this iteration of the LIWP Farmworker Housing Component is funded through the General Fund. Although the funding is not subject to the California Climate Investment provisions, the framework from which the LIWP Farmworker Housing Component was funded through the Cap-and-Trade Auction Proceeds Second Investment Plan for Fiscal Years 2015-16 through 2017-18 remains the foundation for this LIWP Farmworker Housing Component.

California Climate Investments is a statewide program that puts billions of Cap-and-Trade dollars from the Greenhouse Gas Reduction Fund (GGRF) to work reducing GHG emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities. The Cap-and-Trade Program also creates a financial incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. California Climate Investment projects include those focused on affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, recycling, and much more. At least 35 percent of these investments are located within and benefit residents of disadvantaged communities, low-income communities, and low-income households across California. For more information, visit the California Climate Investments website at [www.caclimateinvestments.ca.gov](http://www.caclimateinvestments.ca.gov).

In 2012, the Legislature passed, and Governor Brown signed into law three related bills: Assembly Bill (AB) 1532 (Perez, Chapter 807); Senate Bill (SB) 535 (De Leon, Chapter 830); and SB 1018 (Budget and Fiscal Review Committee, Chapter 39). These bills established the GGRF to receive Cap-and-Trade auction proceeds and to provide the framework for how the auction proceeds will be administered to support programs that further the purposes of the California Global Warming Solutions Act of 2006 (AB 32, Nunez, Chapter 488). Every three years, the California Department of Finance (DOF) submits a plan to the Legislature, identifying priority investments (California Climate Investments) that will help achieve GHG reduction goals.

To date, over \$227 million has been appropriated to CSD for the implementation of LIWP. AB 109 (Ting, Chapter 249, Statutes of 2017) provided \$18 million for FY 2017-18, and SB 856 (Budget and Fiscal Review Committee, Chapter 30, Statutes of 2018) provided \$10 million for FY 2018-19 and provided \$15 million for FY21-22. The legislative provisions also required CSD to focus funding on low-income multi-family, solar, and farmworker programs. The LIWP Farmworker Housing Component has been developed in response to this legislative directive. The current amount of available funding is approximately \$23.37 million, appropriated through the General Fund.

Government Code Section 12087.6 requires CSD, for any appropriation to the department for LIWP in FY 2017-18, or any fiscal year thereafter, to develop new program processes and solicitations in its contract procurement processes for single-family energy efficiency and renewable energy services, that:

- Give weight and priority to applicants that can demonstrate they have existing ties to the local communities they would be servicing, among the other factors considered. This applies to both regional administrators and direct service providers.
- Give preference to organizations with demonstrated performance and outcomes related to low-income energy efficiency and renewable energy services.
- Take appropriate measures to ensure that all potential applicants are aware of these provisions.

SEC. 162. Item 4700-101-0001 of Section 2.00 of the Budget Act of 2021 exempts LIWP from Government Code Section 12087.6 that requires CSD to consult with specified stakeholders in the development, design, and goals of these procurements for at least three months prior to the release of a request for applications that would commence the procurement cycle. However, as part of the procurement process, CSD will release a Draft Request for Proposal (RFP) with a fourteen (14) day comment period prior to release of the final RFP to provide an opportunity for community stakeholders to provide input on the procurement and program design.

### **III. PROGRAM GOALS**

Farmworkers are one of the most vulnerable and disadvantaged population groups in the state because of seasonal employment and low wages. Low-income families in general, and farmworker families specifically, pay a disproportionate amount of their annual income on home energy and often cut back on other necessities to pay their energy bills. LIWP investments and services in the Farmworker Housing Component will increase the energy efficiency of eligible dwellings owned or occupied by farmworker families; provide access to clean, renewable energy; reduce their total expenditures on energy; increase comfort and building longevity; and provide health and safety improvements to homes to further benefit households.

#### **A. GOAL #1: REDUCE ENERGY USAGE AND GHG EMISSIONS**

The primary goal of LIWP's Single-Family Energy Efficiency and Solar PV Program is to improve the energy performance of low-income housing and reduce GHG emissions through the installation of cost-effective energy efficiency measures and solar PV for qualifying households.

#### **B. GOAL #2: PROVIDE CO-BENEFITS**

Incidental to this primary goal, LIWP's Single-Family Energy Efficiency and Solar PV Program provides co-benefits, such as reducing air pollution and helping to achieve air quality standards, increasing occupant comfort and building longevity, reducing water use, improving public health, encouraging job creation and job training opportunities, and stimulating the economy.

In addition, CSD envisions the Farmworker Housing Component to be conducted in coordination with other assistance programs to enhance the economic and social impacts of LIWP service offerings and achieve efficiencies in program administration. Evaluation of proposals will include the partnerships and leveraged dollars brought to the Farmworker Housing Component to help extend the use of limited LIWP funding and enhance service to the farmworker population. Farmworker programs offering the potential to enhance services may have goals such as:

- Stabilization of incomes
- Safe housing
- Pathway to homeownership
- Occupational safety programs
- Access to childcare and education programs
- Adult education programs
- English-speaking courses

- Legal services
- Healthcare and Insurance
- Food security
- Financial literacy and education
- Access to transit options

Fund and program leveraging can also have a multiplying effect in stimulating the local economy.

By allocating funding to projects in disadvantaged and low-income communities, LIWP also provides opportunities for job creation, job training, and related economic benefits in these communities. LIWP providers are encouraged to maximize these benefits through a variety of methods that vary based on the demographics and needs of their local communities. Methods may include:

- Preference for the purchase of goods and services from businesses located within the service region.
- Directly hiring workers from disadvantaged and low-income communities.
- Negotiating employment agreements with hired subcontractors to hire individuals from the community served.
- Giving preference to subcontractors from the community served.

## **IV. FARMWORKER HOUSING ADMINISTRATOR PROCUREMENT**

### **A. ELIGIBILITY FOR THE FARMWORKER HOUSING ADMINISTRATORS**

The Farmworker Housing Component model is premised on the coordination of services at a regional level through a subvention or local assistance contract with Farmworker Housing Administrators selected on a competitive basis. Eligibility for the Farmworker Housing Administrators will be limited to private non-profit or public organizations that have qualified for and received an Internal Revenue Service (IRS) determination letter confirming the organization's tax exemption under section 501(c)(3) of the Internal Revenue Code; local government agencies or joint powers authority; or federally recognized Indian Tribal Governments. In addition, the Farmworker Housing Administrators must:

- Be eligible to receive public funds (a list of entities that have been declared ineligible to receive federal funds can be found at <https://www.sam.gov>);
- Be in good standing and currently qualified to conduct business in California per the Secretary of State. This requirement applies to both the Proposer and its Subcontractors;
- Demonstrate financial solvency through the submission of the most current organization-wide Single Audit, and the last two years of the IRS Return of Organization Exempt from Income Tax Form (IRS – Form 990 and Audit);
- Have experience administering programs and providing supportive services to farmworkers and the communities in which they reside;
- Have demonstrated experience administering low-income, energy efficiency and renewable energy services of similar scale and structure;
- Have demonstrated ties to the region to be served; and
- Commit to provide services in all nine counties in the region.

In addition, Project Team members must, at a minimum, demonstrate previous experience performing the specific activity or service to be provided in this proposal within the region the Project Team member is assigned to serve and address their experience on a county-by-county basis.

## **B. PROCUREMENT PROCESS**

CSD will be releasing a draft competitive RFP and these Program Guidelines on March 18, 2022, as part of an informal release to allow interested parties to provide comments during a 14-day comment period. The Formal RFP and Program Guidelines will be released on April 8, 2022. Proposals will be evaluated, and points awarded in categories to include Proposer and team qualifications, details of the approach, workplan, and the outlined budget. The Awards are anticipated to be announced on June 17, 2022.

Using a Budget Proposal Worksheet Tool provided by CSD, Proposers will be required to provide budget allocations that align with the budgeting requirements of this contract to include: the Indirect Budget not to exceed a maximum of 20 percent of total award; Other Direct Budget (non-energy efficiency including health and safety) not to exceed 25 percent of total Direct Budget; Solar PV Budget with a minimum of 25 percent and up to 50 percent of total Direct Budget; and Energy Efficiency Budget with a minimum of 50 percent of total Direct Budget. Proposers will also be required to provide bid costs for all eligible measures based on CSD provided estimates for frequency of installation using historical data, which will calculate the total estimated average cost per home for energy efficiency and other direct services, and a total estimated average cost per home for solar PV. This will allow CSD to determine the cost-effectiveness of total direct dollars to be expended in the estimated number of homes provided by the Proposer. To compare cost-effectiveness, the Proposer offering the most cost-effective proposal will earn the maximum component points. Other applicants are awarded a percentage of the maximum points available based on a comparison of their cost-effectiveness to the Proposer awarded the maximum points.

Lists of all proposals received and contract awards will be posted on CSD's website, and all applicants will be notified via email regarding the Notice of Intent to Award. Proposals will be treated in accordance with the Public Records Act requirements and certain information, subject to those requirements, may be publicly disclosed. Some reported project information will also be publicly available on CSD's website.

The Farmworker Housing Administrator(s) for each region selected through this process will be contracted to provide services through 2024 with initial allocations of approximately \$11.69 million for each region from CSD's FY 2021-22 LIWP appropriations. It is CSD's intent that the Farmworker Housing Administrators will engage additional subcontractors and pursue strategic partnerships as needed through procurement processes sanctioned by CSD. While initial allocations, contract periods, and work plans may be limited by the funds available and current expenditure deadlines, the model set forth in these Program Guidelines will afford adaptability across Investment Plan cycles, fluctuations in funding allocations, and program changes. The Farmworker Housing Administrators will develop service delivery strategies and capacities that are responsive to geographical, economic, and climate conditions in regions served.

CSD's procurement policy and processes draw from the transparent, fair, and competitive processes set forth in the Public Contract Code (PCC) and the State Contracting Manual (SCM). This procurement is exempt from Department of General Services (DGS) approval pursuant to SCM Chapter 4.04(A)(4), which applies to federally or state-funded grants based on opinions issued by the Attorney General.

## **C. SCOPE OF PROCUREMENT**

CSD may, at its discretion, utilize the 2022-RFP-82 solicitation for Farmworker Housing Administrators to award contracts and program allocations in subsequent years, provided the program scope, key program characteristics, and supplemental funding amounts are largely consistent with the initial solicitation. If CSD determines that the programmatic and financial character of the Farmworker Housing Component, as set forth in these Guidelines, changes substantially, or that the best interests of the state require a new solicitation, then the initial

solicitation shall no longer be used for subsequent contract awards and a new procurement shall be conducted.

If the RFP process fails to identify suitably qualified Farmworker Housing Administrators, CSD reserves the right to issue a new solicitation.

Information on Farmworker Housing Administrators and services will be made available at: <https://www.csd.ca.gov/Pages/Farmworker-Housing-Component.aspx>.

## **V. SERVICE DELIVERY MODEL**

The administration of energy efficiency and solar PV installations will be integrated to ensure eligible households and buildings are assessed for the full complement of available LIWP measures. The Farmworker Housing Administrators' teams will assess each home or structure and make the final determination of eligibility for measures, subject to any guidelines or approvals required by CSD. Providing the deepest energy retrofits available to each household based on this assessment process will be encouraged. Proposers will be required to develop a Work Plan for serving eligible households in specific areas and identify program support and marketing and outreach budgets.

The Farmworker Housing Administrators will be responsible for coordinating program elements, either by performing them directly or overseeing other entities that are responsible for their accomplishment, including but not limited to:

- Management of subcontractors
- Assessment and identification of target areas
- Project development and management
- Community engagement
- Marketing and outreach
- Intake
- Project evaluation and assessment, including health and safety considerations
- Integration of energy efficiency and solar services
- Delivering services on a cost-effective basis
- Customer education
- Oversight of subcontractor work activities including service delivery
- Quality assurance and managing warranty administration
- Service complaint resolution
- Adherence to reporting requirements and targets
- Maximizing opportunities for co-benefits to farmworker communities
- Fiscal and administrative reporting to CSD

## **VI. SERVICE TERRITORIES**

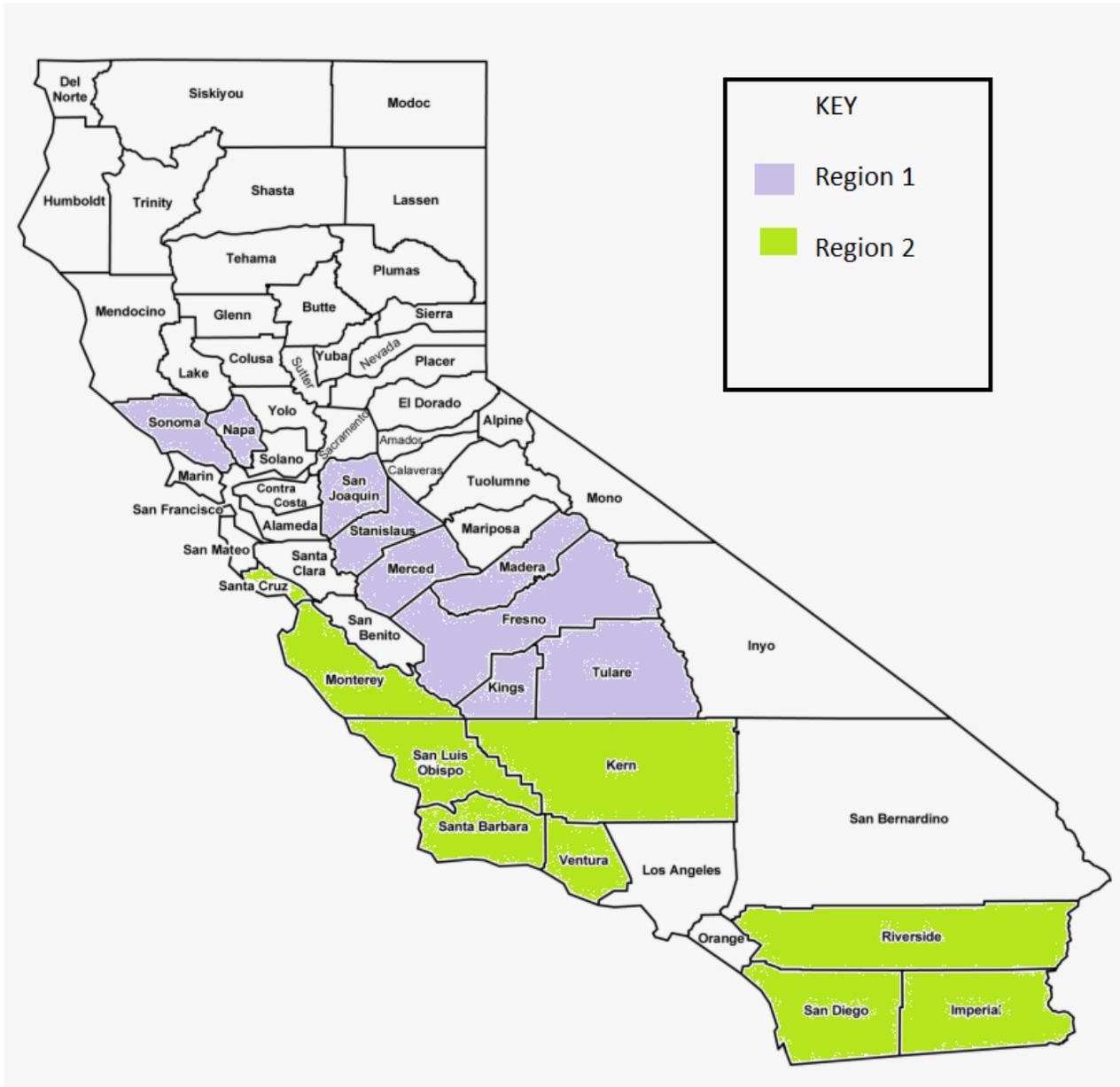
### **A. REGIONS AND ALLOCATIONS**

The geographic coverage of the Farmworker Program has expanded to account for the funding difference between the \$12.15 million 2017-18 program allocation and the \$23.37 million 2021-22 program allocation. Program services will be limited to houses and buildings occupied by eligible farmworkers within two regions, each comprised of a nine-county service area. To ensure delivery of LIWP services to all counties within a region, CSD requires that at least ten percent of the established direct service budget be expended in each county. Therefore, Proposers must represent plans and capacity to serve every county within the service region being bid.

Service regions and initial funding allocations are as follows:

- Region 1 (\$11,685,000):
  - Sonoma, Napa, San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare
- Region 2 (\$11,685,000):
  - Santa Cruz, Monterey, San Luis Obispo, Kern, Santa Barbara, Ventura, Riverside, San Diego, Imperial

Figure 1



This approach will:

- Provide a focused service delivery area, while still allowing the Farmworker Housing Component and the Farmworker Housing Administrators to achieve economies of scale.
- Provide services to those counties with the highest populations of farmworkers.

## B. DIRECT AND INDIRECT ALLOCATIONS

The Farmworker Housing Administrator shall meet the following program funding allocation targets:

- Direct Program Costs which are comprised of:
  - Energy Efficiency Measures (minimum of 50 percent of Total Direct Program Costs)
  - Solar PV Installations (minimum of 25 percent up to 50 percent of Total Direct Program Costs)
  - Other Direct Costs (e.g., health and safety improvements, diagnostics, and limited home repair) (maximum of 25 percent of Total Direct Program Costs)
- Each county must be allocated at least 10 percent of Total Direct Program Costs.
- Indirect Costs (maximum of 20 percent of Total Budget), which are comprised of:
  - Program Support Costs
  - Administrative Costs (e.g., rent, utilities and operational costs)
- Should a Proposer win both regions, the Proposer must consider economies of scale for administrative and program support cost and maximize expenditures of direct program dollars in qualifying households within all counties and develop a new Budget Proposal Worksheet Tool to reflect these economies of scale.
  - As noted in the RFP, CSD retains the right to work with the awarded vendor to adjust the proposed budgets.

Over the course of the procurement and contracting processes, and in the event LIWP funding levels or allocations change, CSD reserves the right to make changes to the funding allocations specified.

## C. REGIONAL COVERAGE AND PRIORITY POPULATIONS

The counties to be served in the Farmworker Housing Component represents approximately 80 percent of the farmworker population in California. Table 2 shows the farmworker population for each county. CSD included six additional counties from the previous FY 2017-18 Program including Sonoma, Napa, Kings, Santa Cruz, San Diego, and San Luis Obispo.

**TABLE 2: FARMWORKER POPULATION BY COUNTY**

REGION 1			REGION 2		
COUNTIES	FW Pop.	% of Total CA FW Pop.	COUNTIES	FW Pop.	% of Total CA FW Pop.
Fresno	37,819	10.02%	Monterey	26,929	7.14%
Tulare	23,233	6.16%	Santa Barbara	22,985	6.09%
San Joaquin	19,741	5.23%	Ventura	22,694	6.01%
Madera	15,654	4.15%	Kern	20,469	5.42%
Merced	15,566	4.12%	Santa Cruz	16,114	4.27%
Sonoma	14,379	3.81%	San Diego	12,335	3.27%
Napa	10,024	2.66%	San Luis Obispo	11,416	3.02%
Stanislaus	12,713	3.37%	Riverside	11,365	3.01%
Kings	6,998	1.85%	Imperial	7,934	2.10%
<b>Total FW</b>	<b>156,127</b>	<b>41.30%</b>	<b>Total FW</b>	<b>152,241</b>	<b>40.33%</b>
308,368 Total Farmworkers, 81.7%* of the total number of farmworkers in CA					

\*USDA - National Agricultural Statistics Service - 2017: Table 7. Hired Farm labor Census of Agriculture conducted every 5 years; the next census will be summer 2022.

Within these geographical areas, CSD prioritizes farmworkers meeting low-income eligibility. For more information regarding low-income eligibility, see Section VII., C of these Program Guidelines. Proposers should demonstrate performance and outcomes related to low-income and renewable energy services. In addition, Proposers are encouraged to incorporate their existing ties to local communities into their proposal.

## **VII. HOUSEHOLD AND PROPERTY ELIGIBILITY**

All measures installed and services provided to eligible households or properties shall be provided at no cost to the applicant. Households may apply for services by contacting CSD or the Farmworker Housing Administrators directly, and the Farmworker Housing Administrators will also be required to perform or coordinate marketing and outreach. The Farmworker Housing Administrators may propose targeted community-based outreach and intake programs (e.g., coordinated neighborhood approaches).

### **A. DWELLING TYPES**

Energy efficiency services will be available to single-family homes (including mobile homes and manufactured housing) and stand-alone buildings of two to four units occupied by low-income farmworker families, whether owner-occupied or rentals. A single unit in a building of two to four units may be served with in-unit measures, but the building can only qualify for whole-building measures if it meets the minimum farmworker family occupancy requirements. Multi-unit buildings of two to four units must be occupied by at least 50 percent low-income farmworker families to qualify for whole-building measures, such as insulation, common water heating, and common heating and cooling upgrades. Not all energy efficiency measures are applicable for households residing in mobile homes.

LIWP's Multi-Family Energy Efficiency and Renewables Program funds energy efficiency improvements and solar PV systems in low-income multi-family buildings. It is possible that other multi-family buildings or complexes of five or more units, or complexes with multiple buildings, that are deemed ineligible under the Multi-Family Energy Efficiency and Renewables Program could be referred to the Farmworker Housing Administrators for assessment. However, these units would require pre-approval from CSD to provide services for five or more-unit multi-family buildings.

Only single-family homes occupied by qualifying homeowners are eligible to receive solar PV and fuel switching measures. If part of a two-to-four-unit building is owner-occupied, CSD will consider eligibility for these measures on a case-by-case basis.

Owners of rental properties will be required to complete a CSD form to verify permission for installation of any measures and certify that rents will not be increased for a period of two years solely due to measures installed.

### **B. FARMWORKER VERIFICATION**

Eligibility for all measures will be restricted to dwellings verified to be occupied by a low-income farmworker or farmworker family.

To verify eligibility as a farmworker, household applicants will be required to provide documentation demonstrating a household member has worked as a farmworker that is dated within the 12 months preceding the date of the application. For verification purposes, the following definitions from the California Labor Code<sup>1</sup> will be applied:

---

<sup>1</sup> Definition of Agriculture and Agricultural Employee, Agricultural Labor Relations, Cal. Labor Code 1140.4(a), (b)

- **Farmworker or “Agricultural Employee”<sup>1</sup>**

One engaged in agriculture, as such term is defined [below]. However, nothing in this subdivision shall be construed to include any person other than those employees excluded from the coverage of the National Labor Relations Act, as amended, as agricultural employees, pursuant to Section 2(3) of the Labor Management Relations Act (Section 152(3), Title 29, United States Code), and Section 3(f) of the Fair Labor Standards Act (Section 203(f), Title 29, United States Code).

- **“Agriculture”** includes the following:

[F]arming in all its branches, and, among other things, [which] includes the cultivation and tillage of the soil, dairying, the production, cultivation, growing, and harvesting of any agricultural or horticultural commodities (including commodities defined as agricultural commodities in Section 1141j(g) of Title 12 of the United States Code), the raising of livestock, bees, furbearing animals, or poultry, and any practices (including any forestry or lumbering operations) performed by a farmer or on a farm as an incident to or in conjunction with such farming operations, including preparation for market and delivery to storage or to market or to carriers for transportation to market.

Further, nothing in this part shall apply, or be construed to apply, to any employee who performs work to be done at the site of the construction, alteration, painting, or repair of a building, structure, or other work (as these terms have been construed under Section 8(e) of the Labor Management Relations Act, 29 U.S.C. Sec. 158(e)) or logging or timber-clearing operations in initial preparation of land for farming, or who does land leveling or only land surveying for any of the above.

As used in this subdivision, “land leveling” shall include only major land moving operations changing the contour of the land, but shall not include annual or seasonal tillage or preparation of land for cultivation.

Employment as a farmworker may be verified through pay stubs or confirmation from an employer. CSD will work with the Farmworker Housing Administrators to implement self-certification procedures.

### **C. INCOME OR CATEGORICAL ELIGIBILITY VERIFICATION**

Household income or categorical eligibility verification must be established by the Farmworker Housing Administrators or their subcontractors. Eligibility for solar PV and fuel switching measures is limited to owner-occupied households.

CSD defines low-income households within these Program Guidelines as those based on the household's total annual gross income, which cannot exceed LIWP household income eligibility limits (the higher of either 80 percent Area Median Income [AMI] for the county where services are being provided or 80 percent State Median Income [SMI] by household size).

In certain counties, and for households of certain sizes, applicants may qualify under the 80 percent SMI standard, but not qualify under the 80 percent AMI standard if the maximum allowable AMI is lower in that county, or vice versa. For this reason, CSD will maintain a hybrid income qualification table so that Farmworker Housing Administrators can qualify households based on the higher allowable maximum income for that specific area.

Income may be verified through pay stubs or confirmation from an employer. CSD will work with the Farmworker Housing Administrators to implement self-certification procedures. Categorical

eligibility may be established by verifying enrollment in public assistance programs that use an income level consistent with the low-income household definitions of CA Department of Housing and Community Development. Additional information for Farmworker Eligibility can be found in the Low-Income Weatherization Program Single-Family Energy Efficiency and Solar Photovoltaics – Farmworker Housing Component Eligibility and Verification Guidelines.

#### **D. CUSTOMER CONSENT**

The Farmworker Housing Administrator shall ensure that all program participants receiving utility services from an Investor-Owned Utility (IOU) company consent to the IOU's release of the participant's annual energy usage data for two years prior to service and three consecutive years post installation of measures. The signed customer consent shall authorize IOU companies to release annual energy usage data directly to CSD to help evaluate program impacts on energy savings and greenhouse gas emission reductions. The authorized collection of annual energy usage data is limited to the residence where services are performed.

### **VIII. ELIGIBLE MEASURES**

CSD determines measures for inclusion in LIWP based on analysis of established deemed energy savings or requiring an energy audit to establish the feasibility and cost-effectiveness of certain measures. Measures that require an energy audit or solar assessment are indicated in Exhibit II, Eligible Measures.

Eligibility for measures is based on household assessment, including the feasibility of energy efficiency measures and solar PV, fuel switching, climate adaptation and resiliency, health and safety considerations, and limited home repair in support of energy efficiency and solar PV measures. CSD has developed technical installation standards that apply to all measures. Factors that affect the feasibility of LIWP measures include:

- Climate Zone (See Exhibit I);
- Existing levels of insulation;
- Age and condition of existing systems and appliances;
- The number of occupants in the home and their existing energy use patterns;
- If the property's physical condition permits the measures to be installed; and
- Addressing health and safety and limited home repair in support LIWP measure installations.

Additional considerations apply for the assessment of solar PV installation. Installation of solar PV may be assessed as feasible on a percentage of homes or structures (e.g., garage or carport or other out-building) based on considerations including:

- Ownership status;
- Proper orientation of home or structure;
- Available unshaded roof space; and
- Roof condition and whether roof repairs are feasible to facilitate installation.

With the focus on farmworker housing, the Farmworker Housing Administrators and subcontractors will encounter various conditions within these dwelling types that can make it challenging to install energy efficiency and solar measures. These may include poor roof conditions, unsafe interior living conditions, and combustion appliance safety hazards, including non-operable heating and cooling appliances. Home repair may be necessary to facilitate installation of energy efficiency measures and solar PV, including, but not limited to: dry rot repair, installation of mobile home skirting, electrical hazards and panel upgrades, and minor roof repair. In recognition of additional challenges associated

with roof conditions related to solar PV installations, an additional roof repair measure was included in the program to allow for more significant roof repairs; however, the cost of this measure must be included in solar PV Savings-to-Investment Ratio (SIR) calculation to meet cost-effectiveness. A whole-house assessment, including combustion appliance and duct diagnostic testing, is also required to identify building conditions and determine potential improvements to the building shell for energy efficiency or health and safety issues that need to be addressed.

To promote the program goal of reducing GHG emissions, and align with the statewide objective of decarbonization, fuel switching will be allowed and encouraged. Fuel switching provides increased GHG emission reductions due to the elimination of inefficient combustion burning appliances and allows energy efficient electric appliances to be installed. Fuel switching will be allowed when the fuel being utilized prior to the switch, known as the original fuel, is either natural gas, propane, kerosene, or fuel oil, and the fuel that is replaced, known as the new fuel, is electric.

Eligible fuel switching measures will be restricted to only heating, cooling, and water heating measures, where heat pump technology will be installed to replace the existing combustion appliance. Fuel switching may only be offered when owner-occupied households are supplied with electricity from a solar PV system, or a solar PV system will be provided as part of the LIWP Program. Either the heater only, or water heater only, or heater and water heater together must be converted to electric, and the cost-effectiveness criterion must be met as calculated through the use of an energy audit.

To address climate adaptation and resilience for mobile home residents, mobile homes with a standard roof will be eligible for retrofit with a cool roof measure.

In recognition of the challenges that may need to be overcome to provide energy efficiency and solar measures to qualified households, measures under this program include diagnostic testing and those addressing health and safety concerns and limited home repair needs.

LIWP requires that all feasible energy efficiency measures be identified during assessment and prescribed for installation. CSD will require the Farmworker Housing Administrators to meet minimum thresholds in assessing each home for energy efficiency measures that may become feasible if facilitated by diagnostic testing, health and safety remediation, and limited home repair. CSD has also developed cost caps to limit the expenditures associated with health and safety and home repair, both for individual measures and for each home.

Exhibit II includes specific details on conditions applying to each measure.

The Farmworker Housing Administrators are responsible for ensuring that they, their Subcontractors, and their Partners hold the licenses necessary to perform the services they are each proposed to under this contract. The CSD license requirements for each measure are in the Measure Standards document found in the Bidders' Library available upon request for access as instructed on the Contracting Opportunities page of CSD's website at <https://www.csd.ca.gov/Pages/contractopportunities.aspx>.

CSD reserves the right to request proof of the Project Team's licenses during the procurement and Contract periods.

## **A. WARRANTIES**

Farmworker Housing Administrators and their Subcontractors and Partners are responsible for adhering to CSD warranty policies. See sections 7.3 and 9.0 of the LIWP Farm Worker Measure Standards for General Installation Guidelines, available in the Bidders' Library.

## **B. MARKETING GUIDELINES**

Farmworker Housing Administrators are required to provide marketing and outreach materials to CSD for approval prior when conducting marketing and outreach activities for the program.

## **IX. REPORTING AND RECORD RETENTION**

Reporting and recordkeeping requirements will be the responsibility of both CSD and the Farmworker Housing Administrators and their subcontractors, and some project information will be publicly available. All reports must be consistent with reporting guidance established by CSD in these Program Guidelines.

The Farmworker Housing Administrators will be required to report to CSD project-level information that includes, but is not limited to, project location; project type; building characteristics; whole-house assessment and energy audit results; specific services or measures installed; diagnostic testing results; historical building energy usage; and solar PV system design and specifications. The Farmworker Housing Administrators will be required to electronically report completed measures and measure information to CSD each month. From these reports, CSD quantifies program outcomes and co-benefits. CSD's reporting template will be provided to Proposers.

The level and duration of reporting and record retention will vary depending upon project type and will be specified in the Farmworker Housing Administrators contract. At a minimum, the Farmworker Housing Administrators will be required to report to CSD basic information for projects conducted during the contract term and maintain records for three years after contract close. CSD may also impose other reporting requirements that will allow CSD to track and manage progress towards goals, and to report, as necessary, to other agencies and organizations who seek updates on the progress of spending and households served within each county and Region.

## **X. QUANTIFICATION OF OUTCOMES AND CO-BENEFITS**

Adoption of energy efficient and on-site renewable energy technologies will reduce demand for electricity, natural gas, and other fossil fuels. Reduction of natural gas and other fossil fuel demand will reduce air pollutants which could improve local air quality in communities where projects are implemented.

For awarded funds, initial estimates and targets for energy savings and GHG emission reductions from energy efficiency and renewable energy measures will be estimated based on the average anticipated reduction per home, multiplied by the number of homes anticipated to be served.

For completed projects, using data reported to CSD during program implementation, CSD will perform all calculations to quantify the following program outcomes and co-benefits:

- Lifetime electricity and gas savings (in kWh and therms);
- Lifetime GHG emission reductions (in Metric Tons of Carbon Dioxide equivalent [MTCO<sub>2</sub>e]);
- Lifetime renewable electricity generation (in kWh);
- Lifetime toxic air pollutant reductions (in pounds [lbs]);
- Lifetime energy cost savings (in dollars);
- Lifetime water savings (in gallons); and
- Identification of a positive climate adaptation co-benefit.

The methodology used to quantify program outcomes and co-benefits is documented in the CSD Savings Reference Manual. This methodology aligns with the principles established in the California Air Resources Board (CARB) Quantification Methodology used for the LIWP Farmworker Program

2017-2018 appropriations. The manual will be provided to the selected Farmworker Program Administrator at the beginning of the program.

### **A. METHOD FOR QUANTIFYING ENERGY SAVINGS AND GHG EMISSION REDUCTIONS**

CSD will apply different methods for quantifying energy savings for LIWP measures. These methods may include a “deemed savings approach,” which uses energy industry standards and data to calculate savings averages for commonly installed measures or utilize energy audit tools and solar calculators. Not all measures that are eligible for funding will provide direct energy savings and will therefore not be quantified (e.g., limited home repairs).

For energy efficiency measures with well-known and consistent performance not dependent on individual dwelling characteristics, deemed energy savings will be applied. The deemed savings approach relies on applying deemed savings from the California Electronic Technical Reference Manual (eTRM) or the Database for Energy Efficient Resources (DEER).

These databases are designed to provide well-documented estimates of energy and peak demand savings values, measure costs, and effective useful life (EUL). Other industry-standard resources may be utilized when individual measure savings are unavailable unless the measure has no direct energy savings.

For energy efficiency measures whose performance is dependent on the geographic location, age, efficiency of existing appliances, and conditions of the individual home, an energy audit will be used to calculate site-specific energy savings.

Lifetime electricity savings is calculated by multiplying the electricity savings of the energy efficiency measure (kWh) by the EUL of the measure. Lifetime gas savings is calculated by multiplying the gas savings of the energy efficiency measure (therms) by the EUL of the measure.

CSD will calculate lifetime GHG emission reductions from electricity savings by multiplying the electricity savings of the measure by the emission factor for electricity (MTCO<sub>2e</sub> per kWh) and the EUL of the measure. Lifetime GHG reductions from gas savings are calculated by multiplying deemed gas savings (therms) for the measure by the emission factor for natural gas (MTCO<sub>2e</sub> per therm) and the EUL of the measure.

All sources for deemed savings and emission factors will be documented in the CSD Savings Reference Manual.

### **B. METHOD FOR QUANTIFYING RENEWABLE ELECTRICITY GENERATION**

For Solar PV, the National Renewable Energy Laboratory’s (NREL) PVWatts calculator is the methodology used to estimate electricity savings from LIWP solar PV installations. NREL's PVWatts Calculator is a web application that estimates the electricity production of a grid-connected roof or ground-mounted photovoltaic system based on site-specific inputs.

For solar PV, lifetime GHG reductions are calculated from the PVWatts calculator’s estimate of annual kWh generated, multiplied by the emission factor for electricity and the EUL, factoring in an annual rate of system degradation.

### **C. METHODS FOR QUANTIFYING OTHER CO-BENEFITS**

In an effort to enhance analysis, provide greater transparency, and assist in project-level reporting, CSD will report on other co-benefits. The co-benefits that are applicable to this program include:

- Air pollutant emissions;
- Energy and fuel cost savings;
- Water savings; and
- Climate adaptation.

Lifetime toxic air pollutant reductions (lbs) include calculations for the reductions in nitrogen oxide (NOx), reactive organic gases (ROG), and fine particulate matter less than 2.5 micrometers (PM2.5). For each air pollutant, the lifetime electricity (kWh) and gas savings (therms) will be multiplied by their respective emission factors and combined.

To estimate household energy and fuel cost savings (dollars saved on energy bills on an annual basis), CSD will multiply anticipated lifetime energy savings by a California average fuel rate to arrive at an estimated lifetime dollar savings per household.

Lifetime water savings (gallons) will be calculated using deemed water savings per measure and multiplied by the EUL of the measure.

The method for assessing the climate adaptation co-benefits is qualitative, involving documenting if there is a presence or absence of an expected outcome (a “yes/no” approach). This approach enables CSD to identify whether a project is contributing to a positive climate adaptation co-benefit but does not characterize the magnitude of that contribution. LIWP measures contributing to a positive climate adaptation co-benefit include measures that enhance the insulation of homes, installation of cool roofs on mobile homes, measures which reduce the electrical grid demand and household costs associated with cooling, and measures with an ongoing mechanism to conserve water.

All assumptions and factors utilized in the calculation of co-benefits are documented in the CSD Savings Reference Manual. The methodologies related to co-benefits align with the principles established in the CARB Co-benefit Assessment Methodologies. These methodologies are available at: <https://ww2.arb.ca.gov/resources/documents/ci-methodologies>.

#### **D. METHOD FOR QUANTIFYING PROJECT OUTCOMES**

CSD has developed outcome reporting requirements for a subset of projects (five percent). CSD will collect and analyze utility billing data for a period of 12 months prior and 24 months subsequent to measures being installed for this subset of homes.

## **XI. MONITORING AND QUALITY ASSURANCE**

**Auditing:** For project auditing and evaluation, the State shall have the right to inspect the work and audit any associated records at any or all reasonable times as part of program oversight. This right shall extend to any subcontracts, and awardees shall include provisions ensuring such access in all contracts or subcontracts. The State retains the right to audit any awardee.

**Monitoring:** CSD employs field monitoring staff responsible for conducting on-site reviews of LIWP awardees. During monitoring visits, CSD Field Monitors verify adherence to contractual obligations, including methods of procurement, providing subcontractor oversight, work quality assurance (QA), staff training, project progress, project costs, review of participant files, and more. QA may include the following:

- *Work-In-Progress Inspections:* Work-In-Progress Inspections will identify compliance and programmatic issues during the initial stages of production.

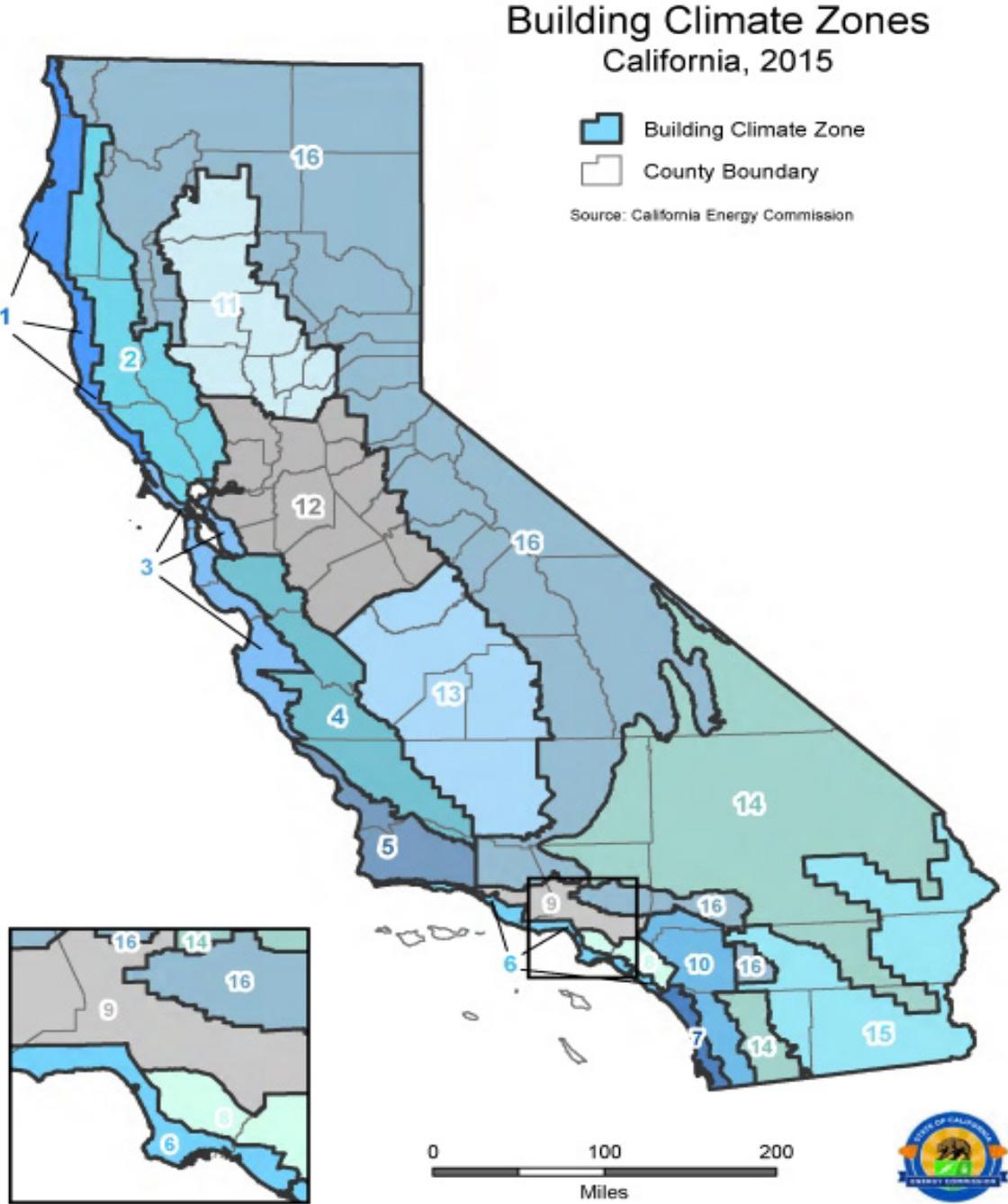
- *Post Installation Inspections:* Post Installation inspections will be performed on a percentage of households receiving energy efficiency measures and solar PV. Any jobs reported to be completed and billed must meet programmatic requirements.

Farmworker Housing Administrators that fail to adhere to contractual obligations may be subject to the disallowance of expenditures and to the return of amounts paid and/or may potentially disqualify them from future funding opportunities

## **XII. LIWP FUTURE**

CSD may find cause to modify the Farmworker Housing Component design (e.g., measures to be assessed for installation). If such changes are necessary, and CSD determines those changes to be substantive, CSD will modify these Program Guidelines, and the revised Program Guidelines will be posted on CSD's website.

# EXHIBIT I: MAP OF BUILDING CLIMATE ZONE



## EXHIBIT II: ELIGIBLE MEASURES

The following four categories of measures will be available to households in this program, with feasibility and eligibility limitations and other requirements described in the tables below:

- 1) Energy Efficiency and Renewables Measures
- 2) Climate Adaptation and Resilience Measures
- 3) Fuel Switching Measures
- 4) Diagnostic Testing, Health and Safety Remediation, and Home Repair Measures

### 1) Energy Efficiency and Renewables Measures

- Some measures may have climate zone restrictions as specified below.
- Some measures require combustion appliance safety (CAS) testing and/or must be assessed for feasibility through an energy audit or solar assessment, as specified below.
- Specialty licenses may be required in addition to Class-B licensure when installed by general contractors as specified below. All sub-contractors are required to have the applicable specialty license.
- Some measures also contribute to climate adaptation and resilience.
- Any available rebates must be obtained.
- For solar PV, eligibility is limited to owner-occupied households.

Measures	Climate Zone	CAS Test	Audit or Solar Assessment	Specialty License	Requirements
CEILING FANS	All	No	No	C-10	When a ceiling fan is present with incandescent bulbs and the light kit cannot be retrofitted with LED bulbs.
CEILING INSULATION	CZ 2-10	No	Optional	C-2	When existing insulation is R-19 or less, increase to R-30.
CEILING INSULATION	CZ 1, 11-16	No	Optional	C-2	When existing insulation is R-19 or less, increase to R-38.
CENTRAL HEAT PUMP REPLACEMENT	All	No	Yes	C-20	When an operational 10 SEER or lower, OR 10 year or older central heat pump is present, OR central heat pump has a Health and Safety (H&S) condition and cannot be repaired.
COOLING REPLACEMENT 16 SEER (CENTRAL ONLY)	All	No	Yes	C-20	When an operational 10SEER or lower, OR 10 year or older central A/C is present, OR central A/C has a H&S condition and cannot be repaired.

<b>Measures</b>	<b>Climate Zone</b>	<b>CAS Test</b>	<b>Audit or Solar Assessment</b>	<b>Specialty License</b>	<b>Requirements</b>
DISHWASHER REPLACEMENT (new ENERGY STAR dishwasher)	All	No	No	No	When existing dishwasher is not ENERGY STAR qualified.
DUCT INSULATION R-6	All	No	Yes	C-20	When duct insulation is not present (R-0), increase to R-6.
DUCT REPLACEMENT	All	Yes	Yes	C-20	When a ducted system is present that requires replacement (requires Diagnostic Test).
DUCT SEALING	All	Yes	Yes	C-20	When a ducted system is present (requires Diagnostic Test) that requires sealing.
DUCTLESS MINI-SPLIT HEAT PUMP 15 & 16 SEER AND DUCTLESS MINI-SPLIT 15-21 SEER AIR CONDITIONER	All	No	Yes	C-20	Install when one or more window/wall A/Cs are present and/or a non-portable electric resistance wall/floor heater is present.
EFFICIENT FAN CONTROLLER	8-15 Mobile: CZ 2-16	No	No	C-20	When the dwelling has a functional central forced air system (A/C or heat pump) with a direct drive PSC blower motor.
ELECTRIC DRYER (new ENERGY STAR qualified electric dryer)	All	No	No	No	When existing clothes dryer is not ENERGY STAR qualified.
ELECTRONICALLY COMMUTATED BLOWER MOTOR (ECM)	CZs 9-16	No	No	C-20	When the dwelling has a functional central forced air system (A/C or heat pump) with a direct drive PSC blower motor.
EVAPORATIVE COOLER	All	No	Yes	C-20	When the dwelling has an inefficient wall/window air conditioning unit.
FLOOR INSULATION	All	No	Optional	C-2	When no insulation is present (R-0), Install R-19.
FREEZER REPLACEMENT (new ENERGY STAR freezer)	All	No	No	No	When existing freezer is not ENERGY STAR qualified.

<b>Measures</b>	<b>Climate Zone</b>	<b>CAS Test</b>	<b>Audit or Solar Assessment</b>	<b>Specialty License</b>	<b>Requirements</b>
HEAT PUMP WATER HEATER (new ENERGY STAR monolithic or split system heat pump water heater)	All	No	Yes	C-20, C-36	When existing standard electric domestic hot water (DHW) heater is present.
HEATING UPGRADE 95% AFUE (CENTRAL ONLY)	All	Yes	Yes	C-20	Split system is operational and is less than 80 AFUE or is 10 years or older, or  Package unit is operational and is less than 81 AFUE or is 10 years or older, or  Central heating system has a H&S condition and cannot be repaired.
HOT WATER FLOW RESTRICTOR, FAUCET RESTRICTOR	All	No	No	No	When existing faucet uses more than 2.2 gallons per minute, or no existing restrictor is present.
HOT WATER FLOW RESTRICTOR, LOW FLOW SHOWERHEAD	All	No	No	C-36	When existing showerhead has a flow rate greater than 2.5 gallons per minute.
INFILTRATION REDUCTION MEASURES (various)	All	Yes	No	C-17 for glass replacement	Cracks, gaps, and holes exist from the conditioned space into the unconditioned ceiling, wall, or crawlspace cavity.
INTERIOR VACANCY SENSORS	All	No	No	C-10	When incandescent or halogen lights are not feasible for replacement with an LED or CFL in intermittently occupied areas.
LED BULBS	All	No	No	No	When LED bulb is replacing an existing incandescent, CFL, or halogen lamp.
LED NIGHT LIGHTS	All	No	No	No	When existing incandescent night lights are present.

<b>Measures</b>	<b>Climate Zone</b>	<b>CAS Test</b>	<b>Audit or Solar Assessment</b>	<b>Specialty License</b>	<b>Requirements</b>
EXTERIOR LED SECURITY LIGHTS (photocell and motion, exterior)	All	No	No	C-10	When exterior incandescent, High-Pressure Sodium (HPS) or Metal Halide (MH) fixture without motion sensor is present.
RADIANT BARRIERS (installation of radiant barriers in an existing attic space)	All	No	Yes	C-2	When roof over residential dwelling (vented attic) has no radiant barrier.
REFRIGERANT CHARGE w/ COIL CLEANING	CZ's 8-16	No	No	C-20	When a functional forced air central cooling system exists; and refrigerant is above or below optimal level.
REFRIGERATOR REPLACEMENT (new ENERGY STAR refrigerator)	All	No	No	No	When a functioning refrigerator is present and manufactured pre-2000.
SMART THERMOSTATS (CENTRAL HEATING AND COOLING ONLY)	CZs 1, 11, 13, 15	No	No	C-10, C-20	When the existing thermostat is either a setback programmable or non-programmable thermostat.
SOLAR PV	All	No	Yes	C-10 or C-46	When the home has adequate roof space and solar assessment establishes cost-effectiveness.
THERMOSTATIC SHOWER VALVE (TSV) AND SHOWERHEAD	All	No	No	C-36	When no TSV is present.
TIER 2 POWER STRIPS	All	No	No	No	When a television and one or more peripheral device will be connected to the T2 power strip.
WALL INSULATION, STUCCO AND WOOD	All	No	Optional	C-2	When existing insulation is R-0 increase to R-13.
WASHER REPLACEMENT (new high efficiency clothes washer)	All	No	No	No	When the existing washer is top loading and contains an upright agitator, and 5 or more people live in the home.

Measures	Climate Zone	CAS Test	Audit or Solar Assessment	Specialty License	Requirements
WATER HEATER BLANKET	All	No	No	D-65	When no external insulation is present, or insulation is substantially damaged and not effectively insulating the heater.
WATER HEATER REPLACEMENT (gas only)	All	Yes	Yes	C-36	When water heater is 10 years or older or has a H&S condition and cannot be repaired.
WHOLE HOUSE FAN	CZs 9-13	Yes	No	C-10	Has a functional central air conditioning system. One per dwelling.
WINDOW REPLACEMENT (dual pane)	All	Yes	Yes	C-17	When single-pane windows are present.
WINDOW / WALL AC REPLACEMENT	All	No	Yes	C-20	When the dwelling has an inefficient window/wall air conditioning unit.

## 2) Climate Adaptation and Climate Resiliency Measure

- Eligibility is limited to mobile homes.
- Measure may also contribute to energy efficiency.
- Not feasible when roof repairs exceed cap on limited home repair.

Measure	Climate Zone	CAS Test	Audit	Specialty License	Requirements
COOL ROOFS (roll-on application)	All	No	No	C-39	Dwelling is a mobile home with a standard roof. Roof will be retrofitted to a cool roof with an initial solar reflectance of $\geq 0.65$ and a 3-year solar reflectance of $\geq 0.50$ .

## 3) Fuel Switching Measures

- Eligibility is limited to homes where the original fuel is natural gas, propane, kerosene, or fuel oil and will be replaced with electric heat pump technology.
- Restricted to heating, cooling, and water heating appliances.
- Measures must be assessed for feasibility through an energy audit.
- Eligibility is limited to owner-occupied homes and in conjunction with solar PV installation.
- All gas-burning appliances that remain in the home are subject to combustion appliance safety (CAS) testing.

Measure	Climate Zone	CAS Test	Audit	Specialty License	Requirements
HEAT PUMP, FURNACE/AC (DUCTED) (15 or 16 SEER, 8.4 HSPF)	All	No	Yes	C-20	Split system is operational and is SEER 10 or less or less than 80 AFUE or is 10 years or older, or  Package unit is operational and is SEER 10 or less or less than 81 AFUE or is 10 years or older, or  Existing system has a H&S condition and cannot be repaired.
HEAT PUMP, FURNACE/AC (NON-DUCTED) (15 or 16 SEER, 8.4 HSPF)	All	No	Yes	C-20	Split system is operational and is SEER 10 or less or less than 80 AFUE or is 10 years or older, or  Package unit is operational and is SEER 10 or less or less than 81 AFUE or is 10 years or older, or  Wall/floor furnace is present, or  Existing system has a H&S condition and cannot be repaired.
HEAT PUMP WATER HEATER (new ENERGY STAR heat pump water heater)	All	No	Yes	C-20, C-36	Install when water heater is 10 years or older; or a H&S condition is present and cannot be repaired.

**4) Diagnostics Testing, H&S Remediation, and Home Repair required for installation of Energy Efficiency and PV Measures**

- Appliances that cannot be repaired within established cost caps may be replaced.

Measure	Climate Zone	CAS Test	Audit	Specialty License	Requirements
<b>Diagnostics Testing</b>					
COMBUSTION APPLIANCE TESTING	All	Yes	No	C-20	When gas appliances are present and affect the living space.
DUCT TESTING (PRE AND POST)	All	Yes	Yes	C-20	When a ducted HVAC system is present, and audit is to be performed.
WHOLE HOUSE ASSESSMENT WITH ENERGY AUDIT	All	No	Yes	No	When an eligible dwelling is identified for energy efficiency and PV services, and measures exist that would require an audit to address.
WHOLE HOUSE ASSESSMENT WITHOUT ENERGY AUDIT	All	No	No	No	When an eligible dwelling is identified for energy efficiency and PV services, and no measures exist that would require an audit to address.
<b>Remediation of Health and Safety Conditions and Home Repair</b>					
CARBON MONOXIDE ALARMS	All	No	No	No	When a gas appliance is present that affects the living space, or as required as condition of permit.
CENTRAL COOLING REPAIR	All	Yes	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition can be repaired.
CENTRAL COOLING REPLACEMENT	All	Yes	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition cannot be repaired.

<b>Measure</b>	<b>Climate Zone</b>	<b>CAS Test</b>	<b>Audit</b>	<b>Specialty License</b>	<b>Requirements</b>
CENTRAL HEATING FURNACE REPAIR (gas or electric)	All	Yes	No	C-20	When the existing heating appliance poses a H&S hazard or is inoperable and condition can be repaired.
CENTRAL HEATING FURNACE REPLACEMENT (gas or electric)	All	Yes	No	C-20	When the existing heating appliance poses a H&S hazard or is inoperable and condition cannot be repaired
COOKTOP REPAIR (gas or electric)	All	Yes	No	No	When a cooktop CAS or electrical hazard exists that can be repaired.
COOKTOP REPLACEMENT (gas or electric)	All	Yes	No	No	When a cooktop CAS or electrical hazard exists that cannot be repaired.
COOKING OVEN REPAIR (gas or electric)	All	Yes	No	No	When an oven CAS or electrical hazard exists that can be repaired.
COOKING RANGE REPAIR (gas or electric)	All	Yes	No	No	When a range CAS or electrical hazard exists that can be repaired.
COOKING RANGE REPLACEMENT (gas or electric)	All	Yes	No	No	When a range CAS or electrical hazard exists that cannot be repaired.
DUCTLESS MINI-SPLIT HEAT PUMP 15 & 16 SEER AND DUCTLESS MINI-SPLIT 15-21 SEER AIR CONDITIONER	All	No	No	C-20	When the existing heating and/or cooling appliance poses a H&S hazard or is inoperable and condition cannot be repaired.
EVAPORATIVE COOLER (DIRECT) REPAIR	All	No	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition can be repaired.

<b>Measure</b>	<b>Climate Zone</b>	<b>CAS Test</b>	<b>Audit</b>	<b>Specialty License</b>	<b>Requirements</b>
EVAPORATIVE COOLER (DIRECT) REPLACEMENT	All	No	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition cannot be repaired.
EVAPORATIVE COOLER (WINDOW) REPAIR	All	No	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition can be repaired.
EVAPORATIVE COOLER (WINDOW) REPLACEMENT	All	No	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition cannot be repaired.
PORTABLE AIR PURIFIERS	All	No	No	No	When occupant is a member of a vulnerable population, and the absence of the appliance creates a H&S need.
HEAT PUMP REPAIR	All	No	No	C-20	When the existing heating appliance poses a H&S hazard or is inoperable and condition can be repaired.
HEAT PUMP REPLACEMENT	All	No	No	C-20	When the existing heating appliance poses a H&S hazard or is inoperable and condition cannot be repaired.
HOME REPAIR (various with maximum individual and overall cost caps)	All	No	No	C-10	When required to facilitate installation of LIWP Measures.

Measure	Climate Zone	CAS Test	Audit	Specialty License	Requirements
ROOF REPAIR	All	No	No	C-39	When a solar assessment establishes cost-effectiveness of solar PV, but installation is not feasible because a section of roofing is in need of repair.
SMOKE ALARMS	All	No	No	No	When a smoke alarm is not present in bedrooms, sleeping area(s), or as required as condition of permit.
WALL FURNACE REPAIR (gas)	All	Yes	No	C-20	When the existing heating appliance poses a H&S hazard or is inoperable and condition can be repaired.
WALL FURNACE REPLACEMENT (gas)	All	Yes	No	C-20	When the existing heating appliance poses a H&S hazard or is inoperable and condition cannot be repaired.
WATER HEATER REPAIR	All	Yes	No	C-36	When the existing water heater poses a H&S hazard or is inoperable and condition can be repaired.
WATER HEATER REPLACEMENT	All	Yes	No	C-36	When the existing water heater poses a H&S hazard or is inoperable and condition cannot be repaired.
WINDOW / WALL AC REPAIR	All	No	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition can be repaired.

Measure	Climate Zone	CAS Test	Audit	Specialty License	Requirements
WINDOW / WALL AC REPLACEMENT	All	No	No	C-20	When the existing cooling appliance poses a H&S hazard or is inoperable and condition cannot be repaired.