

Clean Energy Resources for COVID-19 Response

June 3, 2020



**California
Housing
Partnership**

*California's Experts on Affordable
Housing Finance, Advocacy & Policy*

SPEAKERS

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California Housing Partnership

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Association for Energy Affordability

AGENDA OVERVIEW

- **Welcome**
- **Clean energy program summary by electricity provider**
- **Clean energy program deep dives:**
 - Low-Income Weatherization Program (LIWP)
 - Solar on Multifamily Affordable Housing (SOMAH)
 - South Coast AQMD Electrification Program
- **Co-leveraging Programs**
- **Q&A**

CLEAN ENERGY PROGRAM SUMMARY BY ELECTRICITY PROVIDER

| Resource Type | Program | SCE | Clean Power Alliance | LADWP | Other Municipal Utilities | Contact |
|---------------------|---|-----|----------------------|-------|---------------------------|--|
| EE & solar PV | LIWP MF | Yes | Yes | Yes | Yes | mclaproth@chpc.net |
| Solar PV | SOMAH | Yes | Yes | No | No | mclaproth@chpc.net |
| Solar PV | MASH | Yes | Yes | No | No | 866-584-7436 |
| EE & fuel switching | South Coast AQMD Electrification | Yes | Yes | Yes | Yes | mgantley@aea.us.org |
| Energy storage | SGIP | Yes | Yes | No | No | SGIPgroup@sce.com selfgeneration@socalgas.com |
| EE & solar PV | LADWP MF Program (advocacy) | N/A | N/A | Yes | N/A | bdelacruz@chpc.net |

LOW INCOME WEATHERIZATION PROGRAM for Multifamily (LIWP-MF)



PROGRAM OVERVIEW

- Whole building energy efficiency, solar thermal, and solar PV for multifamily properties under a single program
- All measures that result in greenhouse gas (GHG) reductions are eligible
- Energy efficiency (EE) incentives (including solar thermal) are based on amount of GHG reductions
- Solar PV incentives based on size of PV system



Energy Efficiency



Solar Photovoltaics



Solar Thermal



PROGRAM ELIGIBILITY CRITERIA

- Properties with 5 units or more
- Located in a CalEPA Disadvantaged Community (DAC)
 - Limited funding for properties outside of DACs
- At least 66% of tenants with incomes $\leq 80\%$ AMI
- Sign Property Affordability Covenant agreeing to maintain LIWP affordability requirements for at least 10 years
- Able to achieve minimum modeled energy savings $\geq 15\%$
 - 25% minimum savings required for projects that leverage other major incentive sources (i.e. TCAC, EUC, etc.)
- Incentives cannot exceed net project cost
- Maximum of 1500 units per ownership entity/subsidiaries of one entity



LIST OF REQUIRED IN-UNIT EFFICIENCY UPGRADES

| Measure Category | Measure Type | |
|--------------------------------|--|--|
| Water Heating | Low flow kitchen aerators Low flow bathroom aerators Low flow showerheads | <1.8gpm at 60psi <1.2gpm at 60psi <1.8gpm at 80psi |
| Heating and Cooling | Duct sealing | Where ducts or plenums are accessible, seal seams and connections with mastic. Seal supply boots to drywall with caulk |
| Lighting and Appliances | Replace all incandescent and halogen bulbs with LED equivalent Replace any refrigerator manufactured before 2999 rated 750 kWh annual consumption or more | |



LIST OF ELIGIBLE EFFICIENCY MEASURES

| Measure Category | Measure Type | |
|--------------------------------|---|--|
| Building Shell | Cool roof Roof insulation Attic insulation Wall insulation Floor insulation | Window/sliding door replacement Window coatings Window shading Air sealing |
| Heating and Cooling | Heating system replacement Cooling system replacement Fan replacement Pump replacement | Duct insulation HVAC system controls Energy Management Systems |
| Water Heating | Water heater/boiler replacement Variable speed pumps Recirculation controls | Pool, spa pumps and equipment Low flow fixtures (kitchen/bath) Pipe insulation |
| Lighting and Appliances | Indoor, outdoor, parking lot, and garage | Refrigerators, Dishwashers, washer & dryers |
| Renewable Energy | Solar hot water systems (thermal) | Solar photovoltaic |



Case Study: Florence Ave Villas

Project Scope of Work:

- Cool roof and dual pane windows installation
- High efficiency heat pumps and duct sealing
- Solar thermal system for domestic hot water (DHW)
- DHW pipe installation and low-flow fixtures
- Comprehensive LED lighting
- Upgraded ENERGY STAR refrigerators



Leveraged Incentives Summary

| | |
|--------------------------|------------------|
| Total Project Cost | \$578,639 |
| CSI Solar Thermal Rebate | \$44,404 |
| SoCalGas EUC | \$19,200 |
| Federal ITC | \$46,901 |
| LIWP Incentive | \$117,533 |
| Owner Portion | \$350,692 |



Case Study: Seasons at Ontario

Project Scope of Work:

- Cool roof and attic insulation
- Dual pane windows and sliding doors
- Heat pump for HVAC (in-unit)
- Condensing tankless water heater
- VSD pool pump & condensing pool heater
- ENERGY STAR appliances
- Solar PV system



Leveraged Incentives Summary

| | |
|--------------------|-------------|
| Total Project Cost | \$1,167,244 |
| MASH | \$202,210 |
| LIWP Incentive | \$368,175 |
| Owner Portion | \$596,859 |



FUNDING AVAILABILITY

- **Current Funding Cycle: \$9.5 million (screening waitlist)**
 - Eligible properties located in and out of DACs
- **Open enrollment for \$2+ million for Homelessness Housing carveout**
 - Permanent Supportive Housing, shelters & transition homes
- **Opportunity to participate in LADWP's Solar VNEM pilot**
- **Contact Michael Claproth at mclaproth@chpc.net to learn more**



RESOURCES

- To learn more about the LIWP program, contact Michael Claproth at mclaproth@chpc.net
- To submit an interest form online, visit:
https://aea.secure.force.com/eo3_PortalTradeAllyRegistration?pctxt=LIWP
- Visit the LIWP-MF program website:
www.camultifamilyenergyefficiency.org



SOMAH

SOLAR ON MULTIFAMILY AFFORDABLE HOUSING

Program Overview



PROGRAM OVERVIEW



- Solar access for tenants of qualifying affordable housing
- Upto \$100 million annually through 2030
 - budget allocated by IOU from shared GHG auction proceeds
- Solar financial benefits to reduce tenant energy cost burden and owner operating costs
- One stop-shop program model



PROGRAM ELIGIBILITY

- Existing deed-restricted buildings with at least 5 units
- Regulatory agreement with at least 10 years remaining on term, and
 - 80% of residents must have income at or below 60% AMI, or
 - Located in CalEnviroScreen DAC
- Certificate of Occupancy
- Virtual Net Metering (VNEM)
- Individually metered units and tenants pay electricity bills
- Located in PG&E, SDG&E, SCE, Liberty Utilities Co., or PacifiCorp service area & customers of Community Choice Aggregators (CCA) participating in VNEM

TWO PARTICIPATION TRACKS



Upfront TA (Track A): Projects selecting upfront technical assistance - 21 months



Reservation (Track B): Projects not selecting upfront technical assistance - 18 months



UPFRONT TECHNICAL ASSISTANCE



(TRACK A)

- Requested before applying for incentive reservation
- Up to 3 months of no cost TA for project feasibility
- Solar feasibility report and guidance
- Assistance understanding bids and navigating the bidding portal
- Referrals to relevant regional clean energy programs including energy efficiency, electric vehicle charging, and solar storage programs
- Education and resources to understand financing options and help troubleshooting affordable housing finance program regulations

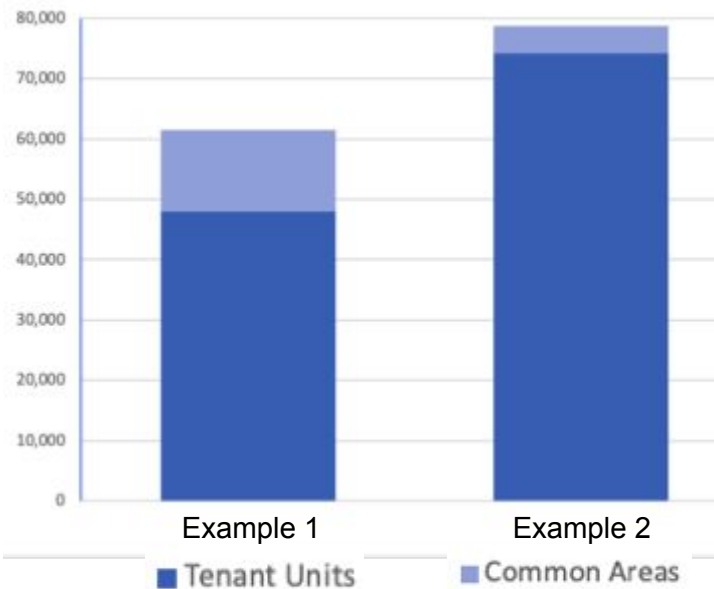
SOLAR PROJECT EXAMPLES

(NO TAX CREDITS APPLIED)



| TAX CREDITS | | \$ PER AC WATT INCENTIVE | |
|-------------|-------|--------------------------|--------------|
| ITC | LIHTC | TENANT | COMMON AREAS |
| No | No | \$3.20 | \$1.10 |

Total Incentive by Tenant-Owner Split (\$)



EXAMPLE 1:

Tenant share: **55%**

Common area: 45%

System size: 27.3 kW

Tenant load: 15 kW

Incentive: **\$48,000**
(15,000 watts x \$3.20)

Common area load: 12.3 kW

Incentive: **\$13,530**
(12,300 watts x \$1.10)

Total incentive: \$61,530

EXAMPLE 2:

Tenant share: **85%**

Common area: 15%

System size: 27.3 kW

Tenant load: 23.2 kW

Incentive: **\$74,256**
(23,205 watts x \$3.20)

Common area load: 4.1 kW

Incentive: **\$4,505**
(4,095 watts x \$1.10)

Total incentive: \$78,761

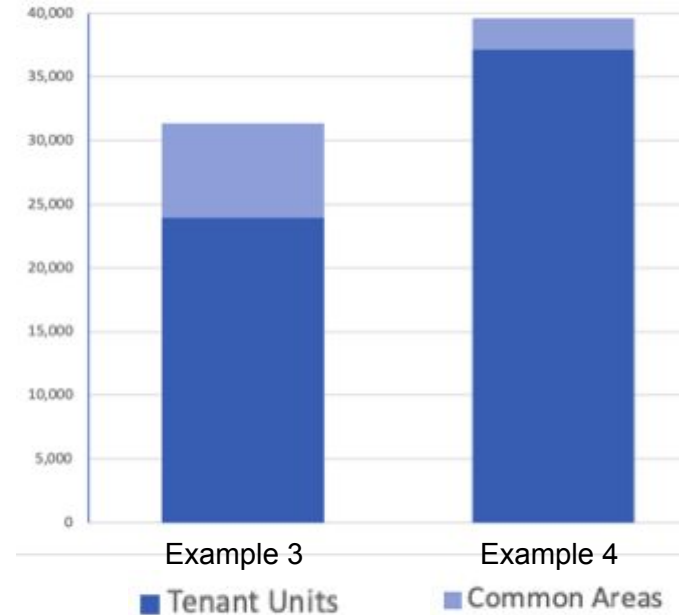
SOLAR PROJECT EXAMPLES

(LIHTC & ITC APPLIED)



| TAX CREDITS | | \$ PER AC WATT INCENTIVE | |
|-------------|-------|--------------------------|--------------|
| ITC | LIHTC | TENANT | COMMON AREAS |
| Yes | Yes | \$1.60 | \$0.60 |

Total Incentive by Tenant-Owner Split (\$)



EXAMPLE 3:

Tenant share: **55%**

Common area: 45%

System size: 27.3 kW

Tenant load: 15 kW

Incentive: **\$24,000**
(15,000 watts x \$1.60)

Common area load: 12.3 kW

Incentive: **\$7,380**
(12,300 watts x \$.60)

Total incentive: \$31,380

EXAMPLE 4:

Tenant share: **85%**

Common area: 15%

System size: 27.3 kW

Tenant load: 23.2 kW

Incentive: **\$37,128**
(23,205 watts x \$1.60)

Common area load: 4.1 kW

Incentive: **\$2,457**
(4,095 watts x \$.60)

Total incentive: \$39,585



FUNDING AVAILABILITY

\$65,953,481 available for projects in the Southern California Edison (SCE) territory for 2020

How to get started?

- Waitlisted applications and new applications processed in order received
 - Check out the [SOMAH Waitlist](#) for information on the queue
- Contact Michael Claproth at mclaproth@chpc.net for an interest call
- Visit CalSOMAH.org for [email signup](#) to receive program news
- Submit [Upfront Technical Assistance](#) request form

SOLAR PROGRAM SUMMARY

| Program | LIWP | SOMAH | MASH |
|--|--|---|--|
| Eligibility | ≥ 66% of units at 80% AMI and in DACs, available to all utilities (not just IOUs) | ≥ 80% of units at 60% AMI <u>or</u> in DAC (IOUs & CCAs only) | ≥20% of units are low-income and In IOUs (PG&E, SCE, SDG&E only) |
| Tenant PV incentive * | \$3.50/W-DC | \$3.20/W-AC | \$1.80/W-AC |
| Common areas PV incentive * | \$1.10/W-DC | \$1.10/W-AC | \$1.10/W-AC |
| Tenant PV share | 0 – 100% | ≥ 51% required | 0-100% |
| Tenant solar benefits | 100% required | 100% required (of the ≥ 51% required) | ≥50% required (for higher incentive) |
| Utility allowance (UA) & rent adjustments | Must exclude solar & EE benefits to avoid recapture and/or diminishment of tenant benefits | Must exclude solar benefits to avoid recapture and/or diminishment of tenant benefits | Owner may not adjust UA by more than 50% of tenant benefit |

SOLAR PROGRAM SUMMARY

| Program | LIWP | SOMAH | MASH |
|--|--|--|---|
| No-cost TA | Deep, free TA | Deep, free TA | None |
| EE incentive | ~50% - 80% of costs | None | None |
| EE Compliance | ≥ 15% energy savings & free whole building audit | ASHRAE I audit <u>or</u> EE program participation, and ESA referral and solar sizing | ASHRAE I audit and ESA referral |
| Other EE programs | Optional EE program referrals | ESAP unit list required & optional EE referrals | ESAP unit list required & optional EE referrals |
| Tenant education & engagement | Program provides educational materials to residents explaining energy upgrades | Owner must notify tenants of project and rate changes; hotline; technical assistance | Owner must post ESA program flyers onsite to notify tenants |

SELF GENERATION INCENTIVE PROGRAM (SGIP) FUNDING AVAILABLE

- **General Budget - \$830 M**
 - No income eligibility requirements & \$0.5 per kWh
- **Equity Budget - \$83 M (fully subscribed, except for SCG)**
 - Low-income rent restriction at least 80% of units at or below 60% AMI or located in DAC
 - SOMAH enrollment automatically qualifies you for SGIP
 - \$ 0.85 per kWh
- **Equity Resiliency Budget - \$169 M, SCE and \$48 M, SCG**
 - Are located in a Tier 3 or Tier 2 HFTD or were subject to two or more discrete PSPS events prior to the date of application for SGIP incentives
 - \$ 1 per kWh
- **Heat Pump Water Heater Budget- \$45 M**
 - For heat pump water heating

SOUTH COAST AQMD FUNDING AVAILABLE

Multifamily Affordable Housing Electrification Program

- **Incentives** - all fuel-switching measures that eliminate NOx emissions
- **Budget** - \$6.58 million
- **Program launch** - mid-summer 2020
- **Eligibility** -
 - Affordable housing (likely aligned with LIWP requirements)
 - Properties in DACs given priority (CalEnviroScreen 3.0)
 - 60% of funds must be spent on properties within 6 mi of a refinery and 7% of funds must be spent within 6 mi of a peaker power plant.

LADWP FUNDING AVAILABLE

\$100 million for residential energy efficiency programs over next 5 years;

LADWP expanding three programs:

- **AC Optimization**
 - a no-cost central air conditioner tune-up and energy saving rebate opportunities
- **Home Energy Improvement Assistance (HEIP)**
 - Need modification to target multifamily
- **Advocacy for a new program based on LIWP-model**
 - LADWP discussions underway
 - Budget - TBD (**\$25-\$75 million over 5 years**)
 - Program launch - TBD
 - Co-enroll with LIWP for waitlist pipeline

LADWP PILOT OPPORTUNITIES

- **Virtual Net Metering (VNEM) pilot for tenant solar projects**
 - Mechanism to share solar financial benefits with tenants
 - New construction and existing buildings eligible; in and out of DACs
 - Tenants must pay their own electricity
- **Electric vehicles (EV) & charging stations with an affordable housing community to help design this project**
 - Benefits: project design and implementation, service upgrades and construction at no out of pocket cost to partners & access to reliable zero-emissions mobility options.
- **Contact Blanca de la Cruz at bdelacruz@chpc.net**

CO-LEVERAGING PROGRAMS

- **LIWP** - may be combined with SGIP, South Coast AQMD, SCE, SCG, LADWP & other municipal utility resources
- **SOMAH** - SGIP, South Coast AQMD, SCE, and SCG resources
- **South Coast AQMD** - LADWP, LIWP, SOMAH, SCE & SCG resources
- **LADWP & other municipal utilities** - LIWP, South Coast AQMD & SCG resources

QUESTIONS & ANSWERS

CONTACTS

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