

Program Overview



- Whole building energy efficiency, solar thermal, and solar PV for multifamily properties under a single program
- Offers financial incentives, property assessments, work scope development, construction management assistance, and quality control
- All measures that result in greenhouse gas (GHG) reductions are eligible
- EE incentives (including solar thermal) are based on the amount of GHGs reduced
- PV incentives are based on the size of the PV system







Solar Photovoltaics

Building Electrification







Administration and Funding



Administration

- Community Services & Development (CSD)
- Association for Energy Affordability (AEA)
 - California Housing Partnership (CHP)
 - TRC Companies (TRC)
 - Atium Engineering

Funding

- Total of \$101.52 million to date
 - Funding comes from cap-and-trade funding, which is administered by the CA Air Resources Board (ARB), and
 - General Fund (Climate Resilience) dollars from the 2022-2023 State Budget Appropriations







Program Model





- Single point-of-contact
- No upfront cost to the property owner
- Free energy audit and technical assistance
- Leveraging of other financial resources encouraged
- Free WegoWise benchmarking account for the first year
- Incentives paid after installation of measures







Property Eligibility Criteria



- Property must contain 5 units or more
 - At least 1 building must have 5 units. If not, the property must have 20 total units
- Have a deed restriction or funding commitment by a housing agency
- At least 66% of tenants with incomes < 80% AMI
- Able to achieve modeled energy savings > 15%
 - 25% minimum savings required for projects that leverage other major incentive sources (i.e. TCAC, etc.)
- Must sign Property Affordability Covenant agreeing to maintain LIWP affordability requirements for at least 10 years
- Incentives cannot exceed net project cost
- Maximum of 1500 units per ownership entity/subsidiaries of one entity







List of Required In-Unit Energy Efficiency Upgrades



Measure Category	Measure Type						
Water Heating	Low flow kitchen aerators Low flow bathroom aerators Low flow showerheads	<1.8pgm at 60psi <1.2gpm at 60 psi <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 1999 rated 750 kWh annual consumption or more	If applicable					



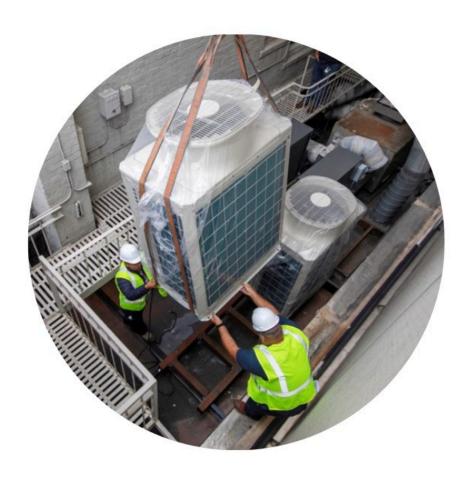






List of Measures Eligible for Incentives





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 lighting	Refrigerators Dishwashers Clothes washer and dryers (incl. common area coin-op)						
Renewable Energy	Solar hot water systems (thermal)	Solar photovoltaic						







Energy Efficiency Incentive Amounts



EE Program Incentives	Tenant Energy Savings Measures	Owner Energy Savings Measures
FY 21-23	\$4,500 per MT GHG	\$3,000 per MT GHG







Project Example #1, LIWP-Only Project



Measure/Specs			timated Install Cost	Annual Energy Savings			Site Energy Savings	Annual Cost Savings	GHG Savings	LIWP Incentive Earned	
PLANI	NED ENERGY SAVINGS MEASURES			kVh	kV	Therm	Gallons		\$	MTCO2	
1	Low Flow Aerators and Showerheads - Watersense 1.5gpm showerhead, 1.0gpm bath LIWP Requirement	\$	1,024.00	1,991	0.20	0	158,213	0.5%	\$338	0.42	\$1,890
2	In-Unit LED Lighting - Comprehensive replacement, energy star or DLC rated, replace ~ 276 bulbs LIWP Requirement	\$	16,796.05	1,415	0.00	-10	0	0.3%	\$229	0.25	\$1,125
3	Common Area and Exterior LED Lighting - Comprehensive replacement, energy star or DLC, replace ~97 bulbs LIWP Requirement		-	579	0.00	0	0	0.1%	\$98	0.12	\$540
4	HVAC Option 2 - Inverter driven packaged terminal heat pumps, Arama, 9 kbtuh, 11.7 EER, 3.58 COP	\$	289,440.00	-3,995	0.00	2,714	0	18.6%	\$2,414	13.56	\$61,020
5	DHW HPWH Option 3 - Replace existing gas water heaters with two Sanden SanCO2 heat pumps, one 200 gallon storage tank, and one 119 gallon swing tank	\$	217,008.00	-57,730	0	8,547	0	47.6%	-\$71	33.17	\$149,265
6	DHW Pipe Insulation - Insulate piping to Title 24 standards: 1.5 inch fiberglass for 2" supply pipe, 1.0 inch insulation for 0.75" return pipe		-	0	0	406	0	2.9%	\$463	2.15	\$9,675
7	DHW Recirculation Control - Install demand control on existing recirculation pump and perform pressure gauge crossover test (required)		-	2,439	0	137	0	1.6%	\$571	1.24	\$5,580
8	Smart Thermostats - Install a programmable smart thermostat in each unit	\$	1,702.00	0	0	67	0	0.5%	\$76	0.36	\$1,620
9	Electric Stoves - Replace existing gas stoves with electric	\$	418,600.00	-10,090	0.00	660	0	2.3%	-\$963	1.37	\$6,165
	Totals		\$944,570	-65,391	0.20	12,521	0	74.4%	\$3,157	52.64	\$ 236,880.00







Project Example #2, Co-Leveraged Project



Measure/Specs Estimated Insta								Site Energy Savings %*	Annual Cost Savings	GHG Savings		LIWP Incentive Earned	
PLAN	NED ENERGY SAVINGS MEASURES			k₩h	k₩	Therm	Gallons		\$	MTCO2			
1	Low Flow Aerators and Showerheads - Watersense 1.5gpm showerhead, 1.0gpm bath LIWP Requirement	\$	1,024.00	1,991	0.20	0	158,213	0.5%	\$338	0.42		\$1,890	
2	In-Unit LED Lighting - Comprehensive replacement, energy star or DLC rated, replace ~ 276 bulbs LIWP Requirement	\$	16,796.05	1,415	0.00	-10	0	0.3%	\$229	0.25		\$1,125	
3	Common Area and Exterior LED Lighting - Comprehensive replacement, energy star or DLC, replace ~97 bulbs LIWP Requirement		-	579	0.00	0	0	0.1%	\$98	0.12		\$540	
4	HVAC Option 2 - Inverter driven packaged terminal heat pumps, Arama, 9 kbtuh, 11.7 EER, 3.58 COP	\$	289,440.00	-3,995	0.00	2,714	0	18.6%	\$2,414	13.56		\$61,020	
5	DHW HPWH Option 3 - Replace existing gas water heaters with two Sanden SanCO2 heat pumps, one 200 gallon storage tank, and one 119 gallon swing tank	\$	217,008.00	-57,730	0	8,547	0	47.6%	-\$71	33.17		\$149,265	
6	DHW Pipe Insulation - Insulate piping to Title 24 standards: 1.5 inch fiberglass for 2" supply pipe, 1.0 inch insulation for 0.75" return pipe		-	0	0	406	0	2.9%	\$463	2.15		\$9,675	
7	DHW Recirculation Control - Install demand control on existing recirculation pump and perform pressure gauge crossover test (required)		-	2,439	0	137	0	1.6%	\$571	1.24		\$5,580	
8	Smart Thermostats - Install a programmable smart thermostat in each unit	\$	1,702.00	0	0	67	0	0.5%	\$76	0.36		\$1,620	
9	Electric Stoves - Replace existing gas stoves with electric	\$	418,600.00	-10,090	0.00	660	0	2.3%	-\$963	1.37		\$6,165	
	Totals	\$	944,570	-65,391	0.20	12,521	0	74.4%	\$3,157	52.64	\$	236,880.00	
										MAHEP REBATE	\$	318,550.00	
										ENERGY SMART HOMES REBATE	\$	163,300.00	
										TOTAL INCENTIVES	\$	718,730.00	







Solar PV System Incentive Levels



Solar PV Program Incentives	Tenant Meter PV Systems < 100 kW*	Owner Meter PV System <100 kW* (Common Area or Master Meter)
FY 21-23	Up to 100%	Up to 50%

Solar PV Incentive is based on:

- Type of leveraged funds (LIHTC, ITC, LADWP) the more leveraged funds, the less LIWP funding is needed. Projects are assumed to take ITC
- If PV system is offsetting owner meter or tenant meter consumption
- Size of PV system







Contractor Selection



- Owner selects and hires contractors directly for energy and water efficiency upgrades
- Solar component:
 - Program team can provide free solar technical assistance
 - Two bids are required, at a minimum, to qualify











Thank you!

To get started, submit an <u>interest</u> <u>form</u> here!

