

ET Summit 2023

Presented by




Building a Comprehensive Affordable Multifamily Retrofits (CAMR) Program

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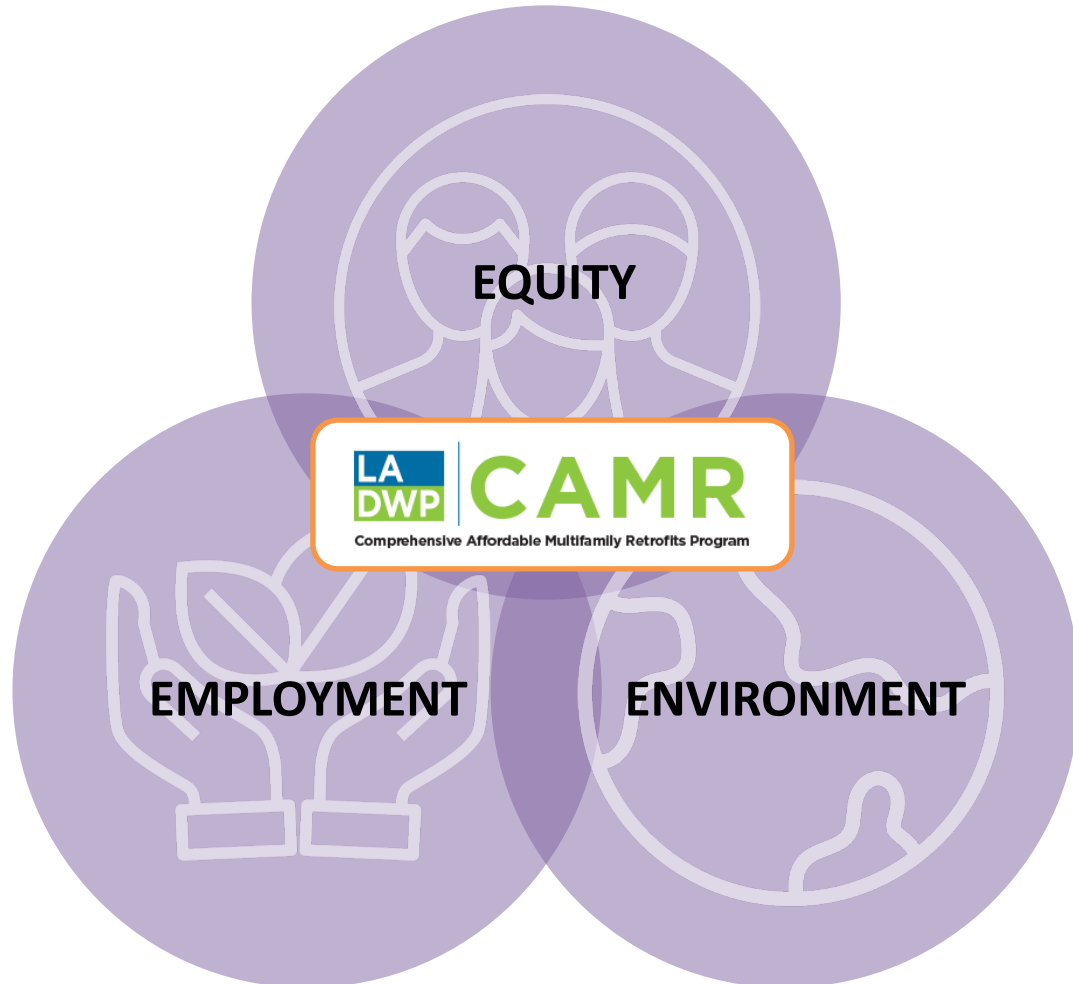
- 
- An aerial photograph of Los Angeles, showing the downtown skyline with several prominent skyscrapers in the background and a dense residential area with smaller buildings and trees in the foreground. The sky is clear and bright.
- 245,707
 - customers on low-income or lifeline discount rates*
 - 409,298
 - affordable housing units in Los Angeles**

Sources:

*LADWP CCB Account Data – Discount Programs as of March 1, 2023

**Affordable Homes First: Advancing a Green New Deal for Los Angeles <https://www.energyefficiencyforall.org/resources/advancing-a-green-new-deal-for-los-angeles-renters/>

Building Equity Through CAMR



COMMUNITY

- Extend benefits to MF customers
 - Reduce greenhouse gas emissions
 - Maximize benefits to Disadvantaged Communities (DAC)
-

TENANTS

- Provide bill savings to strengthen economic security
 - Improve safety, comfort, indoor air quality
 - Reduce climate impact & pollution burden
-

MULTIFAMILY OWNERS

- Improve operating costs with system upgrades
- Assist with EBEWE benchmarking compliance
- High-quality work

Comprehensive Affordable Multifamily Retrofits (CAMR)

CAMR Delivers:

- Deep decarbonization of multi-family buildings by retrofitting for energy efficiency, building electrification, and on-site solar PV
- Significant utility cost savings for low-income tenants and affordable housing property owners and managers
- Skilled, family-supporting green jobs
- Property owner's commitment to maintaining affordability for 10 years from the incentive payment

By:

- Providing robust incentives and technical support to help participants retrofit their properties
- Including “level playing field” requirements for participants' contractors to pay prevailing wages and adhere to labor-standard skilled and trained workforce requirements

Eligibility Criteria

- Must be an LADWP customer in good standing
- Consist of five (5) or more units
- Install energy improvements that equate to at least 5% in electrical energy savings
- Meet affordability requirement of at least 66% of households at or below 80% of Area Median Income and be located in a Disadvantaged Community (DAC)
- Properties located outside of a DAC may be eligible to participate with proof of rent regulatory agreement or provision of public assistance program documentation

Incentive Levels

Number of Units	For energy efficiency measures that reduce owner-paid energy costs	For energy efficiency measures that reduce tenant-paid energy costs
5-64	\$5,400 per metric ton of CO ₂ e	\$6,750 per metric ton of CO ₂ e
65+	\$6,200 per metric ton of CO ₂ e	\$7,750 per metric ton of CO ₂ e

CO₂e = carbon dioxide equivalent

CAMR will also provide up to **\$750 per unit** to upgrade electrical infrastructure and/or utility service to support building electrification

CAMR Measures



Building Shell

- Cool roof
- Insulation
- Window shading
- Title 24 windows
- Air sealing



Space Heating & Cooling

- Heating & cooling system replacement
- Duct insulation & sealing
- Pump & fan replacement
- Refrigerant charge verification



Water Heating

- Water heater or boiler replacement
- Variable speed pumps and controls
- Pipe Insulation
- Low-flow aerators & showerheads
- Pool, spa pumps & equipment



Lighting & Appliances

- In-unit, common area and exterior lighting
- Refrigerators
- Dishwashers
- Clothes washers & dryers
- Vending machine controllers



Renewable Energy

- Solar PV

CAMR Solar Pilot Program

CAMR participants may be eligible for additional incentives for the installation of photovoltaic systems (PV) through participation in the VNEM pilot program.

Property owners can install solar PV systems and sell the solar energy generated to LADWP. A minimum of 40% of the sales proceeds must be distributed among onsite tenants, allowing them to benefit first-hand from the savings.

PHOTOVOLTAIC (PV) INCENTIVE LEVELS

LEVERAGE TYPES		CAMR \$ PER AC WATT INCENTIVE
ITC	LIHTC	VNEM
Yes	Yes	\$2.30
Yes	No	\$3.30
No	No	\$4.70
No	Yes	\$3.70

ITC = federal investment tax credit




LIHTC = low-income housing tax credit

kW-AC ^{CEC} *	Incentive Adjustment Factor
≤100	100%
100 - 300	80%
301 - 500	60%
≥501	40%

*AC^{CEC} = Module PTC x Inverter Efficiency




For system larger than 100kW, per incentive will step down based on system size (see chart above)

Leveraging Existing LADWP Programs

		cost-saving		
FREE leveraging other LADWP programs*		 Electric	 Water	 Gas
1	Lighting	●		
2	Insulation	●		●
3	AC tune-up	●		
4	Trees	●		
5	Refrigerator replacement	●		
6	Toilets and aerators		●	

*subject to program terms and conditions.

Leveraging Existing LADWP Programs

		cost-saving		
Partial Rebates rebate amount varies by type of upgrade*		 Electric	 Water	 Gas
7	Solar PV	●		
8	Water heater replacement	●	●	●
9	Heating and Cooling Replacement	●		
10	Roof replacement	●		●
11	Pool heater replacement			●
12	Gas Dryer replacement			●

*subject to program terms and conditions.

Application Process

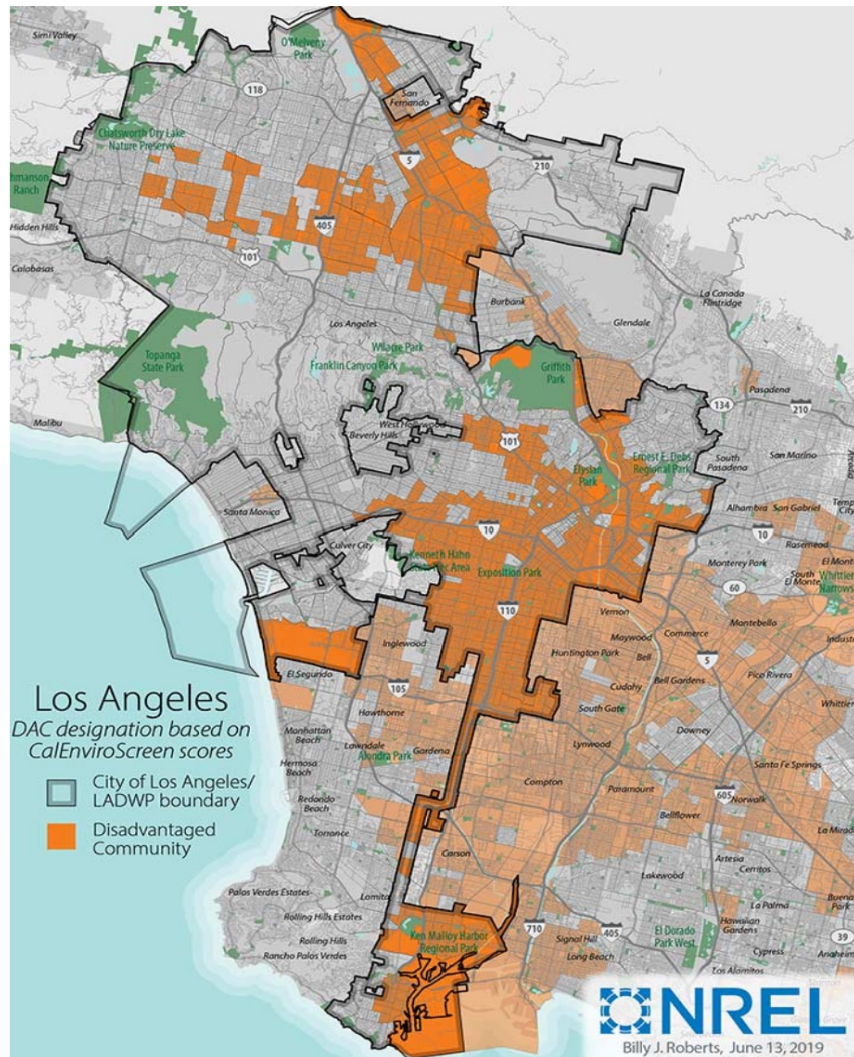
Submit Interest Form at ladwpcamr.com



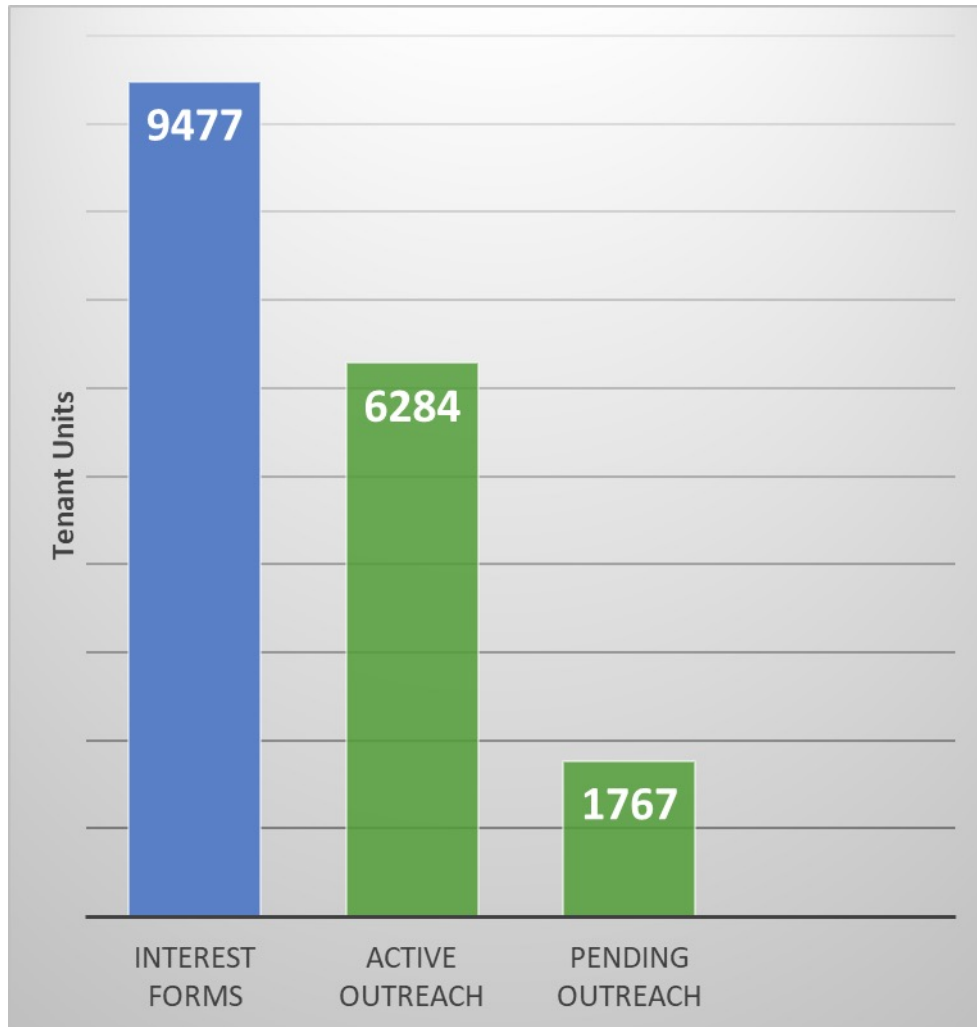
Tracking for Success

To ensure program effectiveness, equity, and inclusion, CAMR will continue to collect and monitor key metrics, developed through an extensive stakeholder process coordinated by the Mayor's Office of Sustainability:

- GHG reductions, energy savings, program costs, and incentives paid
- Program dollars benefitting priority populations
- Property location, including DAC indicators, and council district
- Number of properties, dwelling units, and residents served
- Participation in other LADWP Programs, including HEIP, as a result of CAMR
- Number of green jobs supported



CAMR Customer Activity Dashboard



May 1, 2022 – July 31, 2023

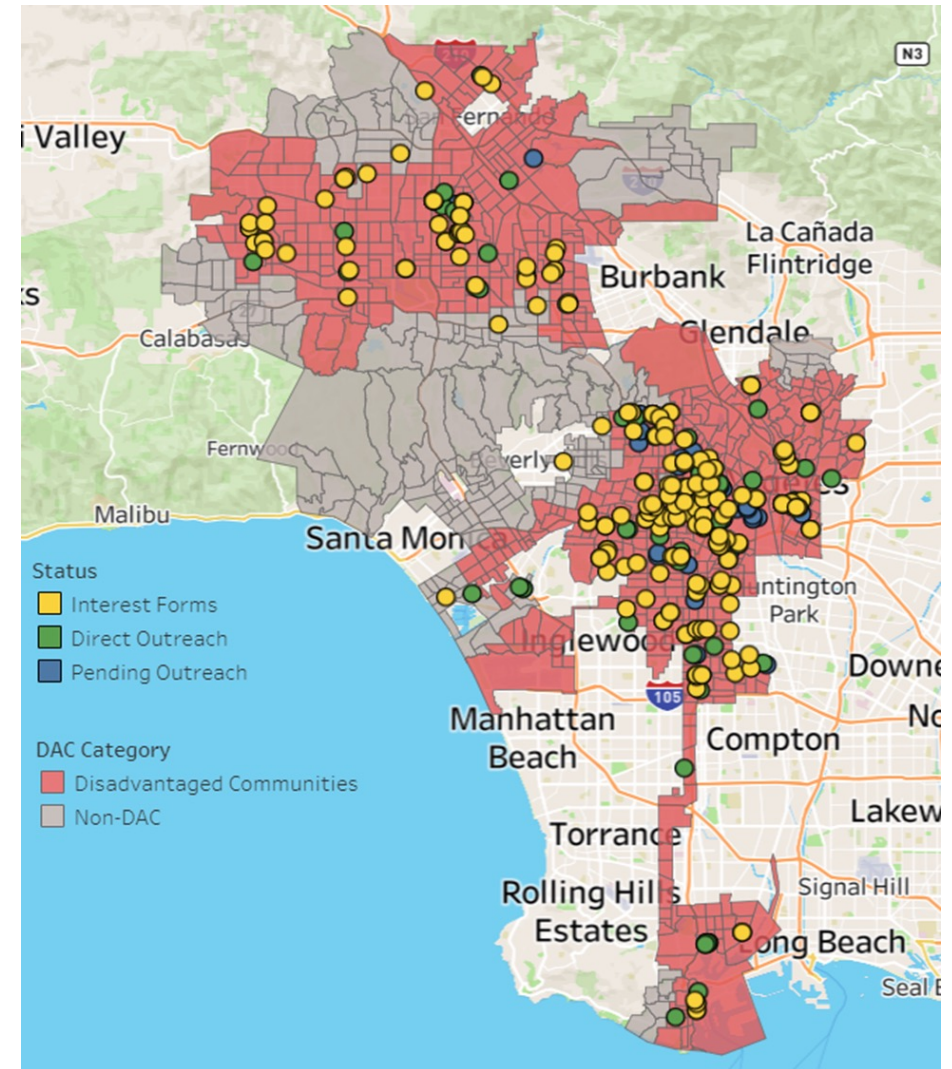
- Interest forms submitted: **9,477 units**
- Active Outreach¹: **6,284 units**
- Pending Outreach²: **1,767 units**

¹Number of units associated with properties where we have contacted the organization/property owner to discuss CAMR with them.

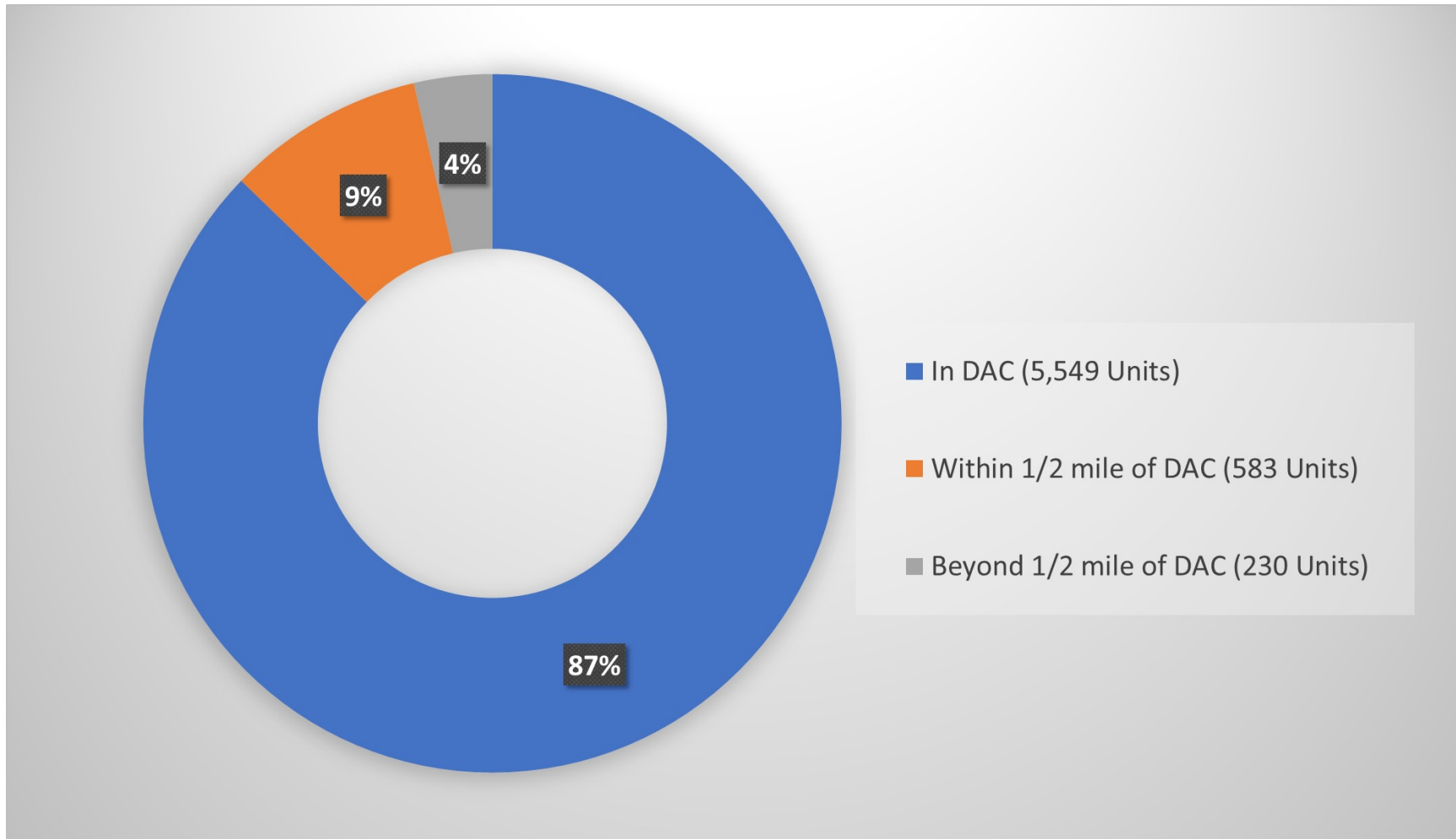
²Number of units associated with lead properties in the current queue who may be candidates for CAMR, but no outreach has been conducted yet.

CAMR Scatter Map: May 1, 2022 – July 31, 2023

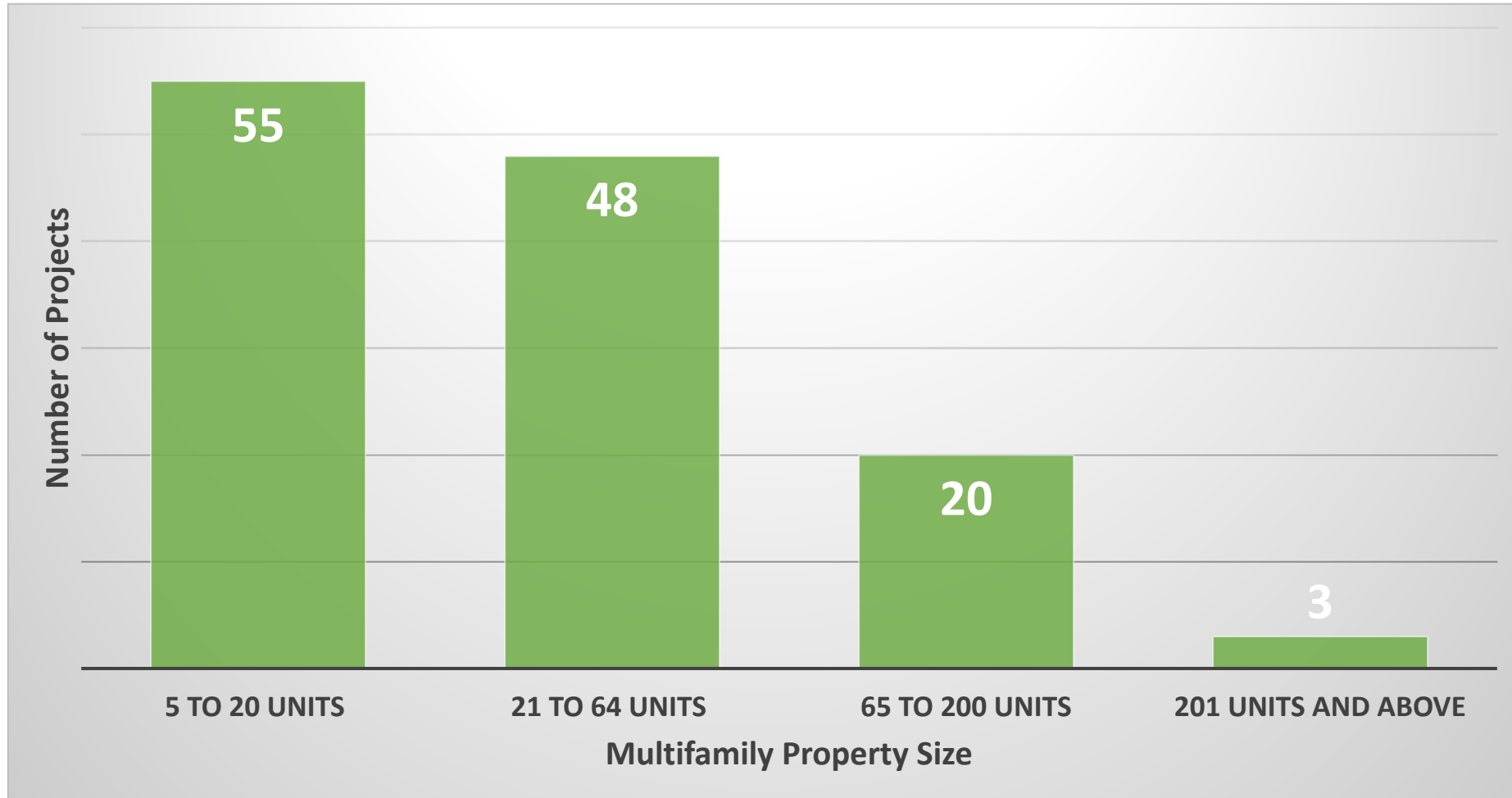
- CAMR is committed to delivering equitable access to eligible customers within LADWP's service territory.



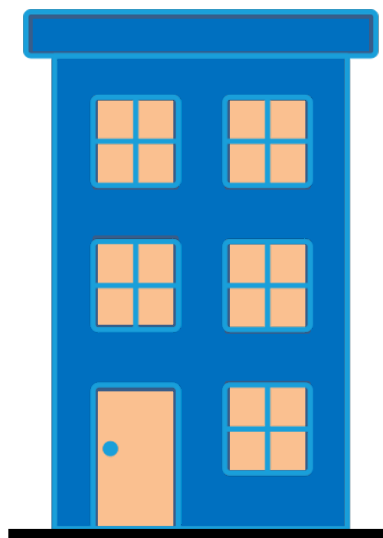
Verifiable Eligible Units: DAC vs. Non-DAC



CAMR Projects by Property Size



CAMR Incentive Sample #1



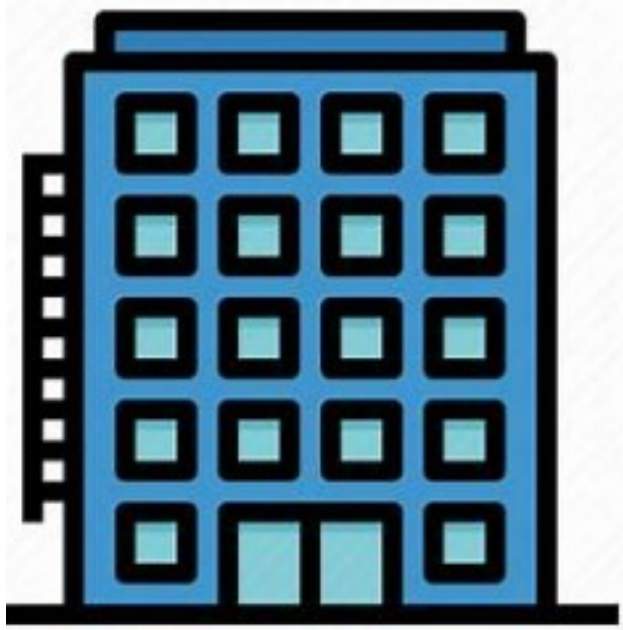
5-unit Building in Los Angeles

- Induction Cooktop
- Smart Connected Power Strip
- Heat Pump Water Heater
- Faucet Aerators
- Low-Flow Showerheads
- Apartment Heat Pump HVAC
- Ceiling Insulation

Estimated Potential Incentives: **\$36,686**

Disclaimer: The information provided in this document is solely for demonstration purposes. The CAMR incentive figures are estimates based on hypothetical scenarios and are not intended to represent actual incentive amounts and are not a guarantee of payment. Actual incentives will be calculated on a per project basis and must meet all CAMR program Terms and Conditions. Incentives cannot exceed the total combined cost of materials and labor associated with the implementation of approved measures. All program participation is subject to LADWP final approval.

CAMR Incentive Sample #2



154-unit Building in Panorama City

- In-unit LED
- Common Area LED
- Common Area Washing Machines
- Central Heat Pump Water Heater
- Domestic Hot Water (DHW)
- Low Flow Aerators
- Central DHW Circulation Controls
- Central Chiller and Heating Boiler Controls

Estimated Potential Incentives: **\$464,724**

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Project Spotlight #1



Total Square Footage: 7,500

Recommended Measures:

- In-unit LED Lighting
- Common Area Washers & Dryers
- Refrigerators
- Induction Cooktops
- Heat Pump Water Heater
- Low Flow aerators
- Ceiling and Wall insulation

Estimated Potential CAMR Incentives = **\$ 80,545**

Project Spotlight #2



Total Square Footage = 55,612

Recommended Measures:

- In-unit LED Lighting
- Heat Pump HVAC
- Heat Pump Water Heater
- Refrigerators
- Induction Cooktops
- Low Flow Aerators
- Attic and Flat Roof insulation

Estimated Potential CAMR Incentives = **\$ 387,419**

CAMR Leveraging Additional Funding Sources

TECH Clean California

- Technology and Equipment for Clean Housing (TECH)
- Statewide initiative to accelerate the adoption of clean space and water heating technology across California homes in order to help California meet its goal of being carbon-neutral by 2045.
- About \$7 million of additional statewide incentives for multifamily will become available Summer 2023



CALIFORNIA
Public Utilities Commission

SGIP-HPWH

- Self-Generation Incentive Program (SGIP) Heat Pump Water Heater (HPWH)
- About \$80 million statewide for both single-family and multifamily, to provide residential HPWH (in-unit HPWH for multifamily) and central whole building HPWH for multifamily
- Expected to launch in late Summer 2023



CALIFORNIA
Public Utilities Commission

HEEHRA and HOMES

- High-Efficiency Electric Home Rebate Act (HEEHRA) and Homeowner Managing Energy Savings (HOMES)
- About \$290 million to be allocated for HEEHRA and \$292 allocated for HOMES, for California
- Incentives for appliances such as electric heat pumps for space heating and cooling, including rebates for panel upgrades, wiring, and insulation
- Up to \$8,000 to \$14,000 per household



U.S. DEPARTMENT OF
ENERGY



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