

CGC Residential & Small Commercial Deployment Framework

Implementation Model for Battery + Solar / Heat Pump / Efficiency Package Programs · For: CEF Boards, Program Administrators, Community Group Purchase Operators, and Community Outreach Teams · 2026

PART 1 — PROGRAM STRUCTURE AND GOVERNANCE

1.1 Program Administrator Role

The CEF Board shall designate a Program Administrator responsible for: community outreach and enrollment; site assessment coordination; installer solicitation and contract management; LMI eligibility verification; domestic content compliance tracking; VPP enrollment coordination; and reporting to the CEF Board.

1.2 Program Timeline

Phase	Duration	Key Activities
Community Outreach & Enrollment	Months 1–3	Community meetings, trusted-messenger outreach, soft registrations, LMI targeting, renter strategy activation
Site Assessment	Months 2–4	Roof, electrical, HVAC assessments; technology recommendation by package type; LMI categorical eligibility verification
Installer Solicitation	Months 2–3	Issue RFP with domestic content requirements and local hiring commitment; evaluate bids; select installer(s)
Installation	Months 4–9	Phased installation; LMI first; weatherization and efficiency precursors where needed; permit and interconnection management
VPP Enrollment	Months 5–10	Commission systems; DERMS enrollment; resilience reserve verification; participant training; VPP revenue-share setup
Ongoing Operations	Years 1–20	VPP dispatch; revenue distribution; domestic content reporting; reinvestment deployments; annual participant statements

PART 2 — CO-INVESTMENT STRUCTURE

2.1 Fund Coverage Tiers

Income Tier	AMI Range	Fund Coverage	Participant Contribution	Qualification Method
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LMI	At or below 80% AMI	100%	\$0 upfront	Categorical: SNAP / WIC / Medicaid / LIHEAP / Section 8 = automatic. No documentation required.
Moderate-Income	80–120 % AMI	75%	25% of system cost	Income documentation or categorical eligibility
Market-Rate	Above 120% AMI	50%	50% of system cost	No documentation required

2.2 Participant Financing Options

For moderate-income and market-rate participants, the participant contribution may be covered through:

- Out-of-pocket payment at time of installation
- Third-party solar financing (solar loan, PACE financing, etc.)
- Fund-administered below-market loan: repaid over up to 15 years through a fund-administered on-bill arrangement
- VPP revenue-sharing arrangement: participant contribution recovered over time from grid services revenue; no upfront payment required

2.3 Stacking with State and Federal Rebates

The Program Administrator shall identify and stack applicable state and federal rebate programs with CEF co-investment to maximize participant benefit, including:

- DOE and utility rebate programs for heat pumps, weatherization, and battery storage
- State energy efficiency program incentives
- Utility demand response program incentives
- IRA domestic content bonus credits (where applicable, reinvested in additional deployments)

PART 3 — ELIGIBLE INSTALLATION PACKAGES

3.1 Package Options

Package	Components	Typical Cost	Best For
Solar Package	Battery storage + rooftop solar PV. Battery is the anchor DER; solar charges the battery and	\$28,000–\$40,000	Homeowners with suitable rooftops; flagship package; maximum bill savings and VPP capacity

	exports excess to the local circuit.		
Heat Pump Package	Battery storage + heat pump HVAC. Battery is the anchor DER. Heat pump is a demand response asset: pre-conditions home before peak, cycles off during peak.	\$25,000–\$35,000	Homes with high heating/cooling costs; shaded or structurally limited rooftops; strong DR value
DR Package	Smart thermostat enrolled in VPP demand response. No battery required. 1 kW peak reduction per home; 75% realization rate. Lowest cost; broadest reach; fastest to deploy.	\$75–\$150	All homes with central AC; \$80/kW-yr (Brattle / NRDC 2026); 7–8% participation achievable in 3–5 years
Efficiency Package	Plug-in solar + smart thermostat + home sealing/insulation	\$6,000–\$12,000	Renters; homes where rooftop solar/heat pump not feasible; lower-cost VPP participation
Package 4: Grid Flexibility Package	Smart thermostat + DR enrollment + optional EV charger/smart panel	\$75–\$500	No rooftop work required. Renter-eligible. Lowest cost per kW of VPP capacity (\$80/kW-yr, Brattle/NRDC 2026). Fastest deployment. Heat pump in Package 2 provides complementary DR via pre-conditioning.
Community Solar Subscription	Subscription to offsite community solar array	\$0–\$500/yr net	Renters; multifamily residents; anyone unable to host onsite systems
Weatherization Precursor	Home repair, insulation, air sealing, electrical panel upgrade	\$3,000–\$8,000	Required before solar/heat pump in homes with building condition issues; LMI priority

3.2 Technology Selection Process

A qualified site assessor shall evaluate each enrolled property and recommend the most appropriate package based on: roof condition and solar access; electrical panel capacity; existing HVAC system and heating fuel type; weatherization needs; renter vs. owner status; and participant preferences. The participant makes the final package selection from the assessor's recommendations.

4.1 Equipment Sourcing Obligation

The CEF Board and Program Administrator shall use commercially reasonable efforts to source domestically manufactured equipment for all CGC-funded installations, including battery energy storage systems, solar photovoltaic panels and racking, inverters, and heat pump HVAC systems. "Domestically manufactured" means manufactured in the United States, with priority given to equipment with the highest domestic content percentage as defined by applicable federal guidelines (including IRS Section 48C advanced energy manufacturing standards and IRA domestic content bonus criteria).

4.2 Availability Exception

This domestic content preference does not apply where domestically manufactured equipment meeting the applicable technical specifications is not available within a commercially reasonable timeframe, as determined by the Program Administrator and confirmed by the CEF Board. Any such exception shall be documented in writing and included in the Board's annual public report.

4.3 Installer RFP Requirements

The Program Administrator shall solicit installer(s) through an RFP requiring all bidding installers to:

- Identify the country of manufacture and domestic content percentage for all proposed major components
- Commit to best efforts to source domestically manufactured equipment meeting CEF specifications
- Notify Program Administrator promptly if a proposed domestic component becomes unavailable and document the alternative sourced
- Propose community group purchase discounts where applicable, structured in tiered pricing proportionate to CCEF funds deployed
- Commit to local hiring targets (minimum [25%] of installation workforce from Host Community)

4.4 Installer Selection Criteria

Criterion	Weight	Evaluation Approach
Price per system (by package type)	35%	Lowest compliant bid at specified equipment standards
Domestic content commitment	20%	Percentage of major components domestically manufactured; documentation of sourcing plan
Local workforce commitment	20%	Percentage of installation workforce from Host Community
LMI deployment experience	15%	Prior community group purchase or LMI program track record; references

Technical capability	10%	VPP integration; DERMS compatibility; licensing; warranty terms
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PART 5 — COMMUNITY OUTREACH AND ENROLLMENT

5.1 Outreach Standards

- Trusted messenger network: partner with churches, HBCUs, community centers, food banks, and social service organizations as enrollment partners
- Multilingual outreach: all materials in languages spoken in the Host Community, determined by census tract data
- Community information sessions: offered at varied times and days of the week to accommodate working families; provide childcare and refreshments at all sessions
- Door-to-door canvassing in LMI census tracts within the eligible service area
- At least three community information sessions at accessible locations before closing enrollment

5.2 Renter Strategy

- Identify renters through trusted messenger outreach and tenant organizations
- Offer efficiency package and community solar subscription as renter-eligible options
- Engage landlords in affordable multifamily buildings for heat pump + battery installations with tenant consent
- Enforce 12-month rent increase prohibition for landlord-applied installations as a CEA condition
- Document all renter exclusions and deploy community solar subscriptions as the default alternative

5.3 LMI Categorical Eligibility Verification

Program staff shall verify LMI status through:

- Categorical: self-certification of enrollment in SNAP, WIC, Medicaid, CHIP, LIHEAP, Section 8, or equivalent program (no documentation required)
- Documentation: most recent federal tax return, pay stubs, or employer letter confirming household income at or below 80% AMI
- Area-based: residence in a census tract where median income is at or below 80% AMI (alternative pathway for categorical enrollment in areas without robust means-tested program penetration)

PART 6 — REPORTING AND COMPLIANCE

6.1 Annual CEF Board Report

The CEF Board shall publish an annual report documenting:

- Funds received, funds deployed, and remaining balance
- Co-investment amounts by income tier (LMI, moderate, market-rate) and by package type
- Number of systems installed by package type and income tier
- Households served, broken down by income level, tenure (owner vs. renter), and geography
- VPP capacity enrolled (MW) and grid services delivered (MWh)
- VPP revenue generated, participant bill credits distributed, and CEF reinvestment amount
- Estimated participant payback periods by income tier and package type
- Domestic content achievement rate; any availability exceptions documented
- LMI participation rate and corrective outreach efforts where target is not met