Income-Eligible Multi-Family Deep Energy Retrofit Pathway

Agenda

- Overview
- Rollout & Launch Plan
- Queue

LEAN Income-Eligible Multifamily Pathways

New

Standard Direct-Install	Standard Incentive	Electrification Incentive	DER Incentive
Weatherization, lighting, refrigerators, heating/cooling & DHW systems	Client-managed Wx or heating/DHW system replacement	Under development, replacement of fossil fuel systems to electric	High-level Wx & system upgrades, may include electrification, client-managed

What is an IE DER Project?

A retrofit to an income eligible multifamily building that meets a 40% reduction in site EUI compared to existing building conditions.

1. Must include higher-than standard weatherization and other energy efficiency measures to reach the 40% reduction target.
2. May include electrification of space heating and water heating.
3. Renewable energy systems do not count toward 40% savings.
4. Savings will be projected through an approved TA study (energy model) following program standards.
5. Client-managed, incentive structure.

What is the Incentive?

Fixed at $350 per million BTU (MMBTU) projected savings

- Calculated after energy modeling (TA study) is completed on final scope.
- Not subject to cost-effectiveness at the project level.
- Paid out at the end of construction, after inspection.
- Paid to client or directly to contractor.
    - Not a direct-install pathway.

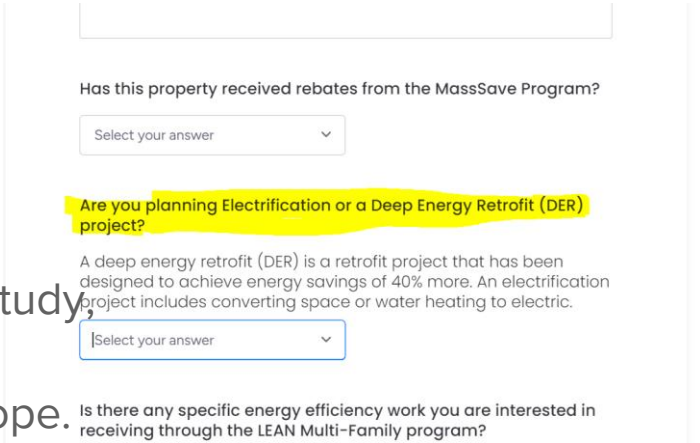
Example: 1,000 MMBTU savings = $350,000 incentive

What are Other Benefits?

- Support for TA study.
  - PAs cover cost, vendors must be approved by LEAN.
  - Details and approach to come.
- Client-managed scope and construction.
  - Contractors subject to PA background check.
  - LEAN conducts usual inspection.
- Commissioning covered by PAs 6 months after construction.
  - Process and products tbd. Client will benefit from final report.
  - Will assess how well the building operates compared to the DER scope and identify corrective actions.
- PR and marketing support - tbd

Requirements

1. Same income eligibility as standard LEAN program.
2. Same application intake, question added.
3. Have a feasible scope for achieving 40% Site EUI savings.
4. Submission of supporting documents: audit, CNA, feasibility study, final scope report, Passive House study, pricing/final bid, LEAN DER template.
5. TA Study (whole building energy model) for final scope.
6. Commissioning 6 months after.
7. Master metering for new electric systems or other approved method for shielding tenants from utility bill increase.



TA Study

Purpose: To establish whether the final scope meets the 40% savings threshold for DER funding and to provide projected MMBTU savings and GHG emissions reduction.

- Not the same as scoping or feasibility study.
- Must be done by LEAN-approved vendor using industry-standard or LEAN-approved tool.
- Supporting documentation required: weather file, list of assumptions & inputs, explanation of deviations, table of baseline usage.
- Representative buildings allowed, must have 1 for each construction type, size, occupancy.
    - For extrapolation, provide equivalent baseline data & accurate gross square footage for all buildings.

Program Definitions & Standards

Audit: ASHRAE LEVEL I, purpose is for complete, detailed building conditions

- Level II not required but accepted, utility cost analysis not required (e.g. SIR)

Modeling for TA Study: Industry-standard software accepted

- No preferred tool but must be appropriate for multi-family
- Proprietary spreadsheets accepted upon approval

Baseline Usage: 2-3 years if possible, standard weather normalization, deviations must be explained

EUI: Site energy use of all fuel sources / gross square footage

Gross Square Footage: Conditioned space + attached, enclosed unconditioned space (attic, basement, garage)

- Don’t include covered porches, parking decks, balconies

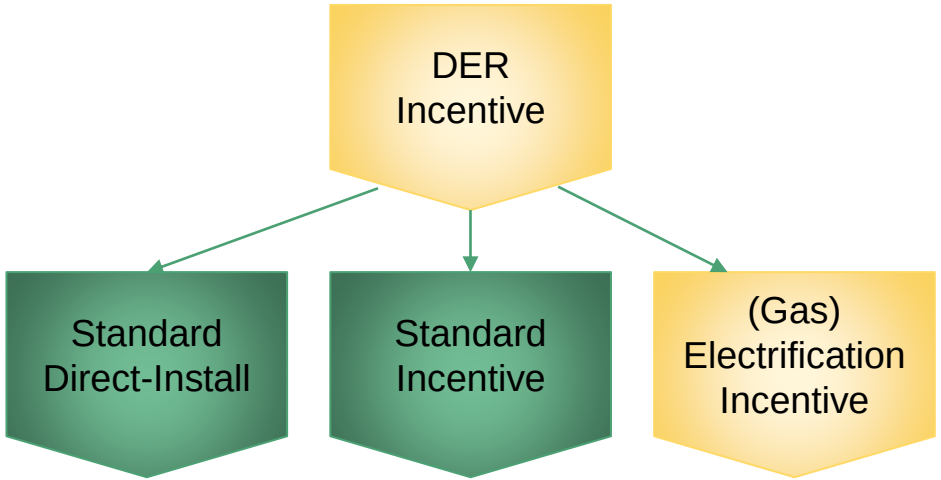
Submission	Discovery & Validation	Approvals & Agreement	Construction & Invoicing	Inspection, Payment, Cx
Client: upfront audit, scoping, design, modeling; submits LEAN application; submits docs & project template	LEAN: compiles docs, review, validation & incentive calculation • Audit if needed • TA study if needed	LEAN: submits for internal & PA approval, sends incentive letter to client Client: signs incentive letter	Client: manages construction, submits invoice to LEAN	LEAN: manages inspection, issues payment, oversees Cx

Process & Responsibilities

Client	Either/Both	LEAN
Notify LEAN of intent	Complete audit	Conduct discovery
Submit LEAN application as soon as ready	Complete TA Study	Validate project, complete Template, calculate incentive
Email documents	Add to Project Template	Obtain LEAN & PA approvals
Fill in as much of Project Template as possible		Notify client
Participate in discovery		Oversee inspection & issue payment
Sign incentive letter		Oversee Cx
Manage construction		
Submit invoices & cooperate with inspection		

What Happens if Project Doesn't Meet 40% Threshold

1. Moved to standard direct-install or incentive pathways (same-fuel heating upgrades or oil/propane to electric, Wx, lighting & appliances).
2. Moved to electrification pathway (gas to electric).
3. Combination.



Coordination with Stakeholders

- LEAN meets regularly with DOER, DHCD, LISC, RMI, City of Boston, MassCEC, key vendors, and others to coordinate funding and iterate pathway.

- Objectives are: to be consistent wherever possible and to optimize funding for each project.

- Clients have option not to share info with stakeholders but are encouraged to allow it.
    - Benefit through exposure to other funding sources and through facilitating discovery.

Milestones & Key Dates

- November: Introduce PA DER Pathway
- December - January: Early Project Review & Pathway Test Cases
- February: Refine Requirements, Engage Stakeholders
- March: Draft Process & Program Resources
  - 3/1: PA Alignment Meeting
  - 3/13: Technical Refinement Meeting
- April: Launch! Info Sessions, Publish Pathway Online, First Project Approval
  - 4/6: Energy Cohort Meeting
  - 4/15: Web Page Live
- May: Construction begins on first approved project
- June: Final Guidance & Requirements
  - 6/15: TA Study Guidance & Vendor List
  - 6/30: MF Electrification Protocol

Program Aids In Development - edited

1. Project Template
    a. Excel/Google Sheets workbook with basic info, energy modeling summary, approvals tab
2. TA Study
    a. Detailed guidance
    b. Approved vendor list
3. LEAN DER Webpage
    a. Links to application & resources
    b. FAQs
4. Cx guidance

DER Project Template

Project Information		Name of Person Completing this Form
Facility Name		
Customer Contact		
Facility Address		
Target Start of Construction		
Number of Buildings included in project		
Number of Units affected by project (across all buildings)		
Total Gross Square Footage (across all buildings)		
Retrofit Goal, if any, e.g. DER, zero over time, Passive House		

DER Program Requirements - In addition to the DER scope and savings requirements, the following factors are required.		
Will the new electrified heat or DHW be master metered (owner pays) or is there another		
Do you agree to participate in commissioning of the retrofit, covered by the utilities, 6+/- months after installation? If no, please explain in column E.		

System Description if not provided elsewhere - Please provide descriptions for the existing conditions, "business as usual" upgrades, and high efficiency upgrades. If there are multiple possible high efficiency upgrades, please add additional columns to describe alternative designs.

System	Existing Building Conditions	High Efficiency Proposal
Envelope		
Heating		
Cooling		
DHW		
Ventilation		
Lighting		
Appliances/other		

Project Costs if not provided elsewhere - Costs should include the materials + installation costs. If design and management costs are known they can be noted, but by default are not considered in the program. Add rows as needed.

Measure Description	DER Costs	Notes if any (e.g. contingencies, options)
Envelope		
Heating		
Cooling		
DHW		
Ventilation		
Lighting		
Appliances/Other		
Total Costs	$ -	

31 Projects In Queue, March 2023

13	**DER**	• 2 Validated, Pending Approval: $1,170,050 • 2 Pending Validation: ~$1,800,000
4	**Gas Electrification (no DER)**	• Case by case PA review • Protocol in development
15	**Leads**	• Pending Submission • Discovery/Discussions in process

DER Contacts, Links

- Application Form:

  leanmultifamily.org
- Inquiry / Interest Form:

  LEAN DER Contact Form
- LEAN DER Webpage: TBD