

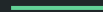
# Income-Eligible Multi-Family Deep Energy Retrofit Pathway

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# Agenda

- Overview
- Rollout & Launch Plan
- Queue



# LEAN Income-Eligible Multifamily Pathways

**New**

Standard  
Direct-Install

Weatherization,  
lighting,  
refrigerators,  
heating/cooling  
& DHW systems

Standard  
Incentive

Client-managed  
Wx or  
heating/DHW  
system  
replacement

Electrification  
Incentive

Under  
development,  
replacement of  
fossil fuel  
systems to  
electric

DER  
Incentive

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.

Has this property received rebates from the MassSave Program?

Select your answer

Are you planning Electrification or a Deep Energy Retrofit (DER) project?

A deep energy retrofit (DER) is a retrofit project that has been designed to achieve energy savings of 40% more. An electrification project includes converting space or water heating to electric.

Select your answer

Is there any specific energy efficiency work you are interested in receiving through the LEAN Multi-Family program?

# 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

**Client:** upfront audit, scoping, design, modeling; submits LEAN application; submits docs & project template

## Discovery & Validation

**LEAN:** compiles docs, review, validation & incentive calculation

- Audit if needed
- TA study if needed

## Approvals & Agreement

**LEAN:** submits for internal & PA approval, sends incentive letter to client

**Client:** signs incentive letter

## Construction & Invoicing

**Client:** manages construction, submits invoice to LEAN

## Inspection, Payment, Cx

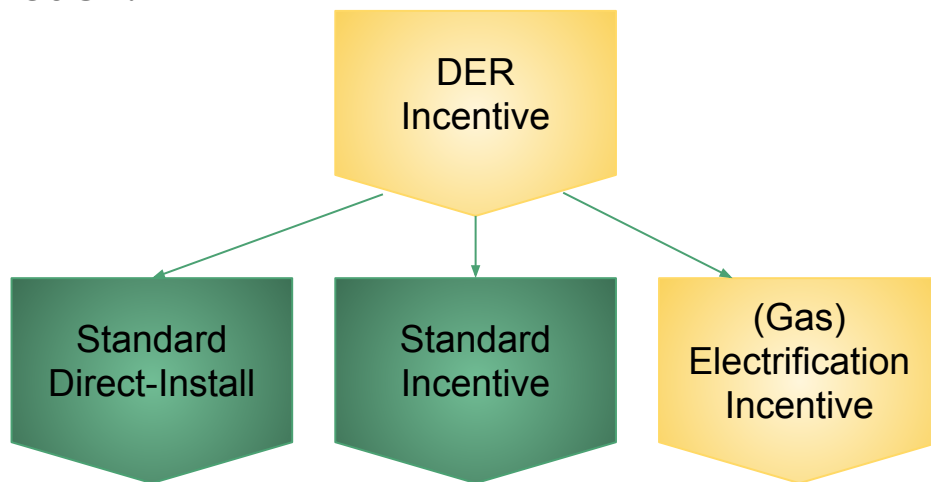
**LEAN:** manages inspection, issues payment, oversees Cx

# 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		
<b>Total Costs</b>	\$ -	



# 31 Projects In Queue, March 2023

13	DER	<ul style="list-style-type: none"><li>• 2 Validated, Pending Approval: \$1,170,050</li><li>• 2 Pending Validation: ~\$1,800,000</li></ul>
4	Gas Electrification (no DER)	<ul style="list-style-type: none"><li>• Case by case PA review</li><li>• Protocol in development</li></ul>
15	Leads	<ul style="list-style-type: none"><li>• Pending Submission</li><li>• Discovery/Discussions in process</li></ul>

# DER Contacts, Links

- Application Form:  
[leanmultifamily.org](https://leanmultifamily.org)
- Inquiry / Interest Form:  
[LEAN DER Contact Form](#)
- LEAN DER Webpage: TBD