



New Construction & Major Renovations (2024)

ENERGIZE CONNECTICUTSM

Memorandum of Understanding for

Path 2: Whole Building Energy Use Intensity (EUI) Reduction

Welcome to Path 2 of the Commercial and Industrial (C&I) New Construction and Major Renovation Program. This participation pathway is intended for customers with large or complex projects who are interested in setting an EUI reduction target that represents a minimum percentage site EUI improvement over a baseline building EUI. The intent of the incentives and technical assistance offered in this pathway is to provide a holistic energy reduction approach that shifts customer and design team focus to expected performance outcomes as they work through the project design.

Definition: Site EUI is a measure of a building's gross annual site energy consumption (including all fuels) relative to its gross square footage. The units are kBTU/sf/year. For this pathway, gross square footage excludes parking garages and penthouse square footage, as these are not typically conditioned spaces. The Program's EUI calculation does not include onsite renewables¹.

Project Eligibility:

1. Projects must have a minimum of 30,000 square feet (sf) of comfort conditioned (heated and cooled) space.²
2. Customer should engage The Companies³ during the project's conceptual or schematic design phases, but before 100% Design Development.
3. Projects must be new buildings, building additions or complete renovations of existing buildings. Qualifying major renovations are such that occupancy is not possible during construction and where the project scope includes at least 3 of the following systems: (1) HVAC, (2) domestic hot water (DHW), (3) lighting, (4) envelope, and (5) process equipment.
4. Buildings should be comfort-conditioned (heated and cooled), but partially conditioned buildings such as warehouses and industrial facilities may be eligible on a case-by-case basis.
5. Core and shell and high-rise multi-family projects may participate in this path⁴.
6. Participants must be a customer of one of The Companies.
7. Projects on campus central plants may or may not be eligible - talk with The Companies to learn more.

¹ EUI calculations will exclude exterior lighting loads (parking garages/lots) and associated loads in garage spaces (i.e. exhaust fans). If there are enclosed spaces in garages with equipment loads (i.e., unit heaters in elevators and lobbies), these loads and square footages will be included in the building's EUI calculation

² The Companies may allow participation in this pathway for energy intensive projects even if they are less than 30,000 sf in size. Please contact us for more details.

³ The Companies refers to The Connecticut Light and Power Company (CL&P) and/or Yankee Gas Services Company each dba Eversource Energy (Eversource) and The United Illuminating Company (UI), The Southern Connecticut Gas Company (SCG), and Connecticut Natural Gas Corporation (CNG), subsidiaries of AVANGRID, Inc.

⁴ Projects that are exclusively tenant fit-outs are not eligible to participate in this pathway.

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Key Customer Commitments:

1. Participating project teams commit to setting an EUI target in early design (at least a 10% site EUI reduction from the Energize CT baseline) and working toward it throughout the remainder of design. Customers also commit to providing design documents to The Companies early in design and to providing drawings at mid-design and at final design.
2. Customers agree to establishing a plan for determining the building's post-occupancy site EUI.
3. Customers must commit to a minimum 25% cost share of the services of a third-party Technical Assistance (TA) consultant (services include energy charrette facilitation, site EUI target setting, energy modeling, and mid-design review/feedback). See more details on cost sharing in the Key Commitments of The Companies section on Page 3.

Table 1: EUI Targets & Incentives

| Path 2: EUI Reduction Incentive Tiers | | | |
|--|-----------------------|----------------|---|
| | Percent EUI Reduction | Incentive Rate | Heat Pump Adder (All Tiers) |
| Tier 4 | 10-15% | \$0.75/sf | Air Source Heat Pumps: \$640/ton capped at Eversource: \$400,000 Avangrid: \$200,000 VFR: \$1000/ton capped at: Eversource: \$500,000 Avangrid: \$300,000 |
| Tier 3 | 15-20% | \$1.25/sf | |
| Tier 2 | 20-25% | \$1.75/sf | |
| Tier 1 | 25% and above | \$2.25/sf | Ground Source Heat Pumps: \$4,000/ton capped at: Eversource: \$600,000 Avangrid: \$400,000 |
| Grid Interactive Efficient Building Incentives | | | |
| Technical Assistance: 75% of fee for a grid-interactivity specialist and/or \$3000 per program paid upon successful enrollment in the demand response, electric vehicle, or battery storage programs. | | | |

* Equipment must be used as a primary heating source to qualify. The heat pump adder is only available for equipment that transfers heat from a source outside of the building (i.e. outside air (OA) or a geothermal source) for space heating purposes. In order to maximize the benefits of electrification designs, supplemental electric resistance and/or fossil fuel use (if any) to the vapor compression heat pump cycle must be limited by having a maximum configured setting of 30°F outdoor air switchover temperature to supplemental heat. Projects not achieving an average annual heating system performance greater than a COP of 2.0 will be considered on a case-by-case basis.

The incentive calculation is based upon the nominal heating capacity (BTU/hr) at AHRI or ISO conditions divided by 12,000.

- Air Source Heat Pumps (ASHP): heating capacity at AHRI standard rating conditions
 - Air-to-Air Systems: AHRI 340/360 - OA 47°F dry bulb (db)
 - Air-to-Water Systems: AHRI 550/590 - OA 17°F db, Leaving Water Temperature (LWT) 120°F
- Variable Refrigerant Flow – Air Source (VRF): heating capacity at AHRI 1230 standard rating conditions
 - Air-to-Refrigerant Systems: OA 47°F db
- Ground Source Heat Pumps: heating capacity at ISO 13256 or AHRI 1230 (if VRF) standard rating conditions
 - Ground Loop Heat Pump (GLHP): 32°F liquid entering heat exchanger
 - Ground Water Heat Pump (GWHP): 50°F liquid entering heat exchanger

Incentives for ground source heat pump projects will be based upon the lesser value of the peak heating load capacity of the heat pump systems or the peak heating load capacity of the geothermal source/wells. Prior to payment of any incentives, confirmation of equipment capacities, quantities, ratings, and system configuration/control settings as installed at the project site will be required.

Note: Total Eversource project incentives are capped at \$2 million per federal tax ID. For projects in Avangrid service territory, please contact your Avangrid representative for information regarding federal tax ID caps.



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Key Commitments of The Companies:

1. Cost share services of a TA consultant (up to 75% of fee or \$20,000 maximum, whichever is less)
2. Assist customer and design team in identifying and evaluating site EUI reduction strategies
3. Offer construction incentives on a dollar per square foot basis, combined with per-ton heat pump adders. The Companies support projects with deeper site EUI reductions with higher incentive rates.
4. Offer Design Team Incentives to qualifying projects
5. Offer an optional Verification Incentive to help customers and their teams achieve the predicted site EUI once the building is operating. Contact The Companies for details about this additional offer.

This document outlines the roles and responsibilities of each party and sets transparent expectations for all parties participating in Path 2 of the C&I New Construction and Major Renovation Program. Under no circumstances does this Memorandum require customers or design teams to incorporate any particular site EUI reduction strategy, nor does this document bind the customer or design team to a particular site EUI target. Further, this Memorandum does not bind the Companies to any particular site EUI reduction strategy and/or any incentive, and any and all assistance offered by The Companies through this Program is offered in an advisory capacity only. Incentive offerings are contingent on availability of funds from the Connecticut Energy Efficiency Fund.

THE COMPANIES UNDERSTAND THAT THE FOLLOWING CUSTOMER:

The Customer (name):

Will undertake the following (check applicable):

| | | | | | |
|---|------------------|--------------------------|-----------------------------------|-----------------------------|---------------------|
| <input type="checkbox"/> | New construction | <input type="checkbox"/> | Major renovation | <input type="checkbox"/> | Addition |
| Project Schedule (Dates) | | 100% Schematic Designs | 100% Design Development | 100% Construction Documents | Expected Completion |
| | | | | | |
| Premises (Address) | | | | | |
| Premises SF (excluding unconditioned space): | | | Premises EUI Target (kBtu/SF/yr): | | |
| This project's design team professionals include: | | | | | |
| Main Contact Name | | | | | |
| Email | | | Phone | | |



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Detailed Process:

Step 1 - Coordination with The Companies

During Schematic Design or in Pre-Schematic Design, inform The Companies of your new construction/major renovation project and schedule an energy charrette before the end of Design Development. The earlier you contact The Companies, the better the opportunity for energy savings and incentives.

The project team will need to identify an EUI target. Eversource will bring in a Technical Assistance (TA) consultant in their territory who will help facilitate the energy charrette, offer guidance on EUI reduction strategies, and help with EUI target setting. If the Customer does not have a modeling TA consultant in Avangrid Companies territory, Avangrid will work with the Customer to find one. In addition to the energy charrette and target setting support, the consultant will offer mid-design feedback and will provide a final energy analysis report showing the final EUI percent reduction from the Energize CT baseline.

We ask that customers agree to cost share the services of the technical assistance consultant.

- The Companies will cover the fees for TA services in this pathway at up to 75% cost share (each project is capped at \$20,000).
- Customer must commit to a minimum 25% of the fee for TA services and must sign a design agreement document committing to this cost share.
- If the Eversource Customer engages an energy modeler not on the TA Provider list, The Companies may only cover fees for TA services in this pathway at up to a 25% cost share (each project is capped at \$20,000).
- Eversource reserves the right to not cover fees for any consultant not on the Eversource Preferred Consultant List.

Step 2 - Develop a Plan for Measurement and Verification of the Project's Operational EUI

In this path, customers are asked to establish a plan for evaluating energy use post-occupancy and verifying that the low EUI target is achieved. Thought should be given to corrective action if, at post-occupancy, the project is straying from the final design EUI. The Companies recommend that the project team submeter in accordance with LEED BD&C v4 Energy and Atmosphere Advanced Energy Metering credit.

An optional Verification Incentive is available to help customers identify issues that may arise related to energy savings post-construction. Ask The Companies for more details. The Companies will reimburse 50% or up to \$10,000 of the fee associated with this work.

Step 3 - Design

The EUI target should be written into the project documents, including the Owner Project Requirements (OPR). The project team will pursue the EUI target throughout design.

Step 4 - Interim Report and Consultation

The TA consultant will produce a model and report based on the 50% or 100% Design Development set. The customer, design team, and The Companies will meet at this time with the TA consultant to review results and recommendations for further reducing the project EUI.

The Companies will lock in the target EUIs at each incentive tier at this time, based on the interim report. The target EUIs will remain locked for purposes of incentives unless there are major modeling concerns, major design changes, or major changes to project assumptions between 100% Design Development and 100% Construction Documents.

Step 5 - Incentive Pre-Approval

Based on 100% CDs, the TA consultant will prepare the final Energize CT energy model in accordance with the CT Energy Modeling Guidelines and a report documenting the final predicted site EUI and the percent EUI reduction from the Energize CT baseline. This model will be reviewed by The Companies and must be approved before any Letter of Agreement (LOA) is issued.

The Companies will require customers to sign the LOA based on the approved energy model that will lead the project to achieve the final design's predicted EUI. The Companies will issue customer incentive offer letters in accordance with the incentive rates shown in Table 1: EUI Targets & Incentive Rates. Customers must commit to constructing the building as it was designed and as documented in the LOA. Major deviations from the design and changes in energy system components, equipment efficiencies and control strategies as documented in the LOA could jeopardize the project's ability to achieve the target site EUI and could jeopardize the customer's opportunity to obtain full incentives.



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Step 6 - Construction Completion, Incentive Payment

A few weeks before substantial completion, customers must provide a set of approved submittals, invoices and photographs corresponding with energy reducing equipment and systems per the 90.1 Section 11 and Appendix G Compliance Form and CT Companion Tool. The Companies may also request a copy of the project's schedule of values.

All projects participating in the Program are subject to inspection by each participating utility provider. Customers may be asked to arrange for these post inspections to take place once the building is ready for occupancy.

After completion of the review of submittals, photographs, Certificate(s) of Occupancy, and invoices, and upon completion of the post inspection, The Companies will make the construction incentive payment to the customer. Where equipment and systems installed deviate substantially from equipment and systems shown in the design documents and LOA, The Companies reserve the right to adjust the customer and design team incentive amounts.

Select projects are subject to 20% incentive hold-back pending receipt of trend data or other information stipulated in the LOA.

The design team is eligible for a Design Team Incentive (DTI) if the modeled site EUI reduction is at least 10% from the Energize CT baseline. This encourages the integrated design and continuous iterative energy analysis that is necessary to achieve the EUI target. DTI is payable at the end of construction in accordance with the rates in Table 2 that follows. The Companies pay the Design Team Incentives to the design team lead who may disperse them to other team members as appropriate.

Table 2. Design Team Incentives

| | | |
|------------------------------|------------------------------------|-------------------------------|
| Whole Building EUI Reduction | 10.0% to 19.9% site EUI reduction | \$0.05/sf, capped at \$10,000 |
| | 20.0% and 24.9% site EUI reduction | \$0.10/sf, capped at \$12,500 |
| | ≥ 25.0% site EUI reduction | \$0.20/sf, capped at \$15,000 |

Engagement with The Companies after Design Development

Project teams and customers who engage with The Companies on qualifying projects after the end of Design Development may participate with The Companies as follows:

- Engagement with The Companies after 100% Design Development and before the end of Construction Documents:
 - ◇ Project teams may still participate in the modeling-only portion of the Path 2 Whole Building EUI Reduction Program at up to 50% Energize CT and 50% customer model cost share.
 - ◇ The early site EUI benchmarking support and the Design Team Incentive will not be available
- Engagement after 100% Construction Documents:
 - ◇ The Path 2 Whole Building EUI Reduction Program as described above is not available, but teams may participate with The Companies by completing appropriate prescriptive and custom applications via the New Construction Systems Path.

IMPORTANT:

Customers participating in this pathway may not also participate in the Energize CT *Midstream (program payments made to distributors) or Express (customer rebate)* programs. To help ensure participation in only one Energize CT program pathway, designers must include language in project documents informing contractors that this project is participating in a Energize CT downstream program pathway, and that they may not pursue or accept any HVAC, domestic hot water, food service or lighting incentives made to distributors for this project. Customers may not separately apply for support through the Energize CT Express offers (which provide rebate payments after equipment purchase and installation).



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By signing below, the Customer represents that they (1) are an authorized representative of the Customer at the Premises and (2) have read and understand the requirements for participation in Path 2 of the Program outlined above. Signing this document does not guarantee payment of incentives nor any commitment financial or otherwise on behalf of the participant. The terms and conditions for receiving incentives will be outlined in the Letter of Agreement (LOA) discussed in Step 4.

| | | | | |
|---|--|--------------------------------|---------------------------------|---------------------------------|
| Customer Signature: | | | | |
| Customer Printed Name: | | | Date: | |
| Design Firm Official Signature: | | | | |
| Design Firm Official Printed Name and Company Affiliation: | | | Date: | |
| AGREED: | | | Date: | |
| AGREED: | | | Date: | |
| The Companies (specific Utility and its representative to be identified) | Eversource <input type="checkbox"/> | UI <input type="checkbox"/> | SCG <input type="checkbox"/> | CNG <input type="checkbox"/> |
| The Companies (specific Utility and its representative to be identified) | Eversource <input type="checkbox"/> | UI <input type="checkbox"/> | SCG <input type="checkbox"/> | CNG <input type="checkbox"/> |



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| For Utility Use Only | | |
|-------------------------------|-------|-------|
| | Email | Phone |
| Project Architect: | | |
| Electrical Engineer: | | |
| Mechanical Engineer: | | |
| Other Contact: | | |
| Electric Company and Contact: | | |
| Gas Company and Contact: | | |

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