

# **New Solutions for New Construction Commercial Program**

Michael Loughlin February 11, 2021







### **Meet the Team**



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## **Agenda**



- **Utility Territory Map**
- Background
- New & Improved Pathways Overview
  - Path 1: Zero Net Energy/Deep Energy Savings
  - Path 2: Whole Building EUI Reduction
  - Path 3: Whole Building Streamlined
  - Path 4: Systems
- New Program Resources
- Questions





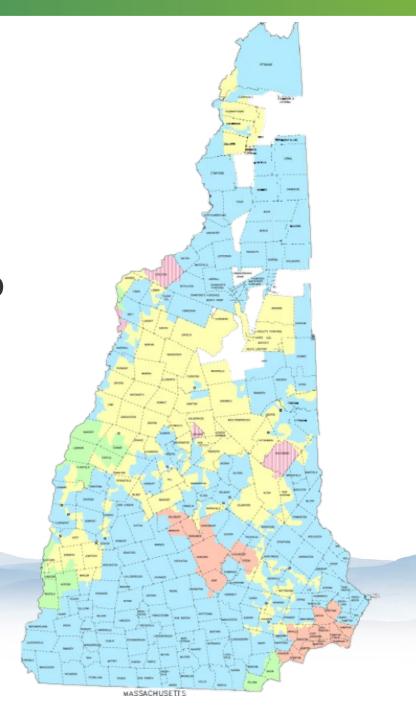






# **Electrical Territory Map**

- = Eversource
- = Liberty Utilities
- = New Hampshire Electric Co-op
- Unitil







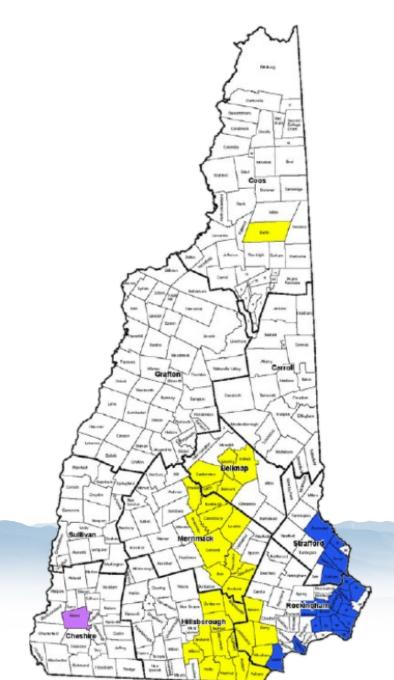




# **Gas Territory Map**

= Liberty Utilities

= Unitil













### **Terminology Primer**

- Energy Use Intensity (kBtu/sf/yr)
- Allows comparison between buildings

**EUI** 



Focuses on robust insulation and air tightness, high-performing glazing, and simplified mechanical systems

Passive House



- Buildings that consume as much energy as they produce over a 1 year period
- Related terms: zero net ready, zero net carbon, zero net emissions

Zero Net Energy













## **C&I New Construction Program Pathways**

The NH Utilities want to reach all NC customers and building types

	Path 1	Path 2	Path 3	Path 4
New Paths	Zero Net Energy/Deep Energy Savings	Whole Building EUI Reduction	Whole Building Streamlined	Systems
Former Paths	New!	Whole Building Performance	New!	Systems (same)











# Path 1: Zero Net Energy/Deep Energy Savings

#### Intent

- Support for small, simpler, fast moving projects or projects in advanced design.
- Optimize equipment and systems for energy efficiency

### Requirements

- Whole buildings projects of any size if they engage Sponsors after the end of design development (late engagement)
- Projects 15,000 sf or less
- Partial building projects

#### **Technical Assistance**

Case by case for custom measures

- Prescriptive and custom applications
- Customer incentives paid upon construction verification













# Path 1: Zero Net Energy/Deep Energy Savings

### Post occupancy

- Participation required through 1 year post occupancy period
- Final incentives based on performance

#### **Technical Assistance**

 ZNE expert provided – participates from feasibility through design development

- Pre-approval at end of design based on design team's model
  Construction incentives: paid at end of construction
- Post occupancy incentives: paid after post occupancy period
- Optional verification incentive













# Path 1: Zero Net Energy/Deep Energy Savings

Customer Incentives				
Construction Incentive	Paid if project design achieves 25 EUI	\$1.00/sf		
Post Occupancy Incentive	Available after 1-year post-occupancy period if project achieves target EUI	\$1.00/sf		
ZNE or PH Certification Incentive	Paid for project ZNE or PH certification	\$3,000		
Design Team Incentives				

Calculated at \$0.20/sf and capped at \$15,000, but not less than \$8,000 per project

Please note: All incentives are subject to funding availability. Certain caps and restrictions may apply.











## Path 2: Whole Building EUI Reduction

#### Intent

Drive projects toward low EUIs

### Requirements

- Minimum 50,000 sf of heated and cooled space
- Engage before 100% Design Development
- Projects meet at least 10% EUI reduction from code baseline

#### **Technical Assistance**

- EUI target setting, & EUI reduction strategy support,
- Energy modeling,
- Mid-design feedback

- Customer and design team incentives paid upon construction verification
- Optional verification incentive













### Path 2: Whole Building EUI Reduction

#### **Customer Incentives**

Percent EUI Reduction (site usage)	Rate
10.0% - 14.9%	\$0.30/sf
15.0% - 19.9%	\$0.35/sf
20.0% - 24.9%	\$0.70/sf
25.0% and above	\$1.00/sf

### **Design Team Incentives**

Based on Percent EUI Reduction	Rates Vary by Tier \$.02 - \$.20	
based off Percent Lor Reduction	(Caps Vary by Tier \$5,000 - \$12,500)	

Please note: All incentives are subject to funding availability. Certain caps and restrictions may apply.







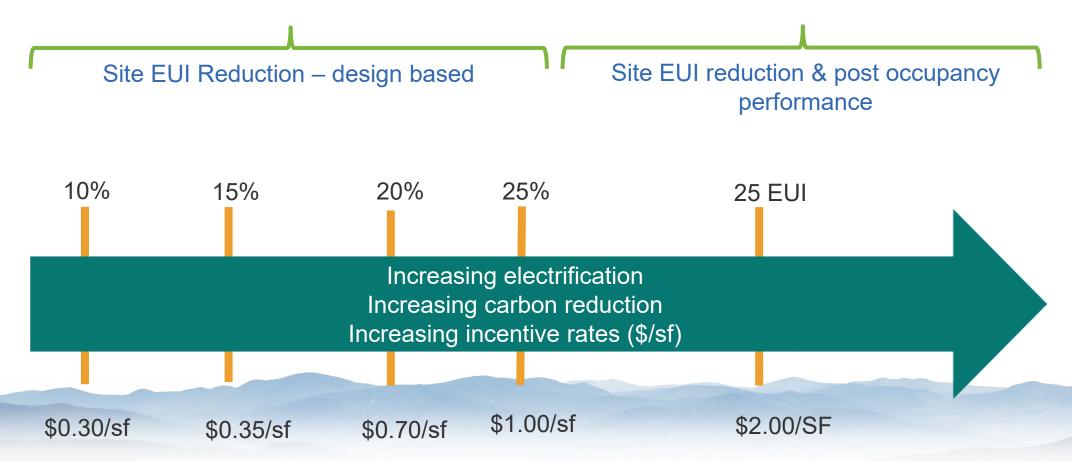




### **Key Program Change – Incentivizing Low Site EUIs**

Path 2: Whole Building EUI Reduction

Path 1: ZNE/Deep Energy Savings













## Path 3: Whole Building Streamlined

#### Intent

- Support for smaller, simpler, fast moving projects
- Customers not focused on EUI Outcomes
- Emphasize Comprehensiveness

### Requirements

- Projects 15,000 to 100,000 sf of heated and cooled space
- Simple buildings with common ECMs
- Customer should engage utility ideally during the project's conceptual or schematic design phases but before 100% design development.

#### **Technical Assistance**

Energy charrette, Mid Design Review, Completion of Whole Building tool

#### **Incentives**

Customer and design team incentives paid upon construction verification













## Path 3: Whole Building Streamlined

Interior Lighting & Networked Lighting Controls

**Exterior Lighting** 

Natural Gas Heating & Hot Water

Envelope

Unitary HVAC (RTU, AC, HP, VRF)

High Efficiency Chillers

Energy Recovery Demand Control Ventilation

Variable Flow Kitchen Hood













## Path 3: Whole Building Streamlined

#### **Customer Incentives**

**Incentive Type** 

Rate

**Custom/electric** 

\$0.30/kWh

Custom/gas

\$2.00/ therm

**Prescriptive** 

Based on prescriptive incentive rate

#### **Design Team Incentives**

Based on kWh/Therm annual reduction

Rates \$0.05/kWh and \$0.30/therm (capped at \$5,000 per project)

Please note: All incentives are subject to funding availability. Certain caps and restrictions may apply.











### Path 4: Systems

#### Intent

- Support for small, simpler, fast moving projects or projects in advanced design.
- Optimize equipment and systems for energy efficiency

### Requirements

- Whole buildings projects of any size if they engage Sponsors after the end of design development (late engagement)
- Projects 15,000 sf or less
- Partial building projects

#### **Technical Assistance**

Case by case for custom measures

- Prescriptive and custom applications
- Customer incentives paid upon construction verification













### **Submittal Process**

Contact us early Submit project information Energy savings analysis Incentive Agreement (LOA) Install equipment Inspection & measure verification Final payments



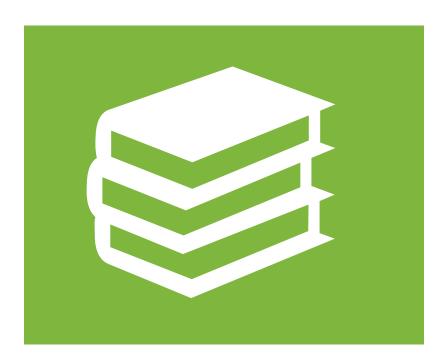








### **New Program Resources**



### NHSaves.com

- Program summary and individual pathway overviews
- Program Memorandums of Understanding (MOUs)
- Follow up e-mail with Webinar recording and program summary













