

2025 Custom Screening Tool

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Topics



Part I: Policy and Purpose

Part II: Initiative Types & Project Baselines

Part III: Tool Updates

Contacts



Part I: Policy and Purpose

Purpose of the Tool



- Determine cost effectiveness of custom projects and determine if they save energy and 2030 GHGs
- Provide uniform screening policies and allocation of project costs and savings across the state
- Uniform documentation of project basics
 - Who was involved (PAs, customer, vendors)
 - Iterations of project screening or evolution of savings
 - Default calculation of kW, energy loadshape, and weighted measure life (for whole building)
 - Remind user how to handle non-central measure inputs (loadshape, secondary fuels, O&M penalties)

Purpose of the Statewide Policies



- Policies are in place to support the purpose of the tool
- Policies are owned by the C&I Management Committee
- Limitations of Screening Policies
 - Policies are only intended to apply within the tool itself to ensure similar results and fair allocation
 - All incentive decisions are made outside of the tool and may consider factors other than the BCR results
 - How the results are used outside of the tool is determined by the individual PA

Spirit of the Final Policies



- Bundling Measures:
 - Screen projects as a bundle measures for one customer at one contiguous location that are all installed at about the same time
 - Initiative and fuel savings selected for each measure can screen multiple initiatives together
- Project Inputs:
 - Gross savings will be used in the screening tool
 - Prescriptive savings should not be used in custom screening
 - Only project costs will be used in the screening tool (Total Resource Costs)
 - Electrification and fuel switching measures should consider **changes to all fuel types** (positive and negative) can include delivered and regulated fuels
 - Project savings and costs must use same baseline
- Screening Results:
 - Screening process should be consistent across the state, although decisions after screening need not be
 - Project BCR more important than measure BCR
 - Payback not emphasized
 - Allocation of savings and costs is done per measures and is based on % benefit of electric and gas benefits for dual fuel measures

Understanding the BCR



- Why? PAs responsible for delivering all cost effective measures to our customers
- Benefit Cost Ratio = $\frac{Sum \ of \ Benefits}{Total \ Resource \ Costs}$
- We use Total Resource Costs
 - Not always equivalent to customer costs
 - Do not remove costs covered by grants, but may remove state and federal tax credits (discuss with PA for more information)
- Benefits are calculated for all inputs, including negative inputs
- Benefits are system benefits
- The BCR is not meant to gauge whether or not a project makes sense for a particular customer, but whether or not the system benefits are high enough to warrant spending ratepayer dollars

Understanding Allocation



- Why? Shared projects should be fairly divided and tracked between PAs in terms of costs and benefits
- Allocation is calculated separately for each measure
- Allocation divides measure savings and costs between the two PAs based on the "PA Claiming Saving"
- If the "PA Claiming Savings" is:
 - Electric
 – all measure inputs are allocated 100% to the electric
 – PA.
 - Gas– all measure inputs are allocated 100% to the gas PA.
 - Dual All electric (kWh, kW) and delivered fuel savings are directed to the electric PA and all natural gas (therm) savings are directed to the gas PA. Other inputs (costs and savings) are allocated to each PA based on the contribution of their fuel benefits.
 - Gas Electrification 62% of all savings (not just electric) goes to electric PA and 38% goes to gas PA



Part II: Initiative Types & Project Baselines

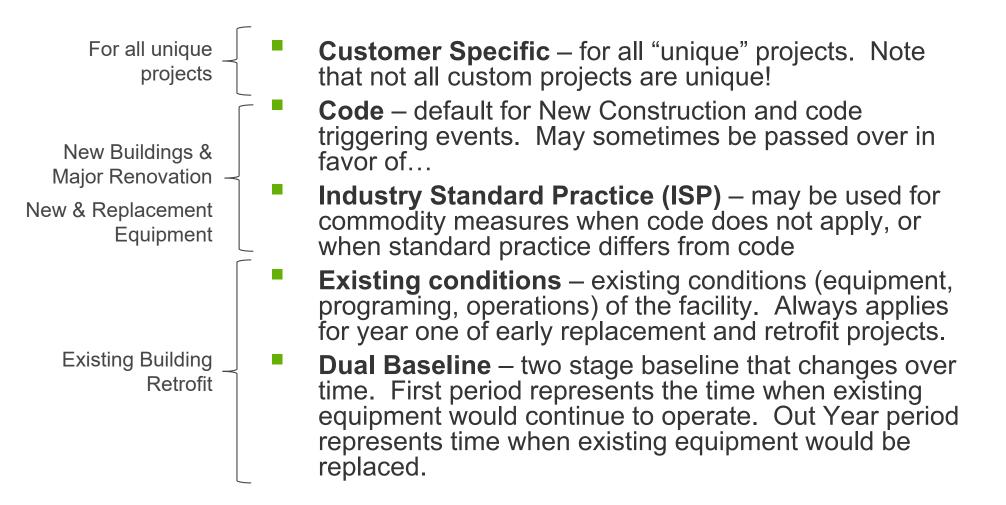
Types of Initiatives



- Projects are broken out into three initiative categories
 - 1. New Buildings & Major Renovation
 - 2. New & Replacement Equipment
 - 3. Existing Building Retrofit
- Different initiatives can have different baselines that impact calculation methodologies

Baseline Strategies





Baseline Repository



- The Baseline Repository is a compilation of the best-known energy efficiency baseline information for commercial and industrial energy efficiency measures in MA
- Purpose of Repository: Minimize baseline risk from project development through evaluation
 - Serves as a central reference for measure baseline information.
 - Leveraged by implementation and evaluation staff
 - Consistent starting point for baseline decisions
- Ongoing refinement
 - Updated whenever a baseline is changed due to targeted primary research (ex. ISP studies) or other findings
 - Undergoes annual review to check for outdated information, errors, etc.
 - Feedback is always welcome!

Repository Content Categories



Evaluator-
vetted
measures

Evaluators are confident in information. Very little risk of baseline changing during evaluation if an evaluator-vetted baseline is correctly applied.

In-progress measures

Evaluators are less confident in information (cannot consider vetted), but may still represent best-available. **Some risk of baseline changing** during evaluation.

Provisional findings

Documentation of project findings and feedback received through the ex-ante review process, Baseline Advisory Group (BAG) discussions, or other evaluation research. Not binding beyond the project for which they were completed, but **provided as informational reference only**.

Repository Content Fields

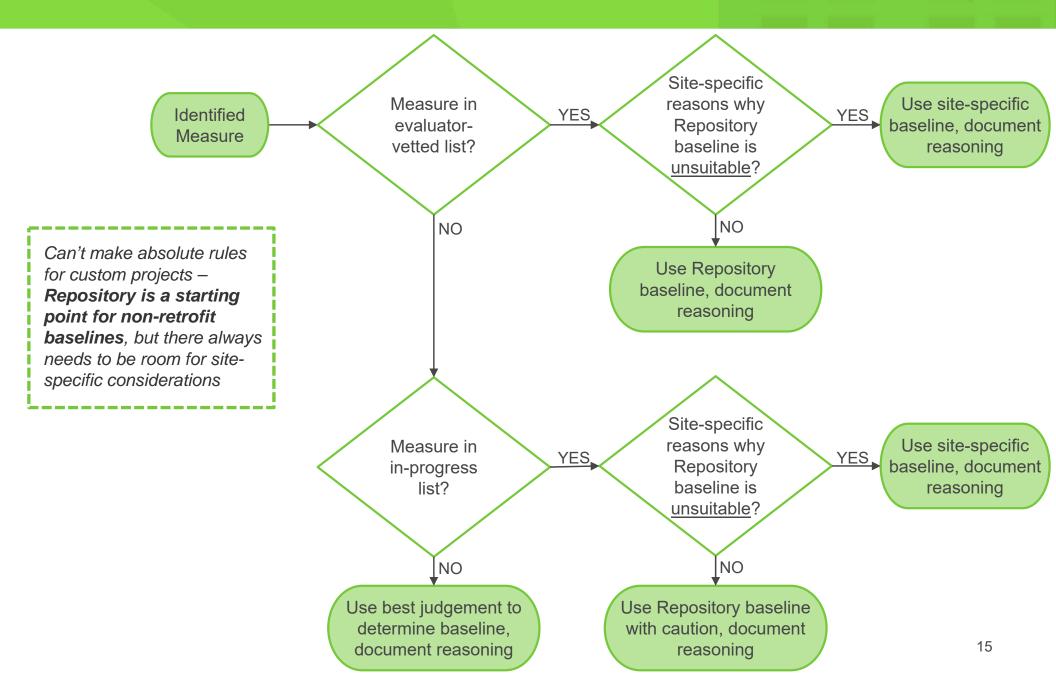


Example of an evaluator vetted Repository entry:

Field	Example Contents
Measure Group Name	Refrigeration
Measure Name	Ultra-low temp freezers (between -70°C and -80°C)
Baseline Relative to Code	ISP in place of code requirement
Baseline Type	Both New construction and replace on failure
Evaluation Baseline Description	Baseline efficiency 0.55 kWh/day/ft3 Ultra-low temp (ULT) freezer definition: "freezer designed for laboratory application that is capable of maintaining set point storage temperatures between -70°C and -80°C."
Next Revision Date	Q1 2029
Study Date	9/19/2023
Notes	Results from 2023 ULT Freezer ISP study report.

Decision Roadmap





How to Access the Repository



- Where to find: MA EEAC website under recent years C&I studies
- Direct link to latest Repository copy: here



Recap



New Buildings & Major Renovation

Measures installed at the time of new groundup facility construction, or as part of a major renovation

New & Replacement Equipment

Measures installed in response to the failure of a previously functioning system

Existing Building Retrofit

Measures installed as an addon to a preexisting system, or installed replace a fully operational preexisting system

Baseline is defined by industry standard practice (ISP). Relevant codes and standards sometimes represent ISP, but not always. Baseline Repository provides a starting place.

Baseline defined by preexisting conditions. If dual baseline: first period represents the time when existing equipment would continue to operate, Out Year period represents time when existing equipment would be replaced.

Note: baseline is customer-specific for all unique measures



Part III: Tool Updates

Updates to 2025 Tool



- Updated for new measures and new electrification tracking methodologies
- Updated AESC, GHG Reduction, and other values for 2025
- Removed some custom NEI entries
- UI Tweaked for more useful Measure and Result Overview
- Better Error Diagnostics
- Streamlined for smaller file size
- Default Loadshapes tab now pre-populates measure-specific % On Peak

Contacts



- General Questions
 - Jerry Song (<u>Jerry.Song@nationalgrid.com</u>)
- Screening Policy Questions Contact the C&I MC
 - Ryan Willingham (<u>Ryan.Willingham@eversource.com</u>)
 - Josh Kessler (<u>Joshua.Kessler1@nationalgrid.com</u>)
- Integrated Design NC Subcommittee
 - Kim Cullinane (<u>Kim.Cullinane@eversource.com</u>)
 - Joel Martell (<u>Joel.Martell@nationalgrid.com</u>)
- Baseline questions your PA evaluation team or the EMC
 - Aakanksha Dubey (<u>Aakanksha.Dubey@nationalgrid.com</u>)
 - William Walker (<u>William.Walker@eversource.com</u>)
- Errors/updates/questions on the tool
 - Jerry Song (<u>Jerry.Song@nationalgrid.com</u>)

Questions?



 If you don't use the tool itself, feel free to drop off



To the Tool!

Thank you

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