



NYSERDA

New York State Energy Code Update Process: ***Criteria for Determining Cost-Effectiveness***

Code Council Meeting
December 1, 2023

Background & Context

Proposed Rule for Determining Energy Code Cost Effectiveness

Public Meeting & Comments

Next Steps

- **The Codes & Standards Act, passed in 2022, changed how New York will approach the cost effectiveness determination of Energy Code updates**
 - NYSERDA is directed to promulgate a rule that:
 1. Establishes a life cycle cost methodology for Energy Code updates, and
 2. Defines societal costs associated with Energy Code updates
 - The Code Council must consider both elements when making a cost effectiveness determination for an Energy Code update

Public Meetings on Proposed *Cost Effectiveness Criteria*
October 2023

NYSERDA Special Board Meeting on *Cost Effectiveness Rule*
November 29, 2023

NOPR of *Cost Effectiveness Rule* Published
NYSERDA January 2024

Cost Effectiveness Final Rule In Effect
July 2024

2024

2025

2026

Energy Code Notice of Rule in Development
DOS March 2024

Energy Code NOPR
DOS September 2024

Energy Code Update in Effect
May 2025

Proposed Rule for Determining Energy Code Cost Effectiveness

Determining cost effectiveness

- The Code Council is required to consider whether the Energy Code update remains cost effective by applying the lifecycle cost methodology and considering secondary or societal effects.
- An Energy Code update can be presumed to be cost-effective where the sum of life-cycle cost savings and the value of societal effects is greater than or equal to zero.

The cost effectiveness Proposed Rule includes:

A. Life-cycle Cost Methodology

- Follows the U.S. Dept. of Energy Building Energy Codes Program *Methodology for Evaluating Cost-Effectiveness of Energy Code Changes*, developed to provide states and local jurisdictions with a standardized approach for use in updating the energy code.
- The Proposed Rule describes where New York-specific refinements to the DOE Methodology will be made for NYS climate zones, construction forecasts, labor and materials costs, energy prices, and average interest rates, and for NYS exclusion of property tax costs.

B. Societal Effects

- Defined as the monetized value of GHG emission reductions resulting from changes in fuel and electricity consumption, calculated using DEC's *Establishing a Value of Carbon: Guidelines for Use by State Agencies*.

C. Cost-effectiveness Presumption

- Establishes a presumption of cost-effectiveness where the sum of life-cycle cost savings and the value of societal effects is greater than or equal to zero.

A. Use computer-simulated models with a 30-year time horizon to determine lifecycle costs:

- Calculate incremental energy (kbtu) and energy cost (\$) savings of the proposed Energy Code compared to existing requirements.
- Calculate incremental costs (e.g., first costs, mortgage, residual value, maintenance) of the proposed Energy Code compared to existing requirements.
- Sum the net present value of these calculated savings and costs to determine energy cost savings.

B. Defines “societal effects” as avoided greenhouse gas emissions:

- Societal effects are to be quantified in dollars.
- Emissions factors are to be applied to incremental energy savings to calculate the emissions output of a proposed Energy Code, determined by NYSERDA in accordance with the *Climate Act*.
- The dollar value of avoided greenhouse gas emissions are to be calculated on an annual basis for the 30-year study period following the DEC’s *Establishing a Value of Carbon, Guidelines for Use by State Agencies*.

Public Meetings & Comments

Energy Law requires meaningful opportunities for comments from impacted segments of the population, including persons living in disadvantaged communities

Four Public Meetings were held in October

- These meetings, three in-person (Albany, Brooklyn, and Buffalo), and one virtual, were the preliminary step in developing a rule to be used by the Code Council to evaluate future revisions to the state Energy Code.
- 520 people registered to attend, 243 people attended, 37 people spoke, 16 provided written comments at the in-person meetings, and 18 comments were separately submitted through the public comment portal or via email during the comment period, which closed November 3rd.

Comments expressed support for this more nuanced approach over the 10-year payback analysis while also suggesting adjustments

- Four main themes of the comments:
 1. Increase the value of societal benefits and reduce costs included in the life-cycle cost methodology
 2. Increase life-cycle costs related to electrification
 3. Provide transparency on costs, discount factors, weather models, and carbon values
 4. Questions on perceived impact on existing buildings

In response to public comments, the Proposed Rule addresses several issues raised

- Identifies all instances where the evaluation criteria differs from the DOE model to align with NYS needs.
 - Areas of refinement: NYS specific climate zones, construction forecasts, labor and materials costs, energy prices, and average interest rates.
- Specifies that the building models baseline for analysis will be the existing Energy Code as well as other legal requirements, like the phase out of fossil fuel equipment and systems in new construction required by the Executive and Energy Laws as updated in the 2023 NYS Budget.
- Property taxes removed from life-cycle costs. In New York State, energy efficiency investments generally have no impact on property assessments.
- Presumes that Energy Code updates for existing buildings will be cost effective if new construction is shown to be cost effective.

Notice of Proposed Rule (NOPR) published

- Published in the *State Register* in late December 2023
- 60-day SAPA public comment period from January to March 2024

NYSERDA Board approval of Final Rule in June 2024

- Final Rule published in *State Register* in July 2024

DOS/Code Council Coordination

- March 2024: Draft Energy Code updates released for public comments
- September 2024: Rulemaking for Energy Code adoption commences
- March 2025: Likely Energy Code adoption
- May 2025: Likely Energy Code effective date

Questions?
