

Executive Summary

2023 RI Energy Measure Life Study

Reliable measure life assumptions are critical for understanding the impact of Rhode Island Energy's energy efficiency programs on lifetime energy savings. For this reason, Cadeo reviewed measure life assumptions to ensure the accuracy of measure life values for prescriptive measures in the state's 2023 Technical Reference Manual (TRM) and Rhode Island Energy's benefit-cost ratio (BCR) models.

Methodology

① *Prioritized*

a list of over 300 prescriptive efficiency measures into "high", "medium", and "low" ranking categories based on each measure's relative contribution to RI Energy's portfolio level expected lifetime energy savings.

② *Scored*

the existing source for every high and medium measure, as well as a sample of low measures, using three factors: source origin (i.e., was it RI- or NE-specific?), robustness (i.e., how strong was the research?), and age (i.e., how recently was the research completed?)

③ *Investigated*

the existence of a "better" source for all measures that scored poorly. Cadeo defined a "better" source as one that scored more favorably than the existing source using the same three review criteria.

Key Takeaway:

In total, Cadeo reviewed **68** prescriptive gas and electric measures across all sectors (commercial, residential, and income eligible), including every high and medium measure and a subset of low measures. Collectively, the measures included in the review represent **85%** of the total lifetime energy savings expected for prescriptive measures for 2023.

Recommended Measure Life Updates

In total, our team identified and recommended a new measure life source and value for 21 of the 68 (31%) reviewed measures, broken down by measure priority group as follows:

High: 2 of the 8 (25%)

Medium: 6 of the 15 (40%)

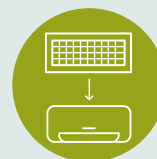
Low: 13 of the 45 (29%)

The net impact of these recommended updates has a small, yet positive, impact on Rhode Island's expected lifetime savings for prescriptive measures. Replacing the existing sources and associated EUL values with those recommended by Cadeo in the memo results in **an increase of 0.3%** in expected portfolio-level lifetime energy savings for Rhode Island Energy prescriptive measures.

HIGH



Wi-Fi
Thermostat



Electric
Resistance to
MSHR

MEDIUM



ERV



Replacement
Refrigerator



Programmable
Thermostat



Heat Pumps



Refrigerator
Recycling



Mini-Split Heat
Pump