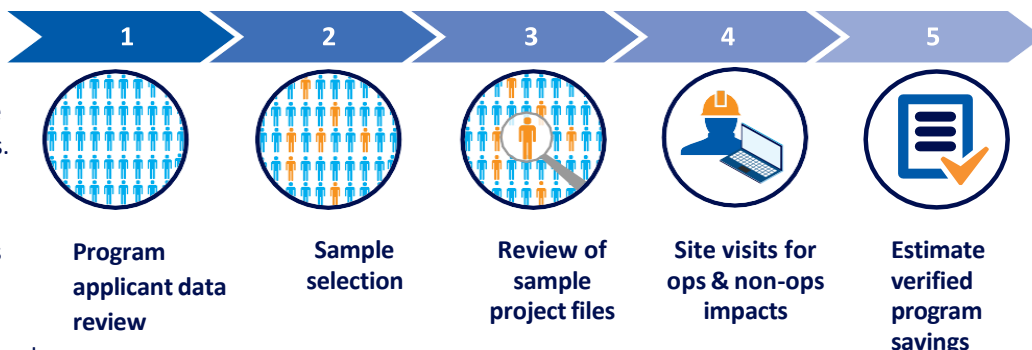


RHODE ISLAND ENERGY C&I CUSTOM ELECTRIC INSTALLATIONS IMPACT EVALUATION - 2021 PROGRAM YEAR

DNV quantified annual electric energy (kWh) savings for custom electric projects completed during the program year (PY) 2021. Those results were then used to calculate a three-year rolling average realization rate using results from PY2019, PY2020, & PY2021.

APPROACH

These projects generally use site-specific customized engineering analysis to generate savings rather than deemed savings estimates. Like the PY2020 study, this year's study calculated savings and realization rates (RR) for non-lighting projects only. This study also verified and re-estimated electric energy savings for the sample of projects through site specific inspection, monitoring and analysis. A total of 10 sites were evaluated in the PY2021 population with Full M&V.



KEY FINDINGS

50M kWh Energy Savings (2019+2020+2021). Three year rolling realization rate is **88%** based on the individual results listed below.

PY2019	PY2020	PY2021
RR 104% (n=15) 13M kWh savings	RR 69% (n=10) 11M kWh savings	RR 88% (n=10) 26M kWh savings

RECOMMENDATIONS

All information and recommendations are from the PY2021 study.

- DNV recommends RI Energy to use 88% RR for non-lighting custom program and continue using 95% RR (from previous evaluation) for custom lighting program.
- DNV recommends RI Energy implementation team conduct a thorough review of baseline assumptions and calculations for measures involving dust collection systems. On future dust collection measures, DNV recommends that program implementers request vendors to provide data showing normalized energy use per quantity of dust removed from the filters, as this was determined to be a defining metric between dust collection vendors.
- For many small saving projects, post inspections are waived. Several of these small projects occur at grocery stores through the Energy Smart Grocer program, for which reach in coolers and grab and go cases are incentivized. DNV recommends that a post inspection is performed to confirm installation location and collect more information if equipment is to be relocated.
- DNV recommends that RI Energy field staff and implementers interview customers on their type of network security anytime a measure involves network and/or Wi-Fi control, such as EMS to understand compatibility with measure being installed.
- DNV continues to note issues related to proper measure commissioning, which has been a driver for discrepancies in this study. We recommend that RI Energy ensure proper commissioning protocols are followed to ensure that key measure components are installed and are generating savings.
- DNV recommends RI Energy continue evaluating lifetime savings and reporting them at the site level in all future custom electric evaluations.

Installed measures

- HVAC
- Refrigeration
- Energy management
- Roof Top Units
- Process equipment
- Compressed air
- and more