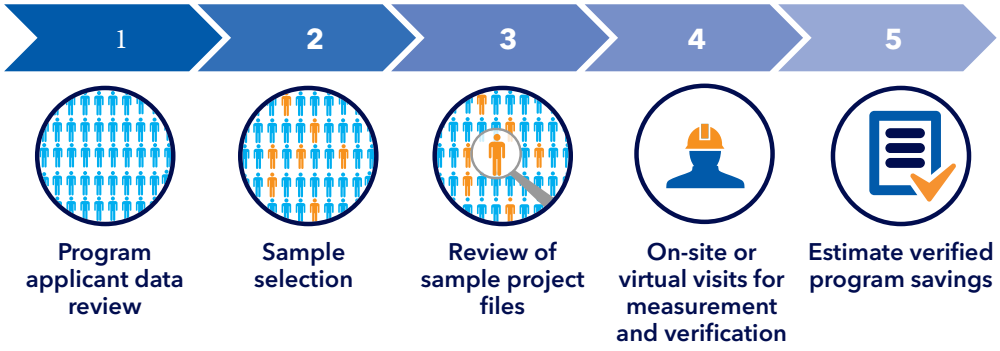
IMPACT EVALUATION OF PY2023 CUSTOM GAS INSTALLATIONS IN RHODE ISLAND

DNV quantified natural gas savings for custom gas projects completed during the 2023 program year (PY). This year's three-year rolling average realization rate is calculated using results from PY2021, PY2022, and PY2023.

APPROACH

Annual sample evaluations: Measurement and verification (M&V) is repeated annually as the previous year's tracking data becomes available.

The overall program realization rate (RR) combines the latest three-year results. The realization rate is the ratio between evaluated and tracking savings. If RR=100%, then applicant estimated savings were verified and consistent with on-site findings.



Site Types

Non-steam trap: Non-steam trap sites are sites which do not involve steam traps as an energy efficiency measure. These sites were evaluated with on-site visits and included the collection of operational data through M&V, collection of customer-provided trend data, or both. The evaluators used the data to produce verified savings analysis and realization results.

Steam trap: Steam trap sites are sites in which steam traps are the energy efficiency measure. This typically involves the repair or replacement of failed or faulty steam traps. In PY2023, steam trap sites are in a separate sample from non-steam trap sites and were not evaluated this program year because they typically result in a 100% realization rate.

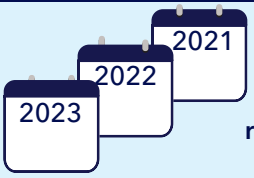
KEY FINDINGS

In PY2023, seven non-steam trap sites were evaluated, which consisted of on-site visits with data collection through equipment metering or customer-provided operating data. The number of sampled non-steam trap sites and results are shown for each year of the three-year rolling evaluation below:

PY2021	PY2022	PY2023
RR 86% (n=4)	RR 103% (n=5)	RR 40% (n=7)
0.65 million therms savings	1.09 million therms savings	0.17 million therms savings

238 Program participants 2021-2023

16 Participants evaluated 2021-2023



3 year Rolling realization rate average = 86%

RECOMMENDATIONS

- Project implementers should list all assumptions, inputs, and sources in savings analysis spreadsheets, linking them to where they are applied.
- Energy models should be calibrated to site-specific data and checked against billing records to catch unrealistic assumptions early.
- Accurately enter all measures into tracking systems before post-inspection, and complete documentation (including TA studies and supporting reports) should be maintained in project files.
- Treat multi-measure projects as interactive systems by standardizing inputs and assumptions across measures within a project to avoid inconsistencies.

Installed measures

- Pipe insulation
- HVAC equipment
- HVAC controls
- Energy management system
- Energy recovery
- Steam trap insulation