

2022 Commercial and Industrial Programs Free-Ridership and Spillover Study

Objective

Tetra Tech quantified the net impacts of Rhode Island Energy's 2022 commercial and industrial (C&I) electric and natural gas upstream and downstream energy efficiency programs.

The net-to-gross (NTG) rate: The NTG rate is the rate of program-attributable savings to program gross savings. It is calculated as follows: **100% – free-ridership + spillover**.

Free-ridership: Program participants who would have installed the same high-efficiency equipment on their own at that same time if the program had not been offered.

Spillover: The adoption of additional energy-efficient measures of the same type implemented without assistance from the program due to program influences.

Methodology

Tetra Tech conducted surveys with a sample of 2022 program participants, market actors, and distributors in each of the C&I electric and natural gas programs.

198
Surveys

---- ACROSS ----

9%
Response Rate

35%
Response Rate
(16 Distributors)

Distributor

243
Measures

22% **5%**
Downstream Upstream

28%
Response Rate
(18 Vendors)

Vendor

The 2022 study included the following Commercial & Industrial programs:

- New Construction
 - Design 2000 (electric)
 - Large Commercial & Industrial New Construction (gas)
- Retrofit
 - Energy Initiative (electric)
 - Large Commercial Retrofit (gas)
- Small Business Solutions (electric, gas)
- Upstream Gas (gas)

Net-to-Gross Results

Tetra Tech, with input from Rhode Island Energy, combined NTG estimates across fuel types, programs/pathways, and measures to report unique NTG estimates by program and delivery type/pathway.



Low NTG Rates

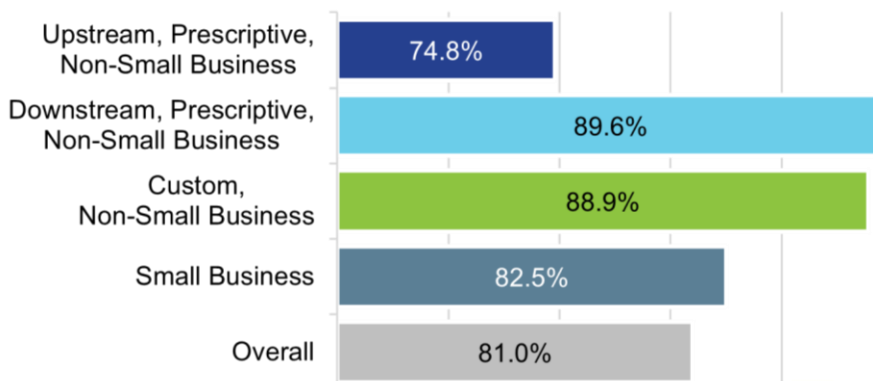
- The lower the rate, the more *likely* the customer was to have installed equipment without the program.
- **Fewer savings** are attributable to the programs.



High NTG Rates

- The higher the rate, the more *unlikely* the customer was to have installed equipment without the program.
- **More savings** are attributable to the programs.

Electric and Natural Gas NTG Results



Recommendations

Rhode Island Energy should adopt these values in its 2025–2026 program design and evaluation.