

Rhode Island Commercial Food Service Equipment ISP Study

Executive Summary

DNV conducted an **industry standard practice (ISP) kitchen equipment study** because of the new Rhode Island Appliance Standards that went into effect on January 1, 2023. The study characterizes ISP in Rhode Island (RI) for commercial kitchen equipment by **incorporating the new standards** and the **prevalence of used equipment** in the marketplace. The study's primary focus was on **commercial fryers, ovens, steam cookers, hot food cabinets, and dishwashers**, due to their relative magnitude of historical program savings.

This study effort was intended to provide **new baseline recommendations** to be applied prospectively to PY2024 and beyond. The **key research question** for this effort was to understand the extent to which used equipment is sold in the market and should therefore be reflected in the baseline assumptions.

Methodology and Approach

To develop the recommended ISP baselines and updated deemed savings and demand values, the team conducted background research, interviews with market actors, and a survey of end users.

Results/Key Findings and Conclusions

Measure	% New Equipment	% Used Energy Star	% Used Standard
Fryer	87% Energy Star V2.0	2% Energy Star V2.0	11% Energy Star V2.0 – baseline
Oven	83% Energy Star V2.2	2% Energy Star V2.2	15% Energy Star V2.2 – baseline
Commercial dishwasher	83% Energy Star V2.0	0% N/A	17% Energy Star V2.0 – baseline
Hot food holding cabinets	86% Energy Star V2.0	0% N/A	14% Energy Star V2.0 – baseline
Steam cooker	100% Energy Star V1.2	0% N/A	0% N/A

Used equipment does play a role in the commercial food service industry. Across the commercial kitchen equipment market, customers estimated that used equipment accounts for about 15% of sales and distributors estimated that used equipment accounts for 12% of sales. Estimates of the percentage of used equipment varied by equipment type – used equipment was most prevalent for fryers, ovens, dishwashers, and hot food holding cabinets. The average age of used equipment was two to three years.

Replace on failure vs. new construction. DNV did not find any difference in the percentage of used equipment for commercial food service equipment installed as a replace on failure vs. a new construction project.

Recommendations

1: Adopt the baselines outlined by equipment type in the study appendix. These are based on the new food service equipment standards and our primary research. For fryers, ovens, commercial dishwashers, and hot food holding cabinets, we recommend a weighted baseline that takes used equipment into account. The ISP baseline for steam cookers should be the appliance standard requirements, due to a lack of evidence of used equipment.

2: Update TRM with new savings values. We recommend adopting the updated energy savings and demand savings shown in the body of the report. DNV also recommends listing all relevant savings parameters in the TRM. Currently, only the idle energy rate and efficiency level are listed in the TRM.