

Evaluating Energy Efficiency

Project Updates - Oct. 2023



► FY2023-2024 Evaluation Strategy

BPA contracted with Evergreen Economics, SBW Consulting, and Apex Analytics in 2018 to plan and conduct their Energy Efficiency impact and process evaluations. The contractors are currently undertaking evaluation activities identified in the latest evaluation strategy. [Follow this link to review the full evaluation strategy.](#)

► Impact Evaluation Activities

Impact evaluations estimate the energy savings achieved by programs and assess their cost effectiveness, in addition to identifying ways to improve the programs, with a focus on increasing savings.

Nonresidential Lighting Impact Evaluation: BPA is currently conducting an impact evaluation of our nonresidential lighting portfolio to understand savings performance and identify recommendations for improving the reliability of savings. The [study research plan](#) includes engineering modeling, the collection of project files, and site visits, of a statistically representative sample of 38 projects (meeting and exceeding BPA's sample precision targets). The sample ensured a representativeness for both Option 1 and Option 2 utility projects, and allocated more points to projects with higher energy savings. Sampled projects are from 18 utilities.

Thank you to those utilities for working with BPA and its contractors to provide project data and facilitate end user cooperation. The final report will be released in early 2024.

Residential Air Source Heat Pump and Variable Speed Heat Pump Impact Evaluation: BPA is also conducting an impact evaluation of savings from residential electric forced air furnace conversions to air source heat pumps (ASHPs) and variable speed heat pumps (VSHPs). Residential ducted heat pump conversions continue to be important measures for BPA and its customer utilities. Therefore, to support a better understanding of these conversion savings in the field as well as regional research needs, this evaluation will estimate energy savings for specific measure applications with the Regional Technical Forum's "planning" status: ASHP conversions in heating zones 2 and 3 and VSHP conversions in heating zones 1, 2, and 3, for single family versus manufactured homes. We requested billing data from 1,330 sites with recent heat pump conversions across 23 utilities to ensure a representative sample that meets the RTF minimum requirements.

Thank you to those utilities for providing data to help us with this important study. The evaluation team will analyze the billing data from these sites to estimate savings and analyze drivers of savings to inform the Residential HVAC program planning. The final report will be released before summer 2024.





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▶ Process Evaluation Activities

Process evaluations focus on identifying opportunities to streamline program processes, to make participation more convenient and appealing for participants, and to allow programs to deliver incentives and support utilities and end-users more effectively and efficiently.

Low-Income Process Evaluation: BPA is currently conducting an evaluation of its Low-Income Energy Efficiency program to explore opportunities to increase program participation and facilitate greater adoption. This evaluation focuses on the public utility energy efficiency incentives and includes a best practices review, stakeholder interviews and demographic analysis. The best practices review will identify findings from other utilities, regions, and states to help BPA leverage existing protocols to offer low income programs in a more equitable and efficient way. Stakeholder interviews with BPA's customer utilities and community action agencies seek to understand barriers to offering and reporting low income measures, and how to overcome them. Finally, the demographic analysis portion of the research will characterize the low income population in BPA's service territory and offer an opportunities assessment for future program outreach. The evaluators have completed four focus groups and 28 interviews with utilities and CAP agencies. The final report will be released in early 2024.

BPA Evaluation Schedule

Evaluation Activity		FY2023			FY2024								
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Impact	Nonresidential Lighting												
	Residential HVAC												
Process	Low-Income EE												



Learn more at:

www.bpa.gov/energy-and-services/efficiency/evaluation