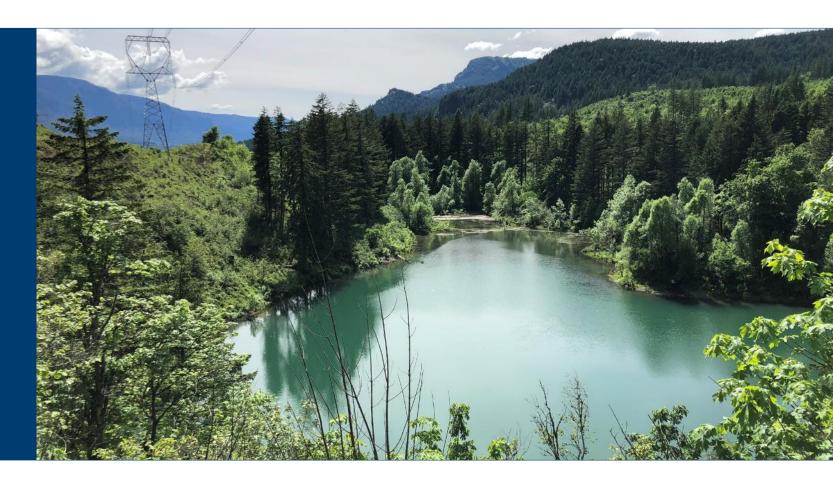
BPA'S LOW-INCOME ENERGY EFFICIENCY PROGRAM

Process Evaluation

External Results Presentation





Agenda

01	Study Background
02	Research Objectives and Approach
03	Low-Income Program Background
04	Findings (Conclusions)
05	Recommendations
06	BPA Program Response

What's Coming Up Next?

Final Report

- Will be posted to the BPA website

BPA Response to Recommendations

 Memo addressing the evaluation findings, recommendations and BPA plans for change

Evaluation Background

Process Evaluation



- Seeks to understand why and how a program/offering is working
- Provides actionable insights for improvements
- Supports BPA's goals of customer service and financial stewardship

Teams

BPA Core Team

Hanna Lee

Planning and Evaluation

Melissa Podeszwa

Energy Efficiency Representative

Amy Burke & Kirsten Midura

Low-Income Programs

Michele Francisco

Marketing Specialist



Contractor Team



Lauren Gage
Joe Van Clock
Michelle Pham



Tami Rasmussen Kayla Kirksey 02

Research Objectives & Approach

Process Evaluation Objectives



Investigate the size, location, and characteristics of BPA low-income population to understand scope of opportunity

Assess **EEI-supported** low-income program activity among BPA utilities

Understand utilities' experience with BPA policies and practices around low-income **EEI measures**

Identify opportunities to expand program activities and/or offerings to increase **EEI-funded** low-income activity

Process Evaluation Approach

Activity name	Objective	Data Source
BPA Program Data Analysis	Understand level of program activity	BOOM reportIS2.0 databaseBEETS data (2023)
National Program Review	Identify common challenges and potential solutions	 Conference proceedings (ACEEE Summer Study, IEPEC) US DOE Resources US EPA Resources
Demographic Analysis	Estimate number of qualified households in region Locate and assess characteristics of areas with high concentrations of qualified households	US Census Bureau data
Interviews	Understand utility & CAP agency approaches to, and experience with, low-income measures & BPA processes	 Group interviews (9 utilities in 3 groups; 3 CAP agencies in 1 group) Individual interviews (23 utilities; 10 CAP agencies) 26 interviewed utilities had low-income programs, 6 did not

03

Low-Income Program Background

Low-Income Program Background

Not just weatherization measures!



EEI-Funded Measures

- Evaluation focus
- Guided by BPA's Implementation Manual
- Some measures with set payment limits and some paid 100%
- Coverage of repair costs
- Qualifying households meet up to 200% Federal Poverty Line or state or local criteria



State & Tribal Grants

- Separate BPA funding source
- State and tribal noncompetitive grants
- Requirements key-off of DOE Weatherization
 Assistance Program and BPA EEI UES measures
- Repair, training & admin cost coverage

Low-Income Project Process: One Example

Documentation & Reporting





Post QA Audit

Oversee

Installation



"It takes time and energy and effort and project management to bring these projects to completion."





Verify Income

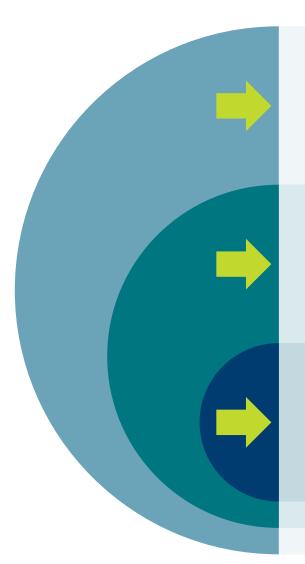
Identify Measure Opportunities





Pre-Audit

Implementation Approaches



CAP Agency Collaboration

- Most common (19 interviewed utilities)
- Allows for braided funding from multiple sources

Self-Administered

- Second most common (5 interviewed utilities)
- Allows utilities to prioritize EEI funding and potentially bypass waiting lists

Third-Party Implementation Contractor

- Least common
- Reduces burden on utility staff but is costlier than other options

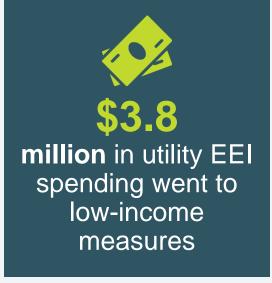
Low-Income Program Uptake



Approximately 614,500 households that earn 200% of the Federal Poverty Level or less are served by BPA utilities based on Census data

In 2022...









04 Findings

Conclusion 1

BPA's low-income program is a valuable resource for Northwest utilities.

Utility Incentives Add Flexibility to Low-Income Offerings



Allows utilities to serve low-income customers directly and with flexible, prescriptive measure offerings

Anyone that comes to us, we have been able to help right now.

(Utility respondent)

[The deemed measure list] was the best thing BPA ever did, in my opinion.

Prescriptive measures not subject to prevailing wage and SIR requirements



(CAP Agency respondent)

Conclusion 2

Measure cost caps constrain program activity.

Typical Installation Costs Often Exceed Caps

- Many utilities could not install certain measures within IM cost caps
 - -Few utilities can provide self-funding
- Some utilities did not offer/advertise measures where installation was likely to exceed cap
- BPA increased cost caps with 2024/2025
 Implementation Manual



ASHP & Window Costs Caps Are Most Challenging for Utilities

The 2024-2025 IM increased the cost caps. Interviewed utilities viewed the increases positively, but it was too early to tell whether they would cover most installations.



Conclusion 3

Limited installer availability is a critical barrier

Three Key Factors Limit Installer Availability

Competition with construction trades that provide easier working conditions

"Training someone to do this...
over time, so they don't get freaked out
by crawl spaces, is a challenge and
we're trying to work through it."

Training and certifications required by other entities can be infrequent and costly.

May require travel and lost revenue from time spent out of field

Increased administrative burden can make agency work less attractive

"People just don't want to take the time to do it because right now there is so much private work out there, they don't need to do it."

Conclusion 4

Utility staff capacity constraints limit low-income activity

CAP Agency Limitations Motivate Utilities to Self-Administer



CAP agency waiting lists can range from a few months to two years

Frustration with **long waiting lists** & **inability to scale up** is a motivator for utilities to implement programs in-house or through implementation contractors

We have said [to our CAP agency partner], 'if we can provide more funding, can you do more homes?' And the answer has been 'no, we are at our administrative capacity to implement.



They were having a hard time using the funds that we allocated for them.





In-house implementation is also labor intensive and subject to contractor availability

Utility staff constraints limit low-income effort

Utility staff have limited time to devote to low-income programs

- Typically oversee multiple efficiency programs (and potentially full efficiency portfolio)
- May have additional responsibilities, beyond efficiency programs

Low-income program administration is labor-intensive

- Self-administered programs must oversee all aspects of delivery
- Successful CAP agency partnerships require hands-on coordination and collaboration

Utilities Need Materials and Support to Build Relationships

Challenges forming/maintaining relationships with CAP agencies



"I am the only staff member that handles...
our energy efficiency measures... My bandwidth
to develop our programs is pretty limited."

Would like **simple**, **streamlined program materials** for utility staff and to **explain the program to potential partners**

Conclusion 5

Increased low-income funding may compete with other priorities.

Limited EEI Budgets Serve Low-Income and Standard Programs



Six utilities reported demand for low-income measures that exceeded their funding availability

"It was heartbreaking to have to shut [the program] down in September, when the annual funding allotment was exhausted."

"We're trying to find a balance between helping low-income customers and having an affordable, cost-effective portfolio" Four utilities noted ensuring cost effectiveness or balancing EEI across customer types could limit low-income spending

Many jurisdictions with leading low-income programs separate funding and/or goals for low-income from standard programs



Conclusion 6

There may be opportunities to broaden and expand program outreach.

Households Need Support and Help Overcoming Stigma



More pressing priorities

"Vulnerable populations have more challenges than remembering to work with a landlord to install a ductless heat pump."

"Our area has a lot of retired folks, and there is a pride element about reaching out for help."

Stigma around accepting assistance



Conclusion 7

It is difficult to accurately track the extent of low-income activity in the region.

Three Large Utilities Do Not Report Some or All Low-Income Activity

- All are urban utilities and have significant low-income activity.
- Reasons for not reporting focused on incompatibility of internal and/or partner data systems with BPA reporting requirements:

Extracting individual measures from whole-home projects

"If you have a project that has five measures, we don't report any of them, as it becomes more challenging."



Flagging customers as low-income in internal data systems

A Diversity of Funding Sources Makes It Difficult to Track Overall Activity

Low-income retrofits can be funded from one or more of:

- BPA utility incentives
- BPA state & tribal grants
- Federal programs (WAP, LIHEAP, etc.)
- State programs
- IOU funding
- IRA Funding (coming soon)



05

Recommendations

Recommendations

Conclusion	Recommendation
d Measure	Assess whether measure cost cap benefits justify constraints placed on the program.
cost caps	If caps are justified, develop a systematic approach to set and regularly update them.
3 Installer availability	Consider opportunities to increase contractor availability and CAP agency capacity including: • Workforce development efforts • Increased incentives to support measure installation in remote areas. • Incentive adder explicitly targeted toward admin costs
4 Utility staff capacity	Consider opportunities to provide administrative or staffing support. Options include: • Materials to help build CAP agency partnerships • Third-party implementation support • Direct support for CAP agency liaison positions

Recommendations

Conclusion	Recommendation
	Consider funding and utility incentive structures that distinguish low-income activity from other EE programs
5 Funding Competition	 Acknowledges that benefits of serving low-income customers go beyond energy savings alone
Competition	Potential approaches:
	 Funding solely designated to support low-income measures
	Specific targets for low-income activity
6 Expanded Outreach	Consider broadening low-income offerings to take a more expansive view of equity and shift away from "low-income" terminology
	Develop standardized reports for low-income EEI funding as well as state grant funding
7 Activity Tracking	Consider supporting research to characterize the low-income retrofit activity occurring in the Northwest, across funding sources
	Consider creating a pathway in the IM to capture whole home retrofits

This is the start of a conversation and not the end of one.

BPA will be planning what changes to implement and how in the short-term, near-term, and long-term.

Priority Efforts

- 1 Improve Collaboration
- 1 Improve Workforce Support
- 03 Discuss Benefits of Payment Caps
- 04 Improve Tracking & Reporting
- **05** Determine Key Program Goals
- O6 Collaborate on Income Qualification
- 7 Address Measure Gaps

Longer-Term Research Equity in Programs

01

Improve Collaboration

- Restore the BPA Low-Income Workgroup
- Determine how to help utilities more adequately fund CAA admin costs
- > Reconcile differences between the whole-home vs. deemed measure approaches
- Better align utility EEI and BPA grant program funding sources
- Increase collaboration with regional IOUs to attempt to align where possible to reduce administrative burden

02

Improve Workforce Support

- Consider leaning on other program resources to effectively recruit and collaborate with regional contractors and support utility needs
- Use demographic analysis workbook to focus efforts on high-potential, low uptake areas
- Discuss possible path to provide resources to utilities who want to fund workforce training and education

Payment Cost Caps

03

> Review the effectiveness of payment cost caps

If payment cost caps remain, develop a more streamlined process for updating & communicating cost caps using acquired market data

Improve Tracking & Reporting

04

- > Resolve issues that prevent some utilities from reporting their LIEE work
- ➤ Improve tracking of Low-Income EEI and Grant activity in BEETS, giving BPA, utilities, and states a better snapshot of regional LIEE activity
- Increase report-out of LIEE activity and showcase benefits of this work, including non-energy benefits

Determine Key Program Goals

05

- Given BPA's unique role in the region, determine if specific spending or uptake goals for low-income activity would be a benefit or hindrance
- Further research the **non-energy benefits** on resident's resiliency

Collaborate on Income Qualification

06

- Collaborate with affiliated agencies on how to more easily cross-share incomequalification of residents to reduce duplicative efforts
- Collaborate with DOE, state, and IOUs on **income qualification requirements** since CAAs often follow the most stringent policies out of all funding sources
- Consider an easier approach to income-qualify mobile home parks

Address Measure Gaps

07

- Build out more opportunities for multifamily buildings and renters
- Explore options for low-income new construction and small commercial measures
- Clarify guidance on allowable repair costs
- Explore a whole-home measure approach

Research Equity in Programs

Longer-Term

- Consider impacts of defining and developing more equitable approaches to implementation, not just within residential
- Discuss how EE can consider impacts of resiliency on how energy efficiency is framed

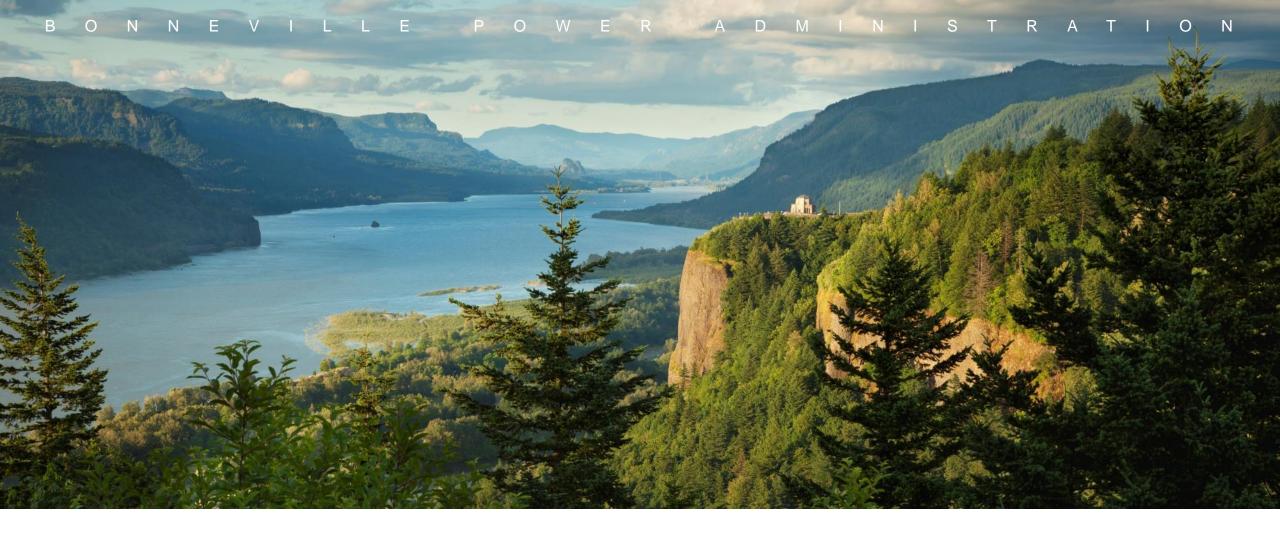
Tasks Already Completed & In Progress

- Added new LIEE measure opportunities for DHPs in Multifamily and a LIEE Custom Project & Program Payment Rate
- Increased payment cost caps for several measures
- Progress on changing the program name of "Low-Income" to remove stigma and highlight non-energy benefits more effectively
- Progress on improving grant data collection and reporting
- Progress on developing a process for capturing case studies
- Progress on streamlining collaboration with Oregon stakeholders,
 CAPs, and IOUs

Questions, Comments, or Suggestions?

Have additional questions or comments?

Email evaluation@bpa.gov.



Thank You!

Questions? Email evaluation@bpa.gov

