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October 4, 2023

### **MEMORANDUM**

**TO: Council Members**

**FROM: Annika Roberts & Laura Thomas**

**SUBJECT: 2022 Regional Conservation Progress Report**

### **BACKGROUND:**

**Presenter:** Annika Roberts & Laura Thomas

**Summary:** On behalf of the Council, the Regional Technical Forum (RTF) conducts an annual data collection of the region's energy efficiency programs to understand energy efficiency savings and expenditures from the prior year. This is known as the Regional Conservation Progress (RCP) survey and report. The purpose of the RCP is to track and report on the region's progress relative to the Council's Power Plan goals.

At this meeting, staff will present the 2022 RCP Report, which provides an update on the region's progress relative to the energy efficiency goals in the Council's 2021 Power Plan. The report comprises data from all the efficiency programs in the region: Bonneville and its customer utilities, the region's investor-owned utilities, the mid-Columbia utilities, Energy Trust of Oregon, and the Northwest Energy Efficiency Alliance. The report also includes data on total market savings, capturing additional savings occurring outside of direct program acquisition. These data provide an understanding of the cost-effective energy efficiency savings acquired in the region and related expenditures for 2022. This time period represents the first year of the 2021 Power Plan's Action Plan period, and is the first account reporting to these goals.

Relevance: The 2021 Power Plan established a goal range 750 aMW to 1000 aMW of conservation acquisition by the end of the six-year action plan period (2027). For the purposes of tracking, this goal has been apportioned annually, consistent with the Plan’s conservation ramp rates:

	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
<b>750 aMW Annual Target</b>	90	102	115	131	146	166
<b>750 aMW Cumulative Target</b>	90	192	307	438	584	750
<b>1,000 aMW Annual Target</b>	120	136	154	174	195	221
<b>1,000 aMW Cumulative Target</b>	120	256	410	584	779	1000

Per its charter, the Regional Technical Forum is responsible for tracking the region’s progress against the plan goals.

Workplan: A.1.1 Tracking and reporting on energy efficiency accomplishments relative to the 2021 Power Plan Conservation Program.

More Info: The final report against the 7<sup>th</sup> Power Plan’s conservation target can be found here: <https://rtf.nwcouncil.org/about-rtf/conservation-achievements/2021/>

# 2022 Regional Conservation Progress Survey Results

October 12, 2023

Council Meeting

Annika Roberts and Laura Thomas



Northwest **Power** and  
Conservation Council

# What is the Regional Conservation Progress (RCP) Survey?



As directed by congress, every year the RTF is tasked with surveying the region's utilities on their energy efficiency achievements



The Plan sets forth a program with targets and goals for the region to achieve, and the RCP is an annual progress report against those goals



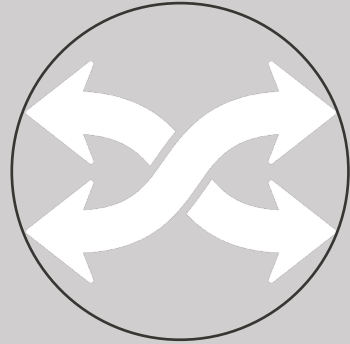
2022 is the first year of the 2021 Power Plan period making this the first RCP reporting to the new Plan

# 2021 Power Plan Resource Strategy



## Energy Efficiency

Acquire between 750-1,000 aMW



## Demand Response

Examine demand response products that can be deployed frequently at a low cost



## Renewable Resources

Acquire at least 3,500 MW



## Existing Resources

Increased reliance on existing hydro and thermal generation to provide reserves for the system

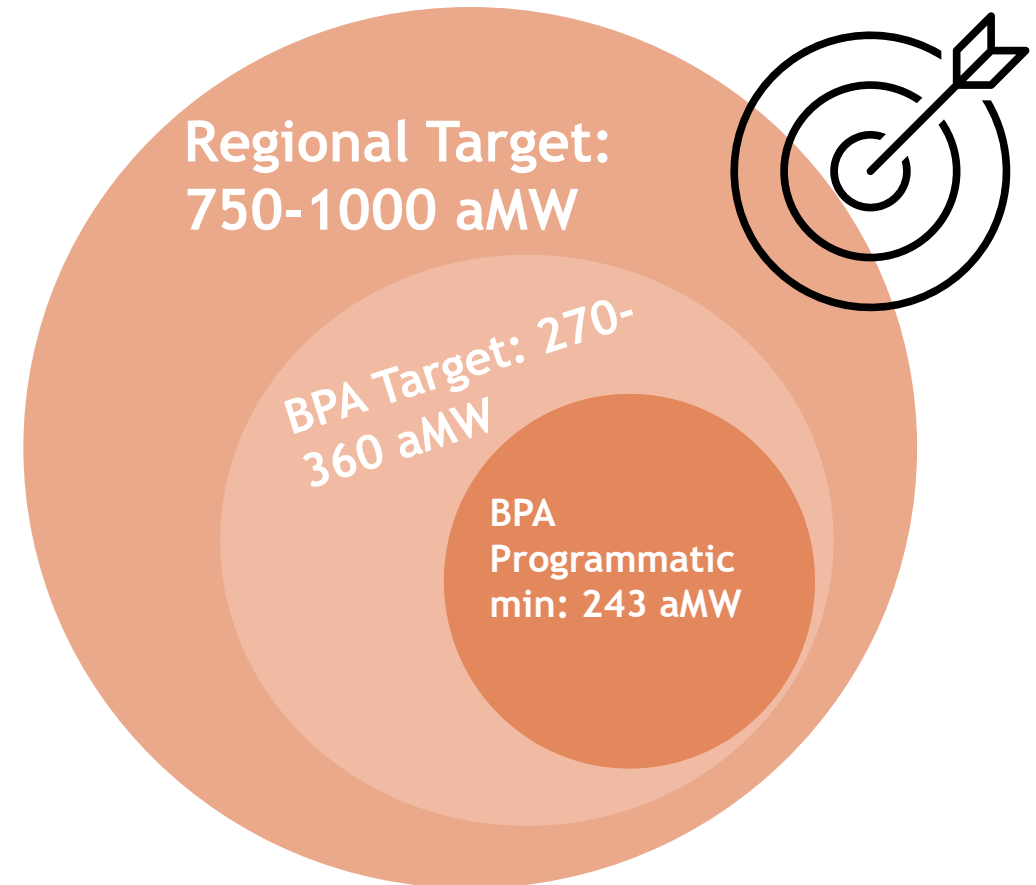


## Regional Collaboration

Explore potential costs and benefits of new market tools in collaboration in region and others in the Western Grid

# 2021 Plan 6-Year Conservation Target

- Target continues to represent the cost-effective conservation found in the 2021 Plan
- The program also recommends achievements above and beyond cost-effective EE in jurisdictions pursuing aggressive decarb goals, in the interest of supporting small/rural utility programs, and to capture weatherization laggards left behind by past programs
- Successful implementation of the Conservation Program requires that the region achieve more than just the target amount of conservation



\*The BPA targets were developed based on the portion of cost-effective energy efficiency in the Bonneville utility footprint

**Cost Effective:**

- Program Savings
- Codes & Standard
- NEEA Alliance Savings
- Market Savings

**Target**

**Additional Program Elements**

- Wx for Non-Weatherized Homes
- EE Serving Decarb Goals
- EE Targeted at Rural Markets

**2021 Plan Conservation Program**

# Types of Conservation Savings in the RCP

## Program Saving

Savings that come from specific energy efficiency measures incentivized by utility efficiency programs

## NEEA Initiative Savings

Savings achieved by the NEEA alliance for market transformation activities across the region

## Market Savings

Energy efficiency occurring in the region that is a result from previous program or NEEA activity, but not directly tied to program or NEEA incentives today

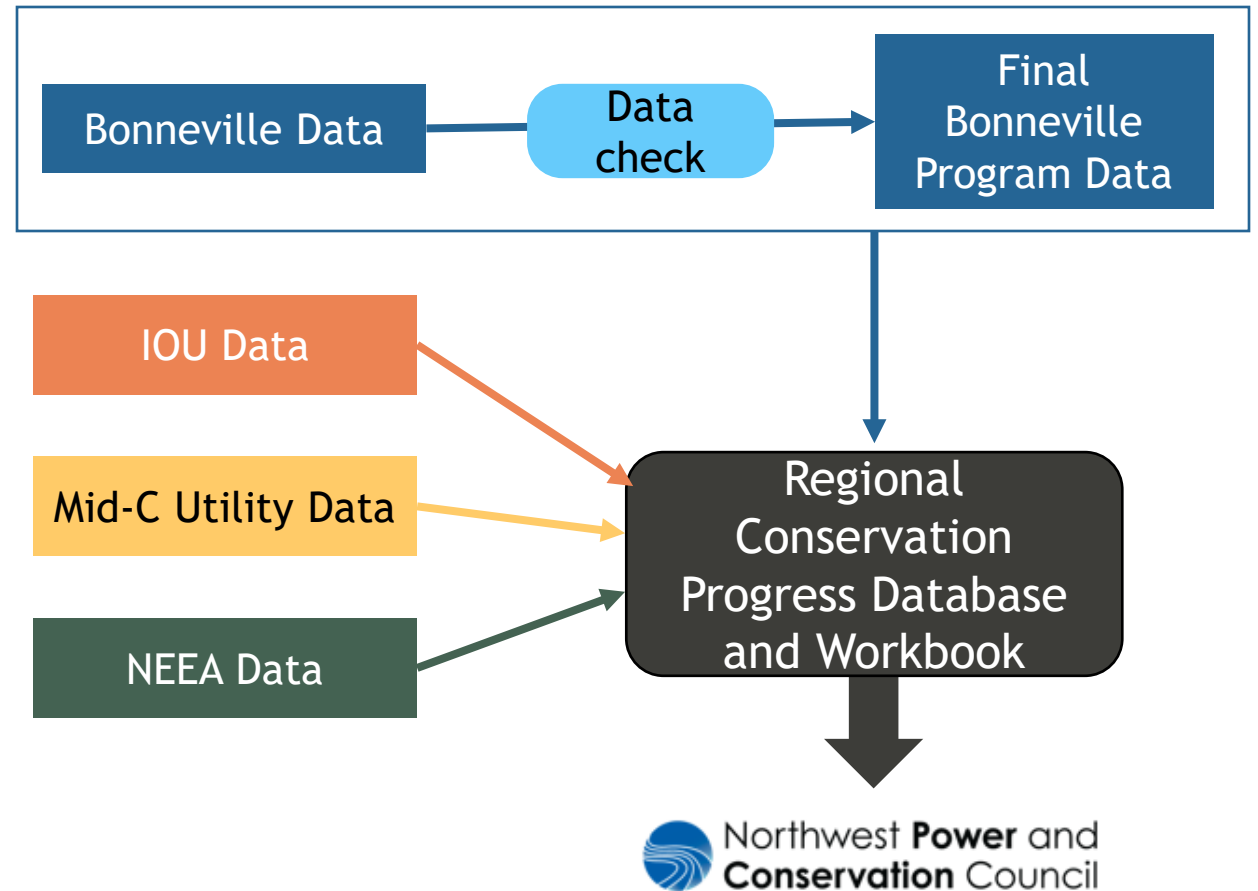
## Codes and Standards

Savings captured when new building codes or equipment standards are put in place after completion of the power plan



# Data Collected

- 2022 Savings
  - As much detail as possible
- 2022 Expenditures
  - Aiming for total expenditures
- 2023-2024 Projections
  - Forecasted savings and expenditures, where available



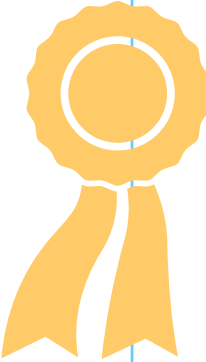
# Acknowledgements

- Kevin Smit
- Tina Jayaweera
- Jennifer Light
- Consultants (Apex)
- Responding Utilities



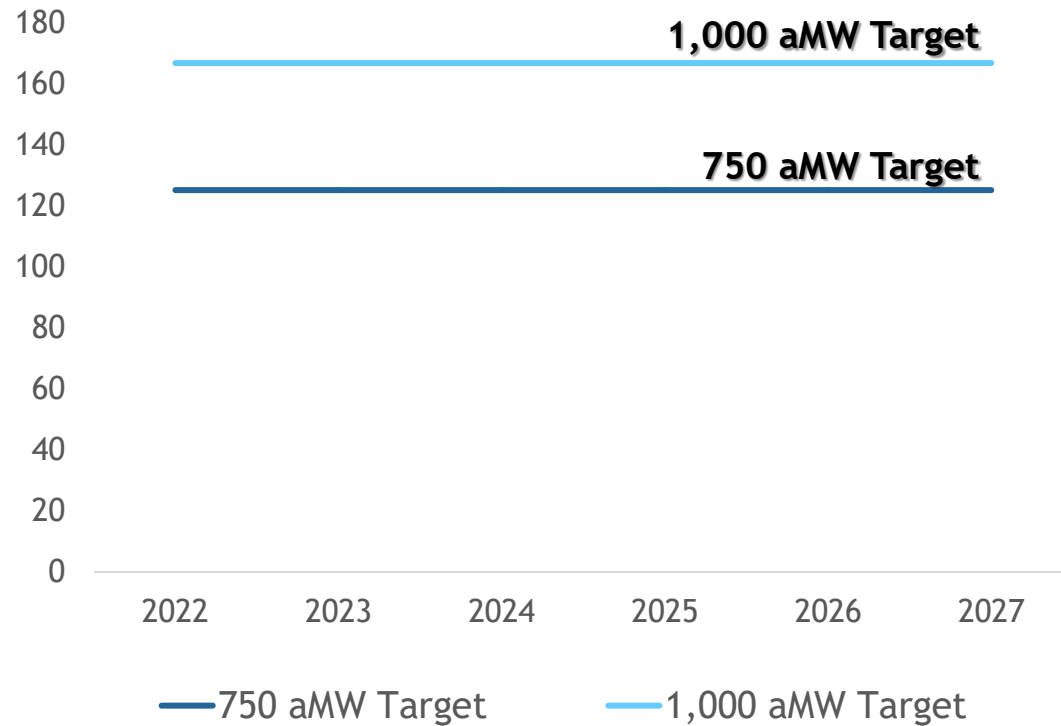
Thank you to the Regional Utilities who provided data:

- Bonneville Power Administration
- Puget Sound Energy
- NorthWestern Energy
- Avista
- Idaho Power
- Energy Trust of Oregon
- PacifiCorp
- Chelan County PUD
- Grant PUD
- Douglas PUD
- Northwest Energy Efficiency Alliance
- BPA Utilities:
  - Seattle City Light
  - Snohomish County PUD
  - Franklin PUD
  - Tacoma Power
  - Cowlitz PUD
  - Grays Harbor PUD
  - Clark PUD
  - United Electric Coop
  - Emerald PUD

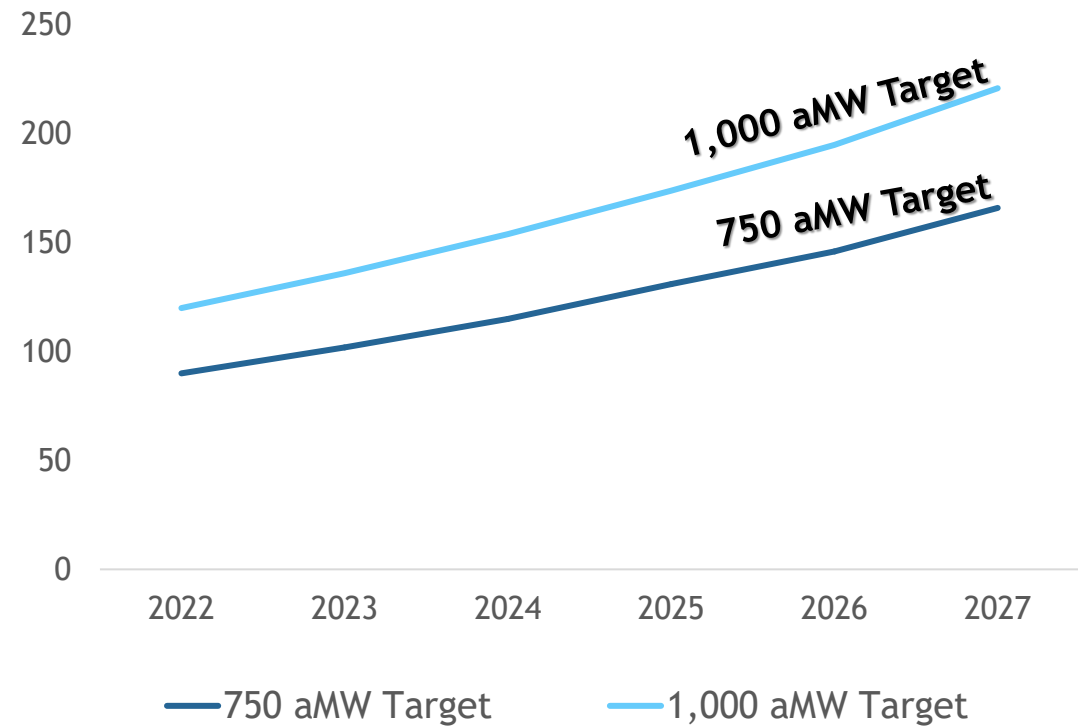


# Look at Target in 2 ways

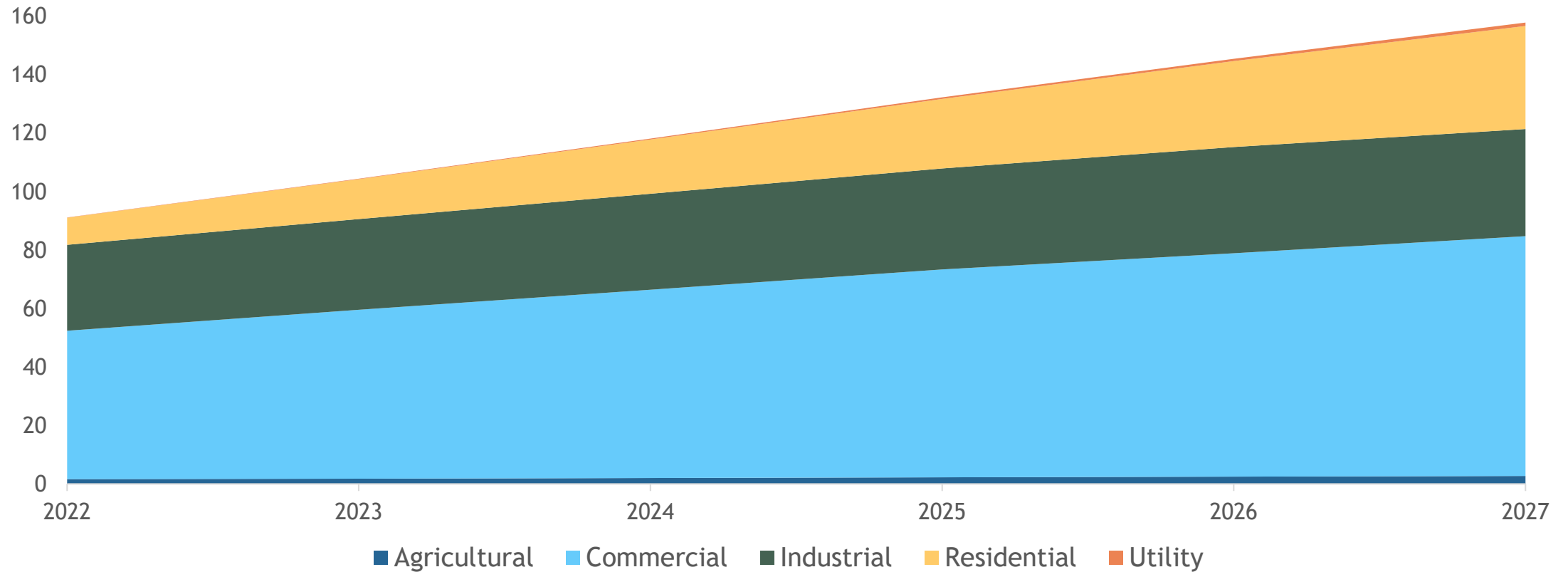
- Even Distribution



- Potential Ramps over time



# Annual Cost-effective Conservation Potential in 2021 Plan by Sector

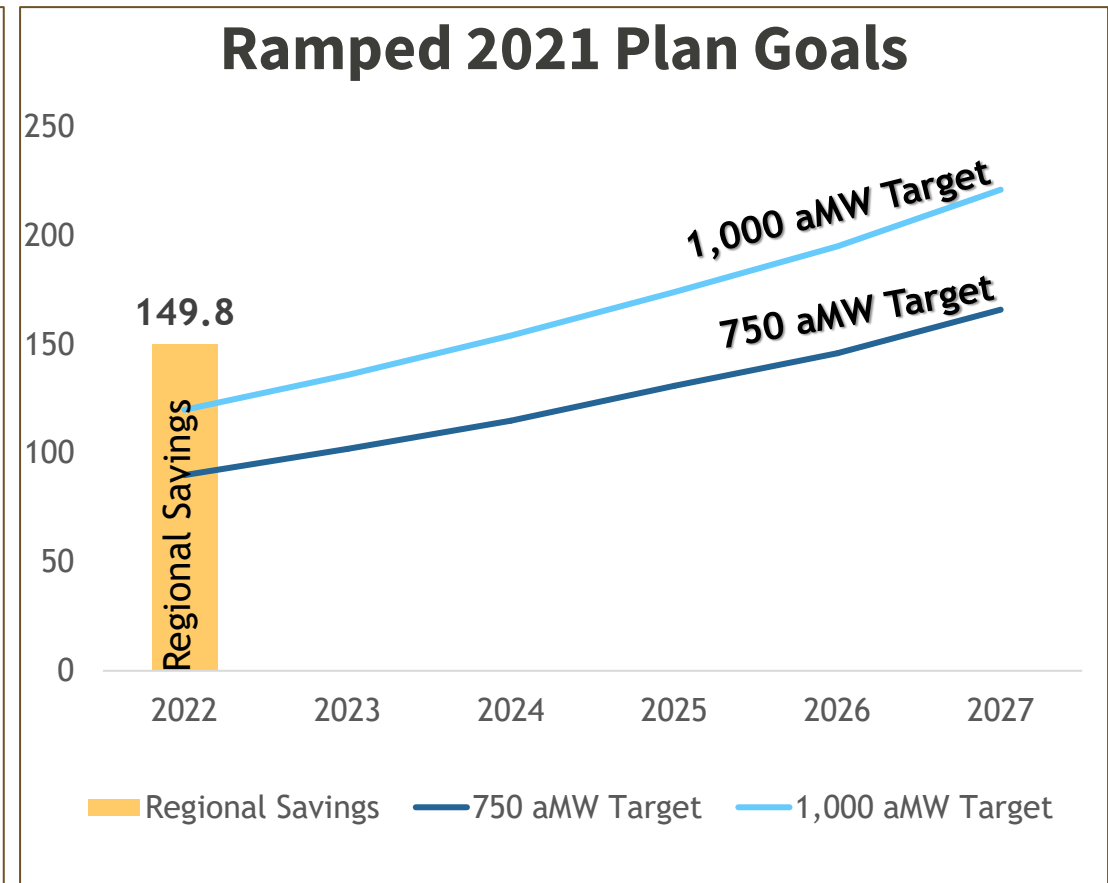
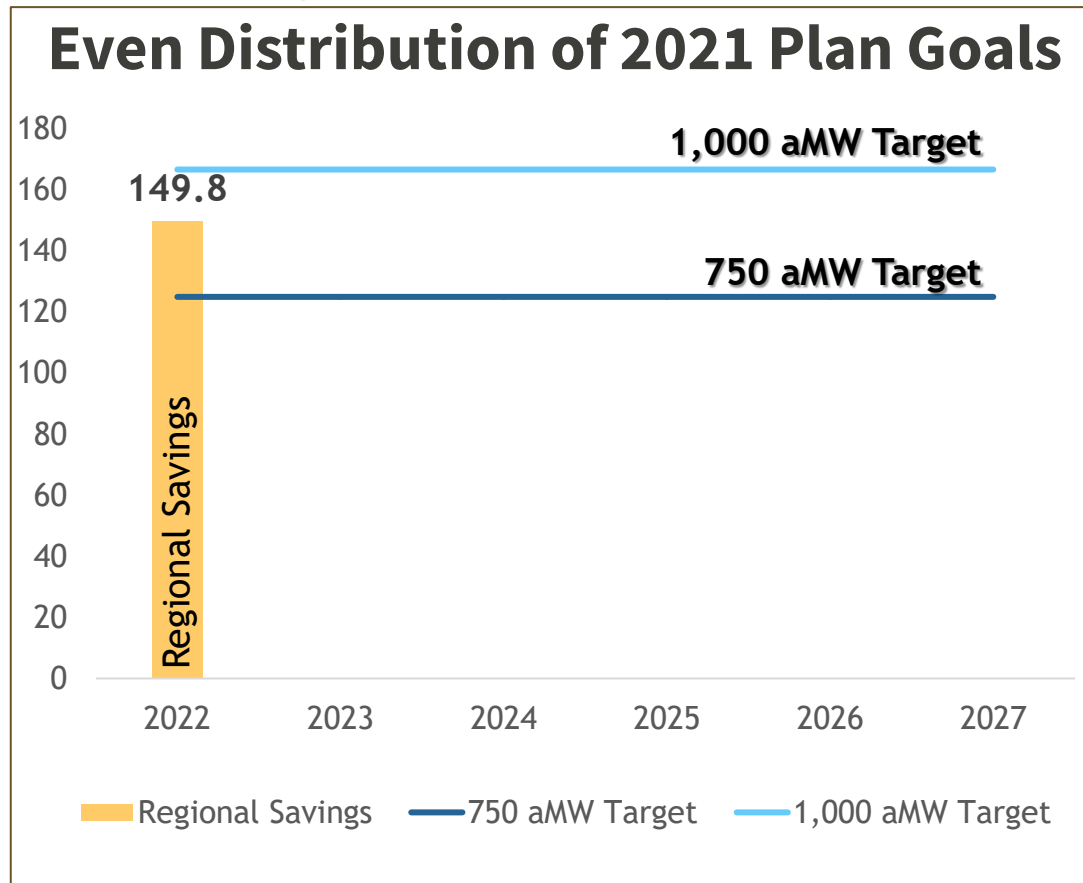




# 2022 RCP Results

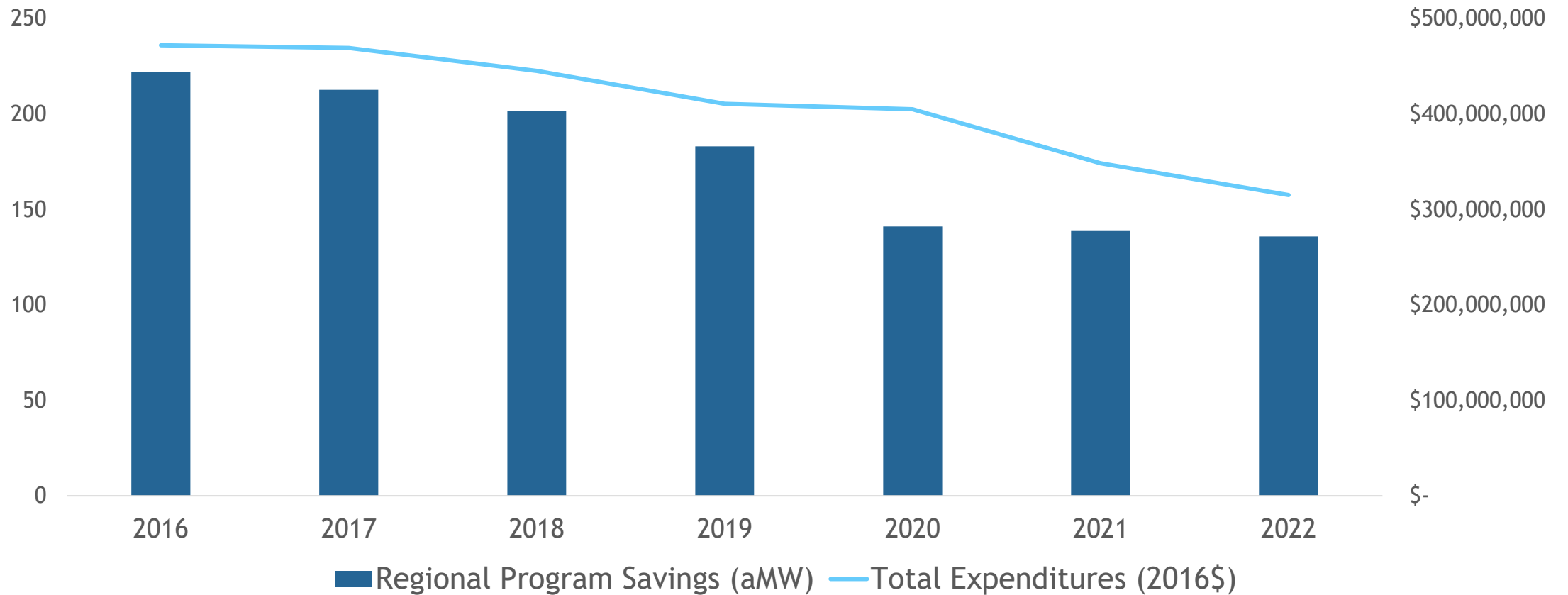
# Total Regional Savings Achieved 149.8 aMW

- First year of tracking puts the region on track to meet the Council's 2021 Power Plan targets

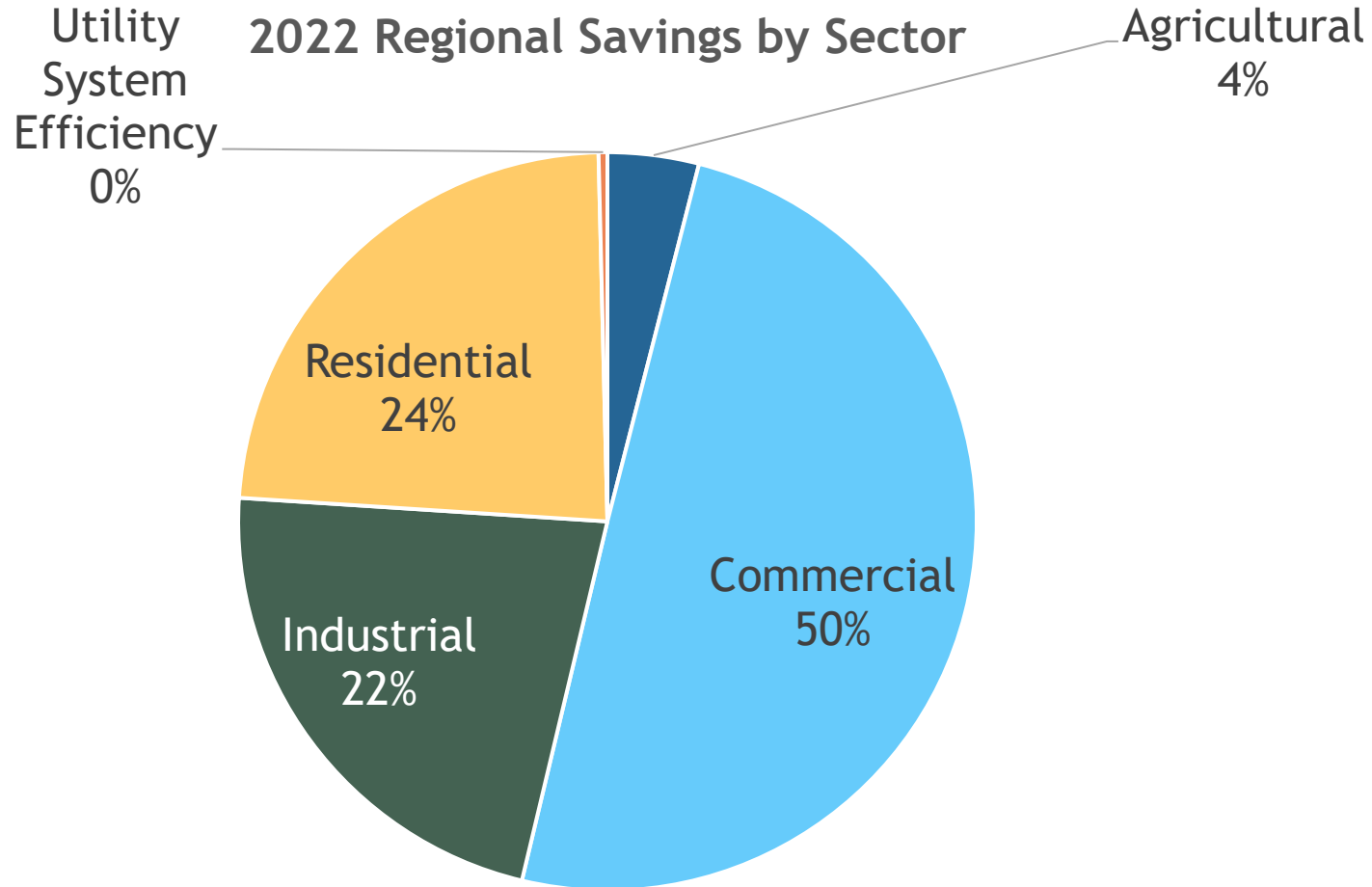


# Program Budgets and Savings Continue to Trend Slightly Downward

Regional Program Savings and Expenditures

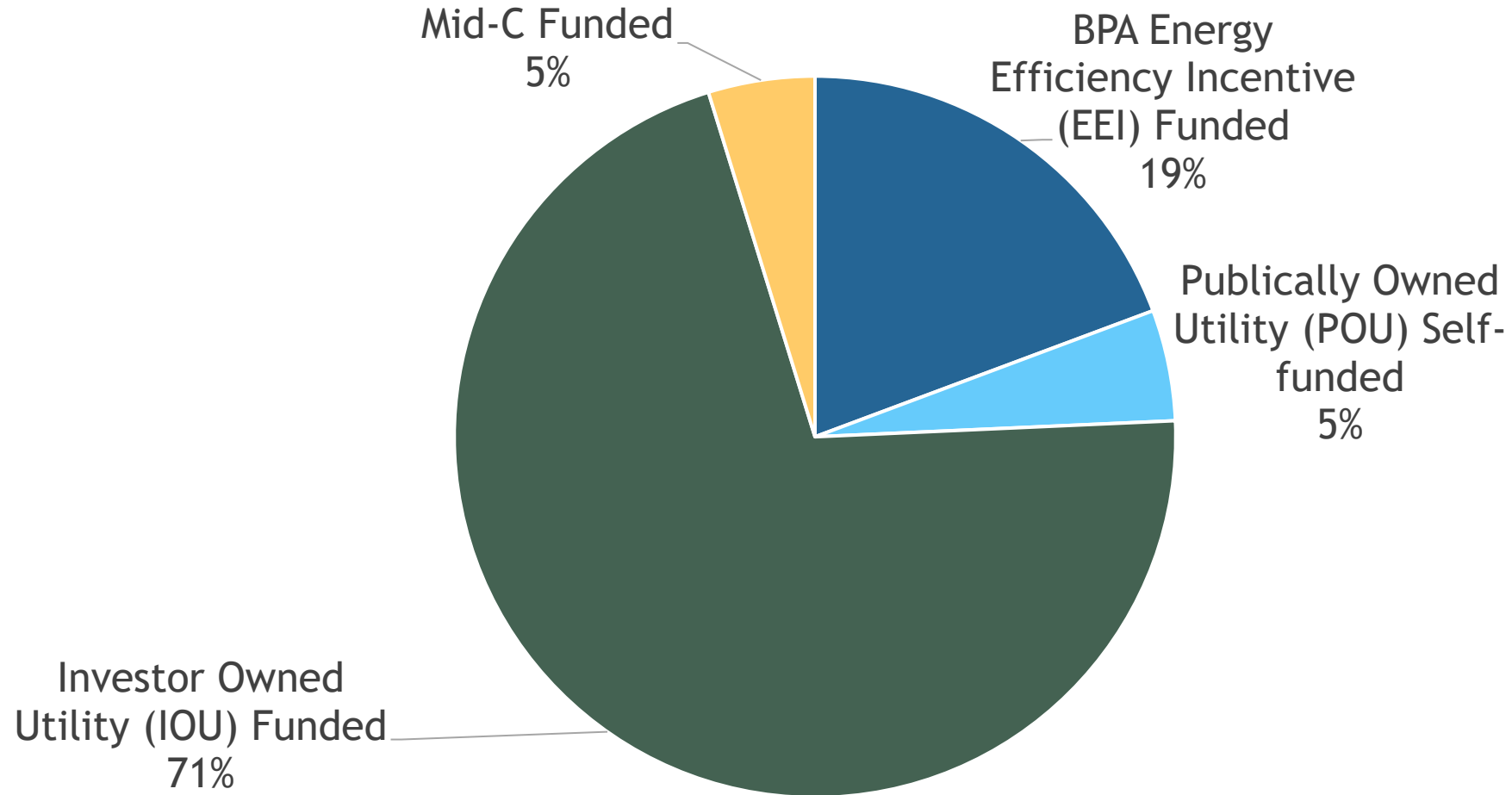


# Commercial Sector Represents Half of Regional Savings in 2022



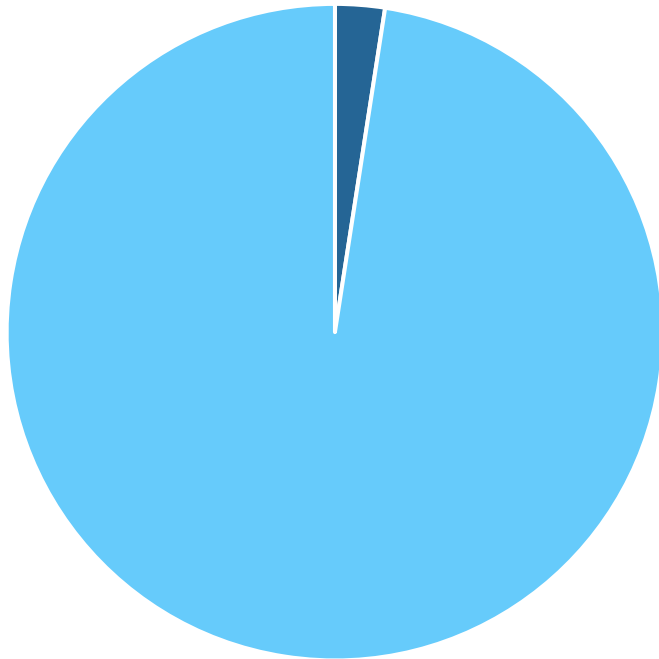


# Consistent with Previous Years the Majority of Savings from IOUs and BPA



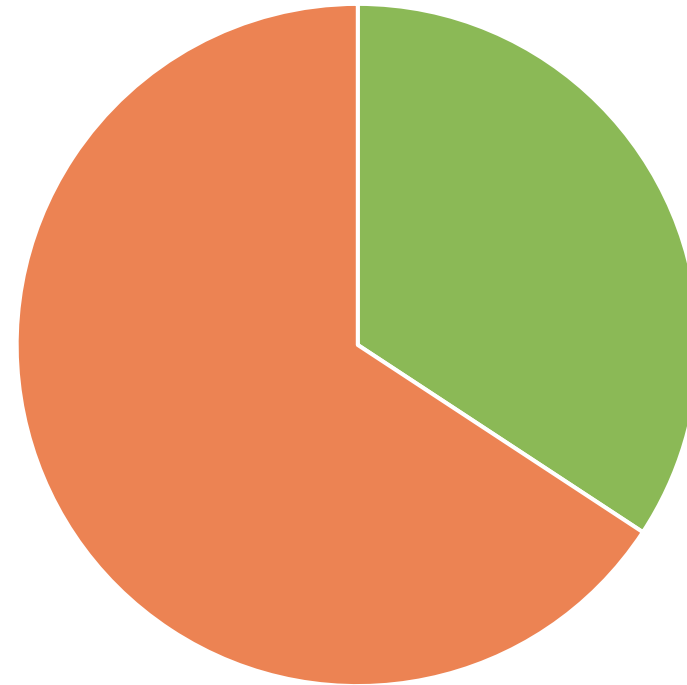
# NEEA's Support of the Region

Commercial



■ NEEA Reported ■ All Other Commercial Regional Savings

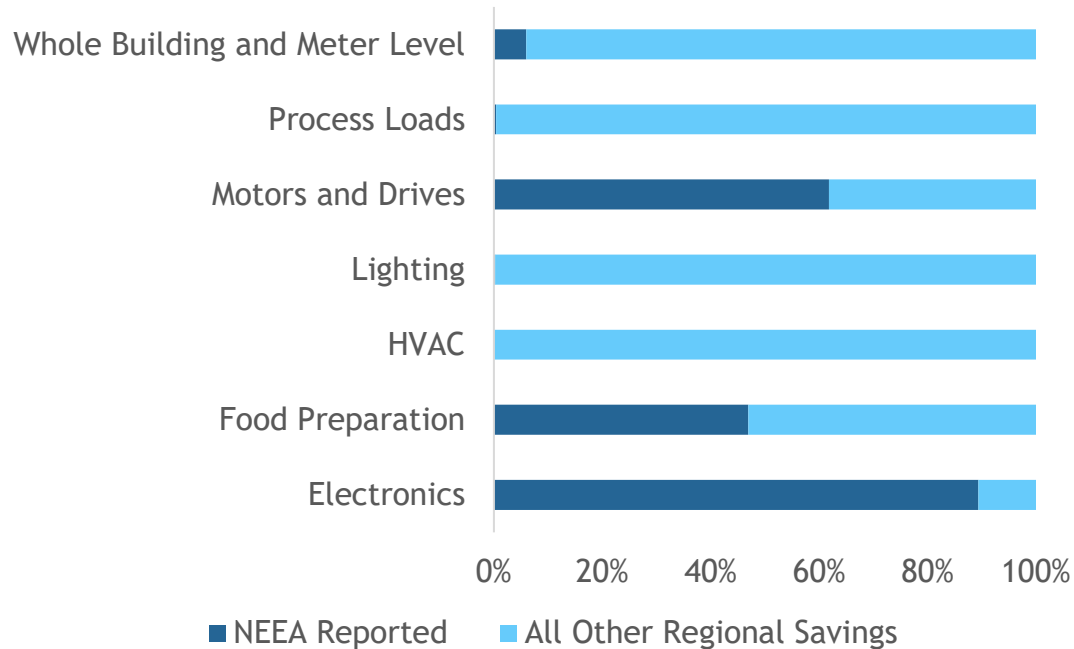
Residential



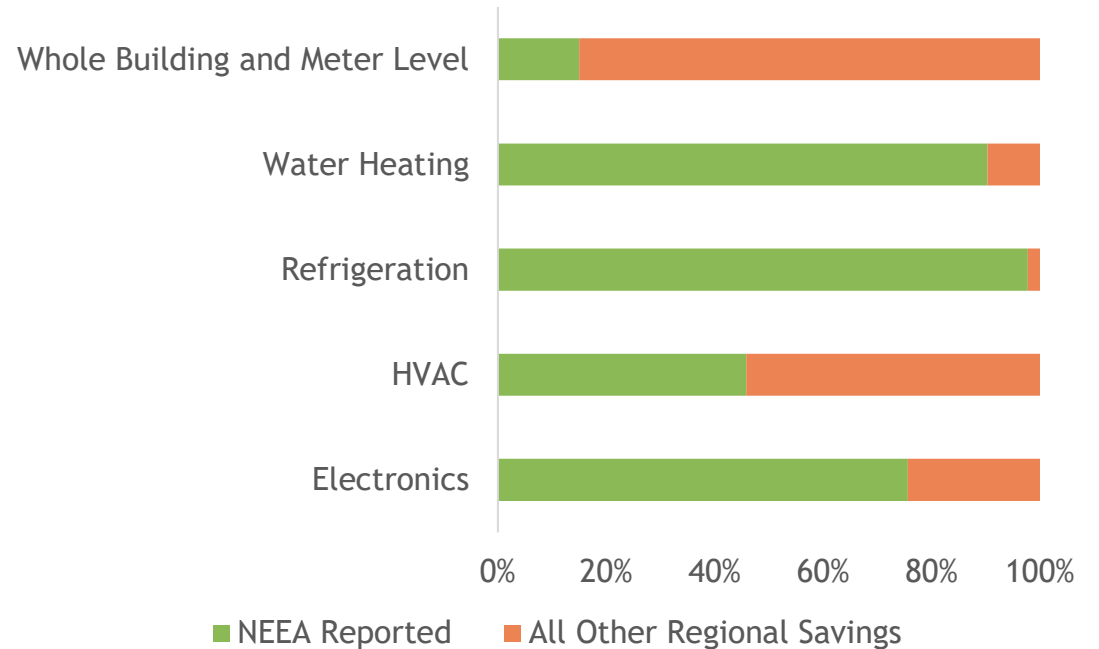
■ NEEA Reported ■ All Other Residential Regional Savings

# NEEA Reported Savings Typically Represent a Large Portion of All Savings Achieved in that End Use

## NEEA and All Other Regional Commercial Savings by End Use



## NEEA and All Other Regional Residential Savings by End Use





# Bonneville Results

# Determining BPA's Savings

BPA's savings represent:

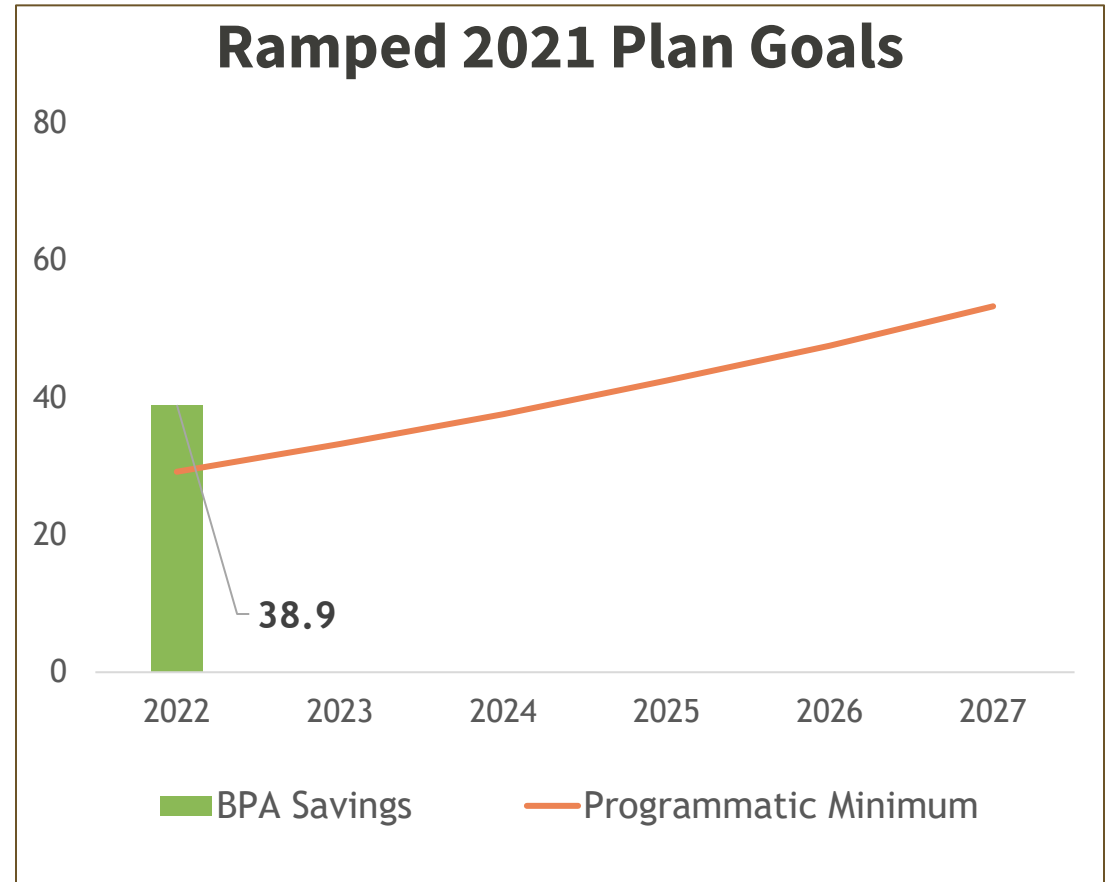
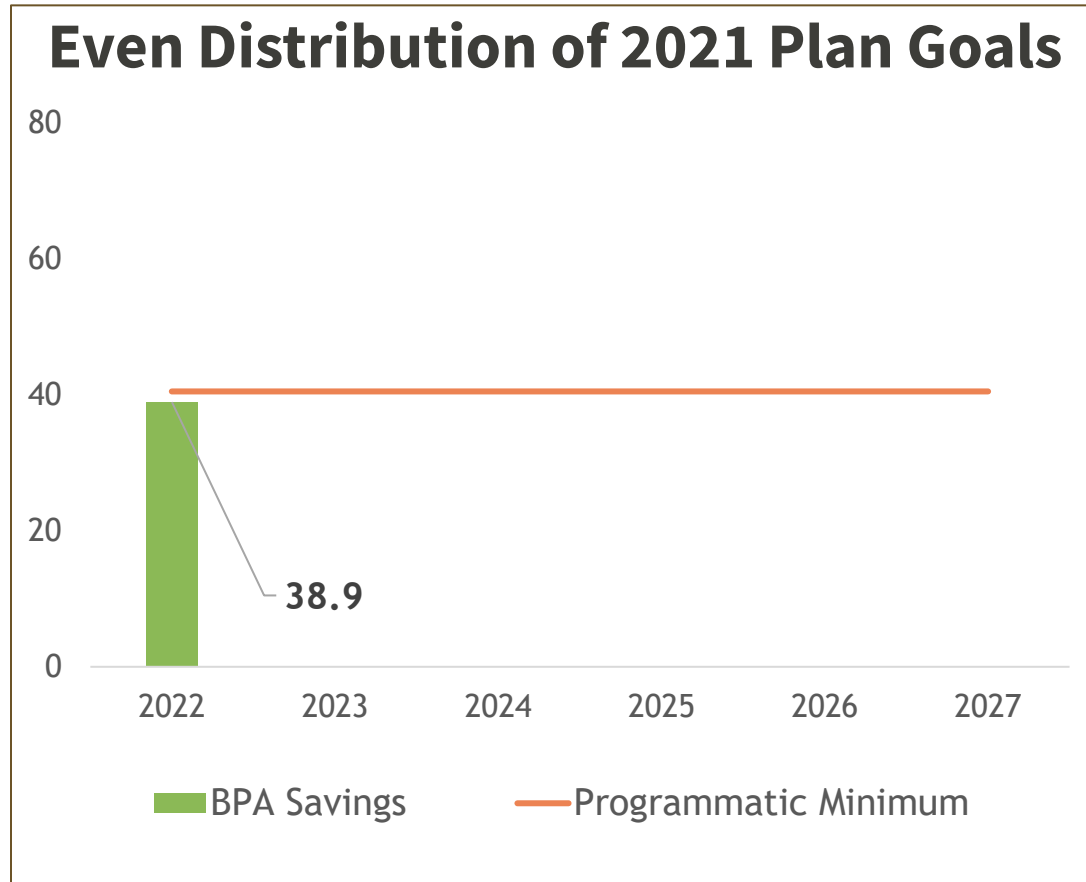
- Program Savings
- Proportional accomplishments from regional mechanisms and adjustments

Note, this includes all EEI and Self-funded efficiency

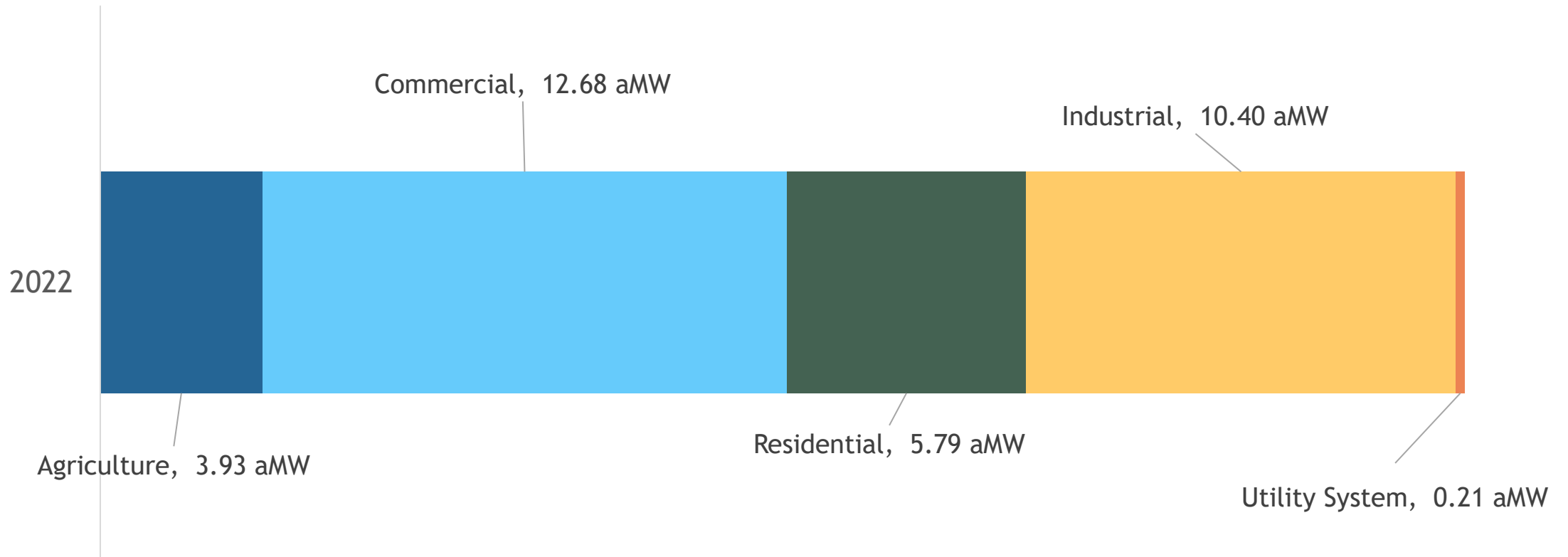


Note: The 42% is based on BPA's share of NEEA funding.

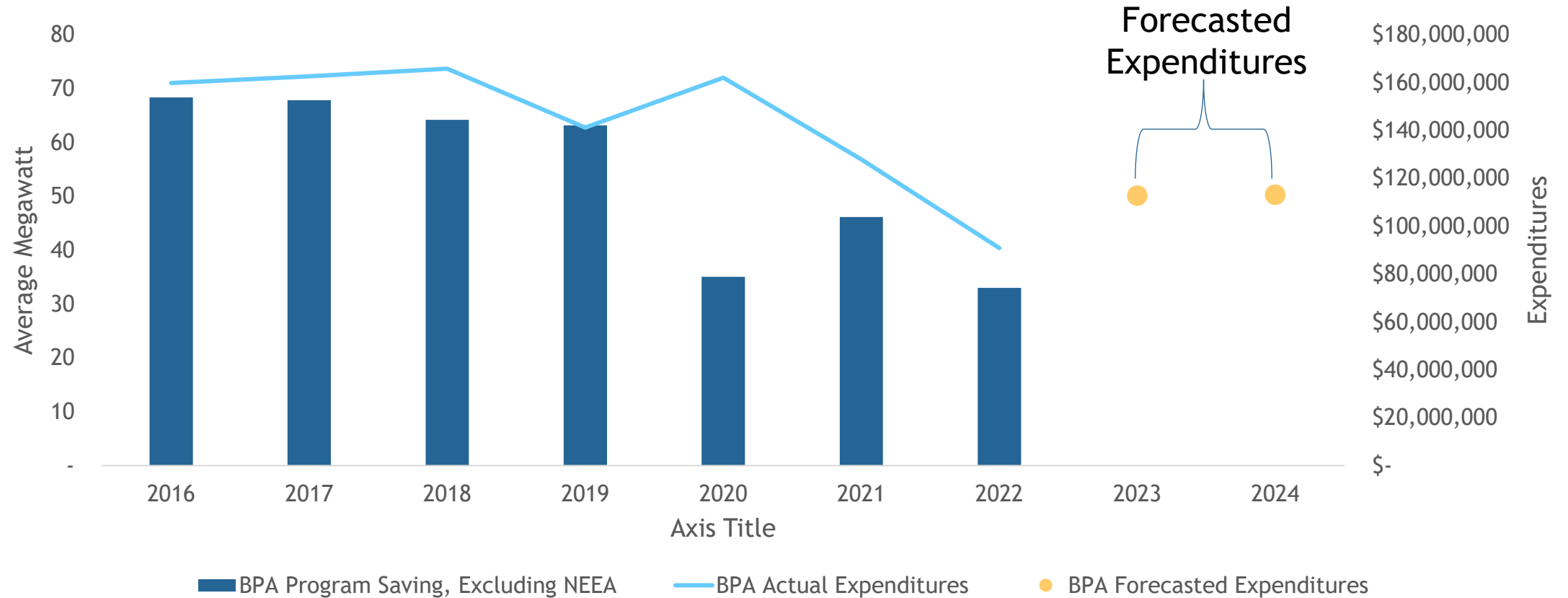
# BPA Achieved 38.85 aMW in 2022



# BPA Program Savings By Sector

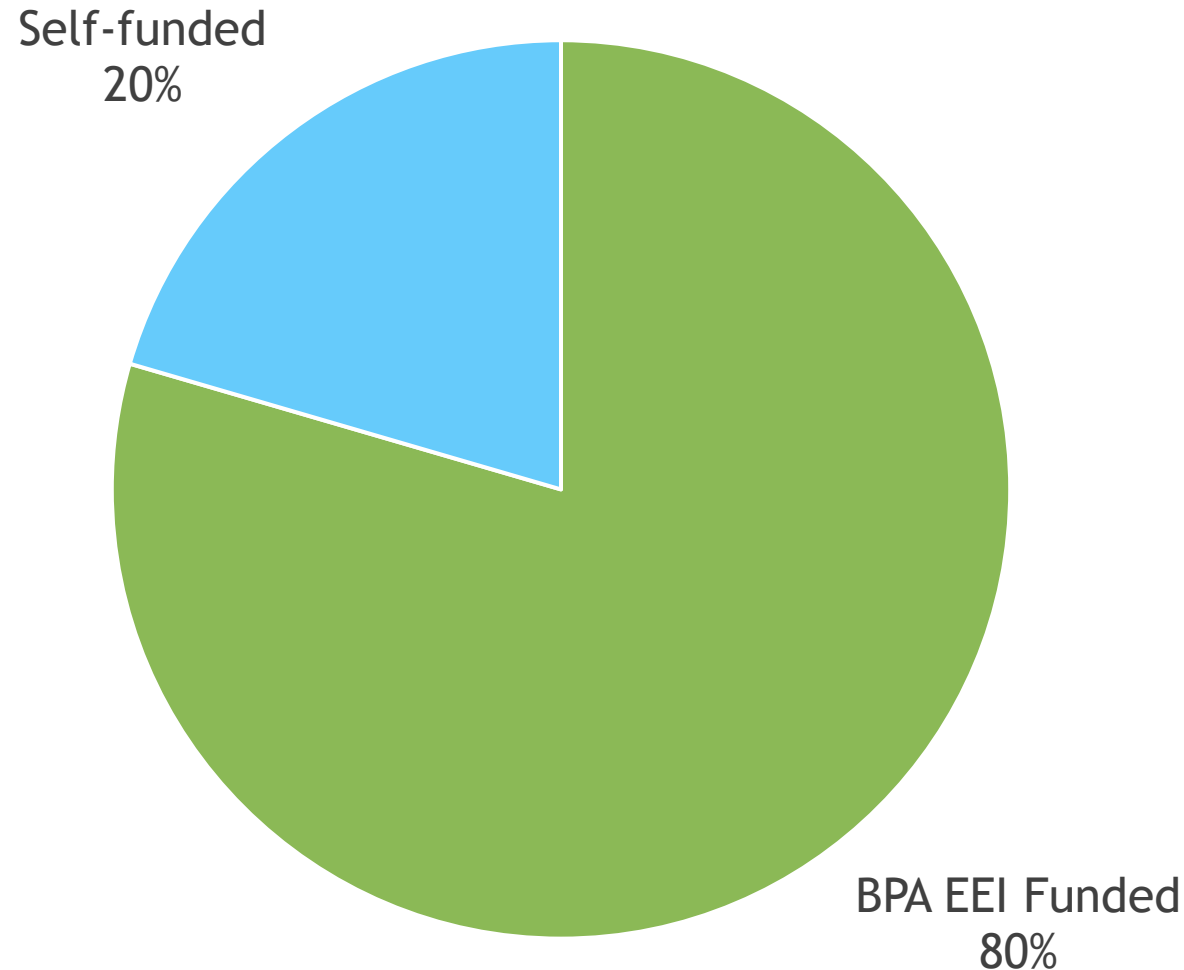


# Past & Forecasted BPA Program Savings & Expenditures

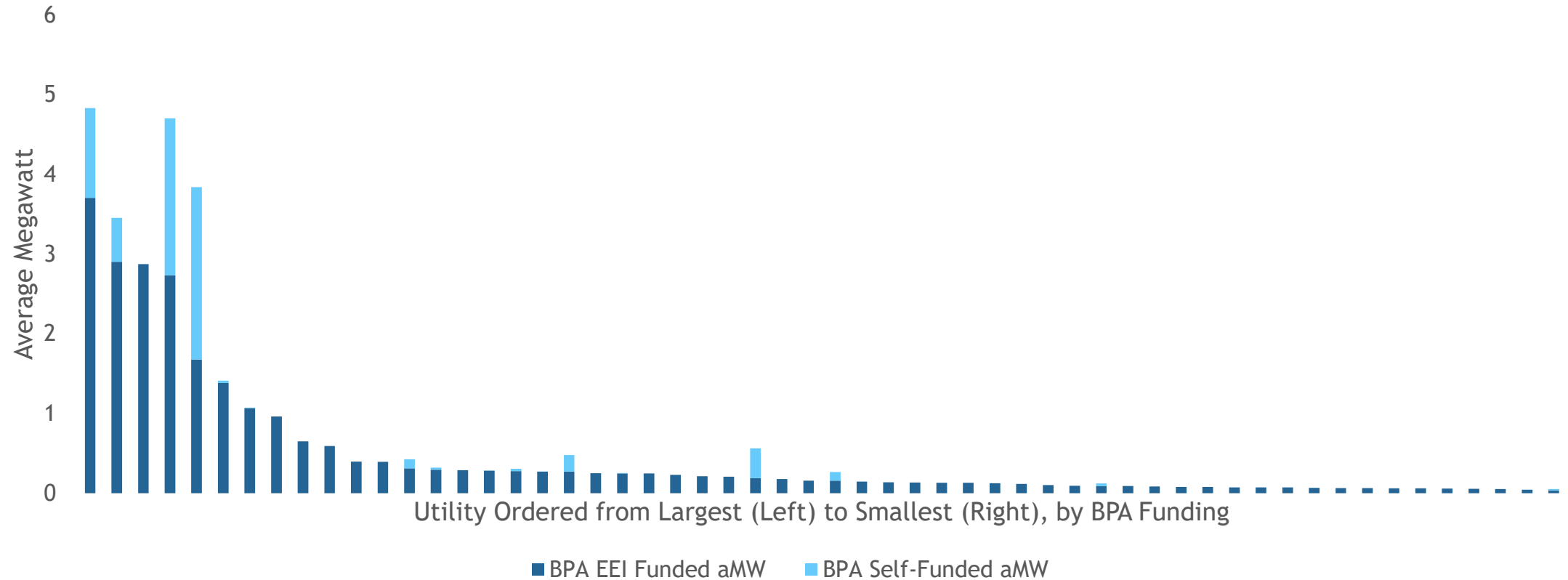




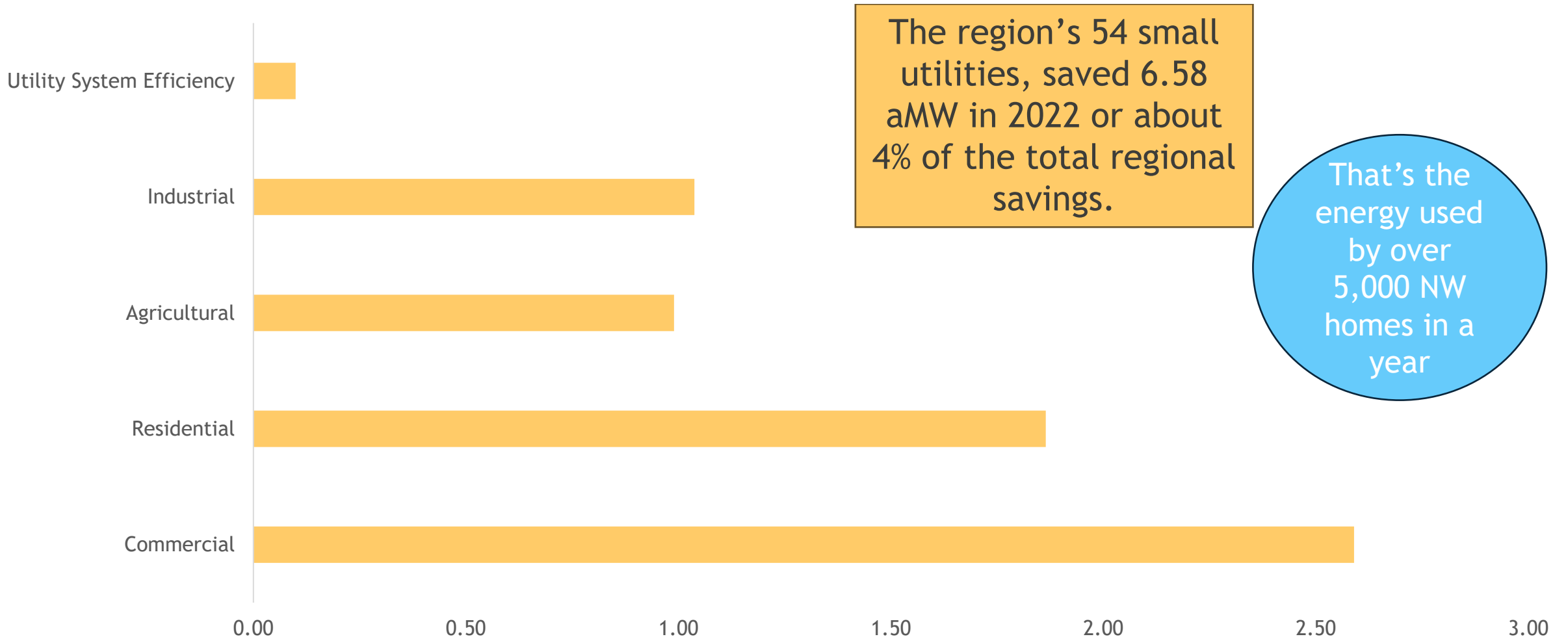
# EEI Funding Accounted for 80% of the BPA Savings Achieved in 2022.



# BPA-Funded vs. Self-Funded Savings, by Utility Size

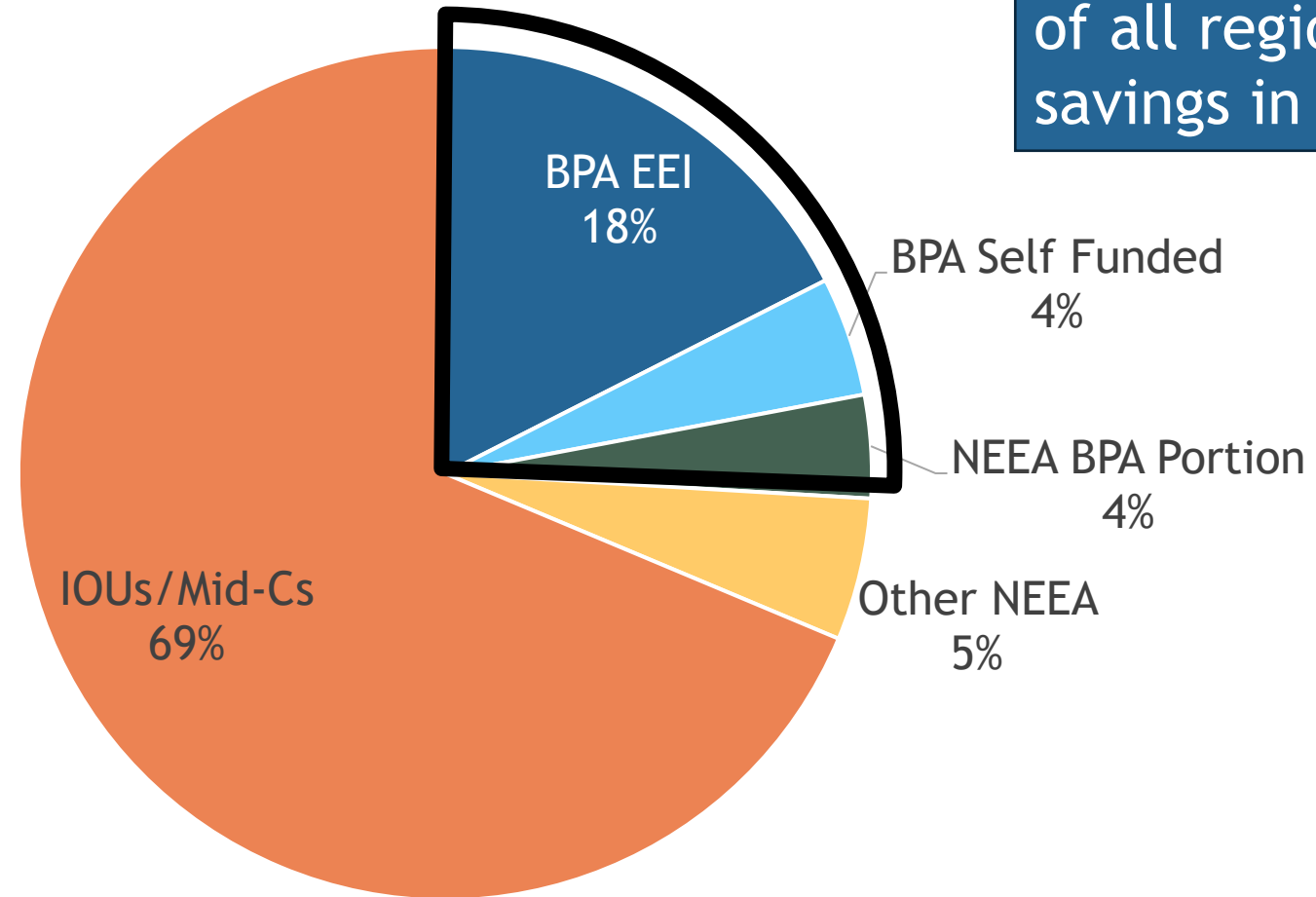


# 2022 Savings Achieved by Small Utilities



# BPA Savings in the Region

Bonneville represented 26% of all regional savings in 2022

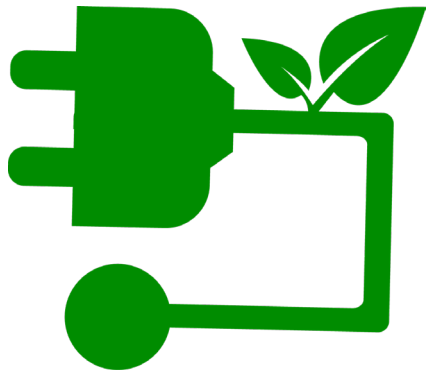




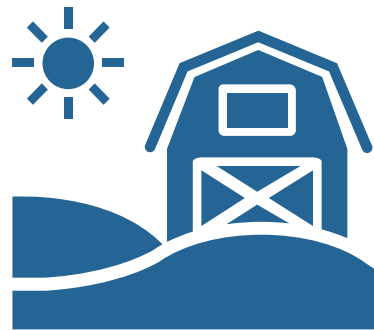
# Other Benefits

# In 2022 the Region Achieved Other EE Program Benefits Provided to the Region

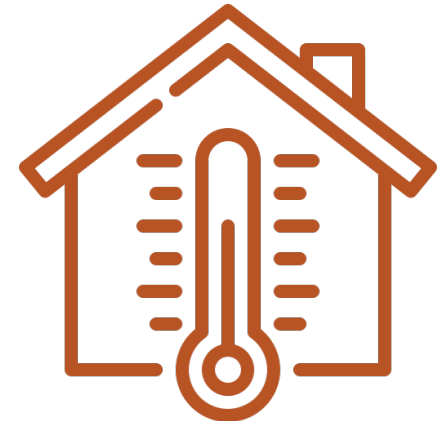
- Of the savings reported to the RCP, 8% were non cost-effective efficiency that instead went above and beyond the target to address the other elements of the program
- 86% of these additional benefits were in the residential sector



**Decarbonization**  
9 aMW savings



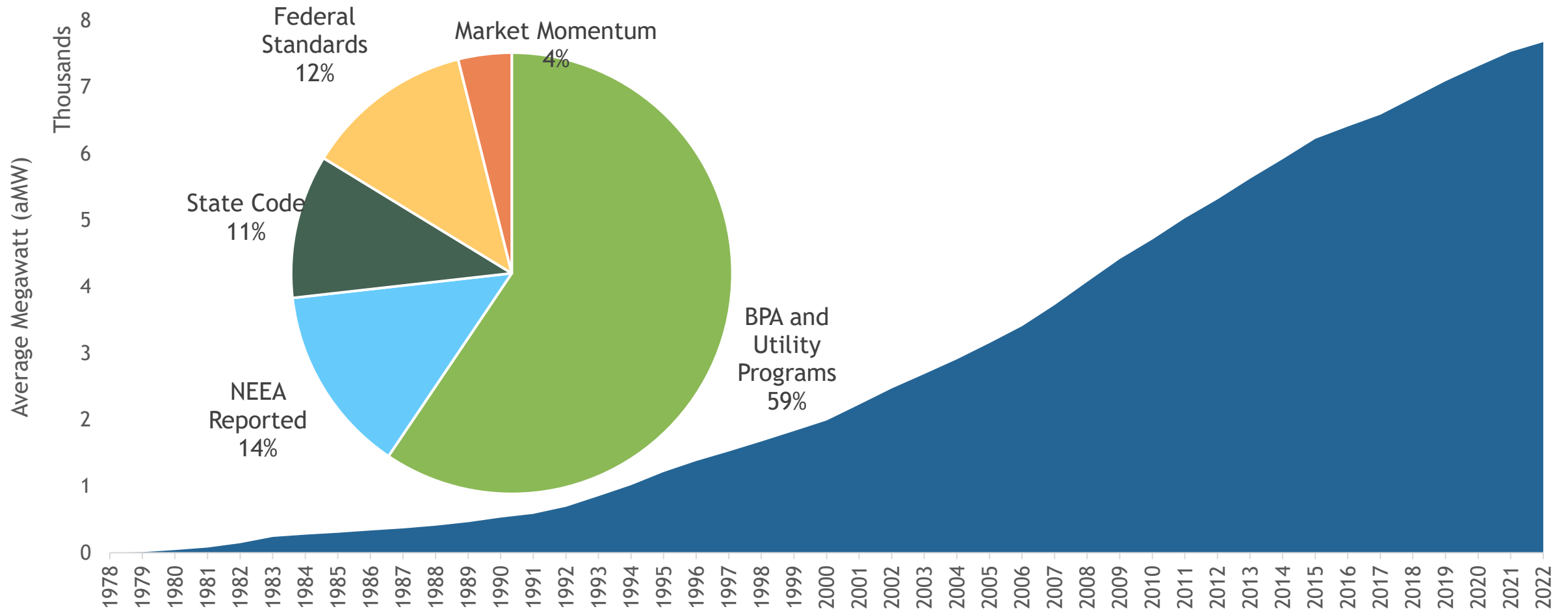
**Rural Markets**  
2.5 aMW savings



**Weatherization**  
1 aMW savings

# Region has achieved 7,678 aMW

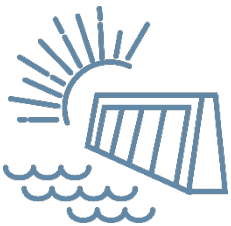
Cumulative Regional Savings, all Mechanisms



# Fun Facts: What does 7,678 aMW represent?



Equivalent to the annual energy consumption of around 6.1 million homes



Almost 3 times the generation of Grand Coulee



or the amount of CO<sub>2</sub> sequestered by 403 million trees over 10 years





**Thank you!**