



# Energy Conservation Annual Review 2024







# A note from Jamae Hilliard Creecy

Vice President of Energy Efficiency

I am excited to present Bonneville Power Administration's (BPA's) 2024 Energy Conservation Annual Review, highlighting the accomplishments of the Energy Efficiency program for fiscal year (FY) 2024. BPA partnerships with customers and regional stakeholders reflects our shared commitment to advancing cost effective energy conservation across the Pacific Northwest.

BPA-funded programs delivered 35.6 average megawatts (aMW) of programmatic energy savings. These investments helped offset the need for more expensive resources to meet BPA's power obligations and preserve one of the region's most valuable assets, the Federal Columbia River Power System (FCRPS).

Focused on accelerating energy conservation, BPA's Direct Fund Demonstration (DFD) approved 62 projects with over 1.62 aMW of energy savings. Several of these successful projects are highlighted in this annual review.

The year also brought an important shift in BPA's approach to utility proposed energy conservation programs. After receiving feedback from customer utilities, who were running effective conservation programs that did not fit neatly into BPA's Energy Efficiency program, BPA acted and developed the Open BPA Qualified initiative.

This pathway allows customers to propose innovative energy efficiency programs. BPA reviewed customer proposals to ensure they are technically sound and use reasonable savings assumptions and implementation characteristics. The approach allows customers to implement and report savings to BPA while collecting data to evaluate program performance.

We look forward to building on this momentum as we continue to advance innovative energy solutions that help meet the agency's power resource needs.

Warmest regards,



# The Pacific Northwest’s Energy Conservation History

The Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act), passed in 1980, laid the foundation for the region’s commitment to energy conservation. The Northwest Power Act directs BPA to acquire cost effective conservation as a resource.

Since 1982, BPA, alongside customers and regional partners, has acquired an estimated 2,533.7 aMW of energy savings. This is enough energy to power approximately 1.89 million homes and translates to roughly \$2.2 billion in reduced electricity bills for regional ratepayers. Four decades later, conservation continues to serve as a reliable and cost effective power resource.

## Energy Savings

BPA, its customer utilities, and regional partners achieved 35.6 aMW in energy savings in FY 2024, equivalent to an annual reduction in electricity costs of approximately \$31.2 million for consumers.

BPA customers accounted for 27.9 aMW of these savings through direct program implementation, spanning Agricultural, Commercial, Federal, Industrial, Residential, and Utility Distribution sectors.

Northwest Energy Efficiency Alliance (NEEA) contributed 7.8 aMW of regional savings, as reflected in [Table 2](#). Momentum Savings will be reported at the conclusion of the Energy Efficiency Action Plan (Action Plan) period.

## Accomplishments

BPA’s Energy Efficiency program has a dedicated team of professionals with expertise in planning and evaluation, program development, engineering, technical oversight, emerging technologies, market research, and customer service. This team worked closely with BPA customers and regional partners to deliver significant energy savings.

**TABLE 1:** Programmatic Savings by Sector, FY 2024

Sector	Savings (aMW)
Agricultural	1.6
Commercial	6.9
Federal	1.3
Industrial	10.3
Residential	7.5
Utility System Efficiency	0.2
Total	27.9

**TABLE 2:** Savings by Type, FY 2024

Savings Type	Savings (aMW)
Programmatic	27.9
NEEA Reported Savings	7.8
Momentum Savings	TBD
Total	35.6

## Agricultural Sector

Agricultural sector projects achieved 1.6 aMW of energy savings. The introduction of two new agricultural energy audit measures, Agricultural Energy Audit Screening and Onsite Energy Audit allowed third party service providers to assess energy efficiency opportunities more holistically at farm sites. These audits helped agricultural producers understand the energy saving potential of various upgrades through a comprehensive business case.

With these expanded tools and BPA's support, customers were better equipped to offer producers customized solutions. Raft River Electric (RRE) actively promotes energy efficiency to its irrigation customers by selling Variable Frequency Drives (VFDs) at cost and facilitates installation by local electricians.

Moss Farms, which irrigates approximately 2,600 acres of diverse crops including corn, alfalfa, sugar beets, potatoes, and spring and winter wheat, approached RRE about VFD rebates to improve energy efficiency and prevent over-pressurization in its irrigation system, an issue that can cause mainlines to burst. The installed VFDs allow remote system monitoring and control, improving automation and reducing energy and water use by more precisely meeting shifting irrigation system requirements with fewer trips to the pump. The project included two VFD installations with an estimated 193,956 kWh of energy savings annually.

BPA's Emerging Technology team partnered with Washington State University's Agricultural Extension Office to evaluate precision irrigation technologies and their impacts on energy and water conservation. Technologies such as Low Elevation Spray Application (LESA) and Mid Elevation Spray Application (MESA) use low pressure spray nozzles to reduce overspray, evaporation, and energy intensive pumping. This uses less electricity and reduces water waste as compared to pumping higher volumes at higher pressures.



This LESA irrigation conversion installed in Eastern Washington uses less electricity than traditional sprinklers and reduces water waste from evaporation.

Columbia Basin Electric Cooperative worked with Turner Ranch in Heppner, OR to convert their irrigation system to LESA, resulting in an estimated 57,205 kWh of energy savings annually and water savings for the ranch and the community of other irrigators. Benton County Public Utility District (PUD) No. 1 also installed precision technologies for their customer Sunheaven Farms in Prosser, WA. They found an opportunity to convert to a MESA, saving both electricity and water by replacing high pressure and high output sprinklers with more precise, low pressure spray nozzles. This reduced electricity use and water waste and resulted in an estimated 164,748 kWh of energy savings annually. These efforts highlight the growing role of advanced technologies in supporting BPA's resource acquisitions, while allowing agricultural producers to reduce operating costs.

## Direct Fund Demonstration

BPA's DFD initiative captured additional cost effective energy savings across the region. This demonstration enabled smaller utilities to complete larger energy conservation projects.

Umatilla Electric Cooperative partnered with Smitty's Ace Hardware to replace 277 fluorescent fixtures with 302 Light Emitting Diode (LED) lights across the store's



sales floor. The project improved lighting quality and is estimated to result in 69,156 kWh of energy savings annually.

Sheldon Public Pool in Eugene, OR, in partnership with the Eugene Water and Electric Board (EWEB), undertook an energy upgrade following a 2022 remodel. The facility added a 6,000 square foot natatorium and warm water pool, installed a heat pump chiller, a dedicated outdoor air handler with a heat recovery ventilator, and implemented LED lighting upgrades. These improvements reduced energy use by 40 percent, with an estimated 496,387 kWh of energy savings annually.

These projects illustrate how the DFD initiative has allowed BPA to acquire additional energy conservation throughout the region.



The heat pump chiller and other commercial upgrades installed at Sheldon Pool in Eugene, OR, reduced energy use by 40 percent.

## Commercial Sector

The Commercial sector delivered 6.9 aMW of energy savings with lighting; heating, ventilation, and air conditioning (HVAC); and refrigeration projects. Several of these projects leveraged DFD agreements to implement impactful upgrades.

New Unit Energy Savings (UES) measures were added to BPA's commercial portfolio including midstream lighting, heat recovery ventilation, efficient pumps, VFDs for pumps, floating refrigeration controls, refrigerated



Jackie Caldera (right) of Umatilla Electric Cooperative presented Tammy and Randy Smith (left and center), the owners of Smitty's Ace Hardware, an incentive and savings check.

display case doors, and commercial duty unitary heat pump water heaters. While it typically takes time to see the impact of the new offerings, the new UES measures represented 10 percent of the total Commercial sector savings acquired during the fiscal year. BPA increased incentives for several existing UES measures for advanced rooftop unit controls, commercial insulation, and consumer heat pump water heaters installed in commercial settings to accelerate conservation measure implementation.

BPA partnered with Idaho Falls Power to install variable refrigerant flow systems, LED lighting, and a dedicated outdoor air system (DOAS) at the new Idaho Falls police station. These installations reduced heating and cooling costs, achieved an estimated 267,624 kWh of energy savings annually while improving indoor air quality and comfort.

In collaboration with school facility managers throughout the region, BPA identified energy conservation

opportunities that reduce energy consumption and energy costs while improving learning environments for students and faculty members.

The City of Plummer participated in the program to update the HVAC systems at Lakeside High School and Lakeside Middle School. A small, rural school district on the Coeur d'Alene Indian Reservation, the Plummer-Worley School District serves approximately 357 students.



The updated HVAC rooftop system at the Plummer-Worley School District, along with other HVAC upgrades, resulted in 198,776kWh of annual energy savings.

Through the DFD, BPA acquired the energy savings resulting from new air handling units, heat pumps, and VFD fan installations. In addition to 198,775 kWh of energy savings, classrooms were more comfortable for students regardless of the weather outside.

Okanogan PUD updated the HVAC systems at four schools in the Omak School District. This small, rural district in north central Washington serves approximately 2,500 students. Through the DFD, BPA acquired the energy conservation from new HVAC systems, heat pumps, and/or energy recovery ventilators (ERVs), resulting in 317,236 kWh energy savings annually and lower energy expenses for the school district. A new [Trade Ally Network NW](#) webpage was created to highlight BPA's priority Commercial sector measures. The webpage also provides technical and marketing resources that support professionals working to

manufacture, design, and install more efficient lighting and HVAC systems in commercial buildings.

Work continued to develop a cloud based Online Lighting Calculator (OLC) to replace the existing Nonresidential Lighting Calculator (LC6.0). The new OLC enhances reliability, cybersecurity, and user experience.

## Federal Sector

The Federal sector and its Energy Smart Reserve Power (ESRP) program acquired 1.3 aMW in reported savings. Key drivers included custom projects such as canal lining and water delivery management system upgrades, along with UES measures like high efficiency pumps and VFDs.

BPA engaged reserved power customers' irrigation districts, which take power directly from the FCRPS, to identify energy conservation opportunities, assist with technical support, and complete required documentation.

In partnership with the East Columbia Basin Irrigation District in Othello, WA, 1.7 miles of 1950s-era open, earth-lined canals were converted to polyvinyl chloride (PVC) piping. This reduced water loss from seepage and evapotranspiration, cut pumping needs, eliminated flooding, and achieved estimated energy savings of 522,068 kWh annually, plus 1,000-acre feet of water savings.

BPA worked with Ochoco Irrigation District in Prineville, OR to replace aging pumps with high efficiency models, saving 51,700 kWh annually while improving system reliability and reducing maintenance costs.

BPA's ESRP program identified the need for automated gates with slipmeters and electromagnetic flow meters for South Columbia Basin Irrigation District in Pasco, WA. The upgrade enabled real time, accurate water delivery management using a supervisory control and data acquisition (SCADA) system, reducing the irrigation district's pumping plant's energy use. This project



reduced both energy and water consumption, resulting in 1,948,672 kWh expected energy savings annually.

In addition, BPA began preparations for the FY 2026-2027 Federal sector incentive solicitation, including offering funding for technical analysis studies to uncover further energy and water efficiency opportunities. Incentive levels for UES measures were also reevaluated to better reflect market conditions.

## Industrial Sector

The Industrial sector generated 10.3 aMW of energy savings, the largest amount of any sector in the portfolio. BPA's Energy Smart Industrial (ESI) program continued its focus on custom project identification and implementation. In total, 47 different customers completed 100 custom projects and 68 UES measures. ESI delivered Strategic Energy Management (SEM) to 43 industries served by 19 different utilities, contributing a significant amount of cost effective savings for the industrial portfolio.

Lamb Weston Hermiston, a major producer of frozen potato products, served by Umatilla Electric Cooperative, proved to be a stellar SEM participant. They implemented at least one energy savings improvement project every month to reduce energy use and operational costs.

ESI's Energy Project Manager (EPM) program resulted in over 20 EPMs completing 42 custom projects which produced 37 million kWh in total energy savings.



The Lamb Weston Hermiston facility implemented an extensive SEM program completing at least one project every month to reduce energy use and cost.



A Hudspeth pump installed in the Ochoco Irrigation District in Prineville, OR, replaced inefficient pumps with high efficiency models to save the irrigation district 51,700 kWh annually.

In January 2024, the Port of Seattle, operator of Seattle-Tacoma International Airport, became BPA's 120th utility to join the ESI program. Staff conducted an initial walkthrough identifying energy conservation opportunities across airport facilities.

BPA added two new streamlined UES measures, Efficient Pumps and VFDs for Pumps, which municipal water and wastewater systems quickly adopted, especially among small, rural, residential (SRR) utilities. New informational flyers provided an effective way to market these streamlined measures to utilities, end users, and key trade ally audiences.

The VFD for Pumps measures proved to be extremely popular with BPA's SRR utilities and, more specifically, municipal water and wastewater treatment sites. The town of Twisp, served by Okanogan County PUD, installed VFDs on their freshwater well pumps and wastewater lift station pumps. The retrofits qualified for a new streamlined measure, saving all stakeholders time and effort associated with custom projects. These were Twisp Public Works' first utility supported efficiency projects and yielded 65,200 kWh of energy savings annually. Regionwide, more than 20 VFD for Pumps measures were implemented, resulting in over 450,000 kWh energy savings annually. An additional 55 new projects in the pipeline are expected to achieve 1.5

million kWh energy savings. Franklin PUD partnered with Reser's Fine Foods on conservation projects at a new production facility. Across two phases, Reser's updated nearly every refrigeration component and installed efficient lighting, pumps, boiler fans, and compressed air equipment. Together these improvements resulted in over 7.1 million kWh energy savings and \$360,000 in avoided energy costs annually.

Six utilities used DFD agreements to complete nine industrial projects, creating 5.9 million kWh of energy savings annually. Almost 70 percent of these projects were new construction or major renovations in SRR areas.

Forest Grove Light & Power used DFD agreements to support energy upgrades at Clean Water Services' wastewater treatment plant, resulting in 662,000 kWh of energy savings the first year after completion in September 2024.



Michelle Stromberg of the City of Forest Grove (right) displays an incentive and savings check with (from left) Russel Webb, senior electrician and instrumentation technician; Matt Smeraglio, Energy Smart Industrial; Jeff Moore, electrician 2; Devin Frost, wastewater plant operator 2; and Tonya Zinzer, senior engineer.

## Residential Sector

The Residential sector achieved 7.5 aMW of energy savings, with the largest contributor being heat pump water heaters (HPWHs). To promote conservation, the Comfort Ready Home (CRH) program developed



Energy Smart Industrial partners conducted a walk through at Seattle-Tacoma Airport to identify potential energy saving opportunities.

new marketing materials and videos for utilities and contractors. With strong utility and contractor engagement, the program resulted in nearly 400 HPWH installations across 74 communities in four states, resulting in more than 700,000 kWh combined energy savings.

FY 2024 marked the conclusion of BPA's Performance Tested Comfort Systems (PTCS) program, which had a significant impact over its 25-year history. Since 2006, the program certified hundreds of thousands of heat pump installations, trained thousands of contractors, helped install approximately 133,000 heat pumps and seal over 60,000 ducts. Between 2016 and 2024, the PTCS program achieved 6.4 aMW of energy savings, translating to more than \$4.7 million in annual regional energy bill savings.

BPA's Low Income (LI) program allow BPA to acquire Conservation throughout the region. BPA's LI program acquired energy savings from the installation of 47,757 new systems and over 631,000 square feet of space insulated, resulting in 0.60 aMW in energy savings. Ductless heat pumps, insulation, and windows represented the largest number of installations.

In FY 2024, 48 utilities participated in implementing LI measures, up from 37 in the previous rate period.



In May 2024, BPA relaunched the Northwest Regional Low Income Workgroup and Workgroup Steering Committee to improve communications and enhance regional partnerships among utilities, BPA staff, program implementers, federal, state, and community agencies.

A LI custom project and program payment rate was developed and included an optional customizable form, introduced commercial LI measures for multifamily shared spaces, and modified payment cost caps for windows and several HVAC and water heating measures to reflect current equipment and installation costs. BPA introduced new measures including Packaged Terminal Heat Pump, Variable Speed Heat Pump, new types of Thermostat, Heat Pump Water Heater, and Clothes Washer and Dryer measures. These direct install opportunities resulted in increased measure implementation from utilities that historically had not implemented LI measures.

Idaho Falls Power launched a LI clothes washer and dryer program, which quickly gained popularity. The utility implemented measures involving 265 dryers and 264 washers, resulting in 52,444 kWh of energy savings. Building on Idaho Falls Power's success, PUD No. 3 of Mason County in Washington implemented measures involving 32 homes and expanded their program to include heat pumps to another 49 residences, realizing 130,443 kWh of energy savings annually.

Weatherization and HVAC measures were installed throughout the region. Central Electric Cooperative in Central Oregon implemented weatherization measures in 66 homes with 71,416 kWh energy savings annually.

Northern Wasco County PUD completed an energy retrofit at Flora Thompson Manor, a multifamily complex in The Dalles, OR. Replacing packaged terminal heat pumps with ductless mini splits resulted in an estimated 60,000 kWh of energy savings annually.

Klickitat PUD No. 1 retrofitted windows and doors for 36 LI single family apartments at Rhine Village in White

Salmon, WA. Rhine Village provides affordable housing to households earning 80 percent or below the area median income in Klickitat County. These retrofits achieved 17,965 kWh in energy savings annually.

BPA acquired conservation resulting from insulation, windows and patio doors, ductless and ducted heat pumps, heat pump water heating, efficient appliances, and lighting measures implemented by states and tribes. Washington, Oregon, Montana, and Idaho states, through a network of Community Action Agencies, work with tribes and utilities within their borders to weatherize homes and install efficient equipment. As a result, 548 homes and multifamily units were weatherized, and 576



Partnerships with retailers provided hundreds of residences with new efficient appliances and resulted in 52,444 kWh of energy savings.

LED fixtures, 100 ductless and ducted heat pumps, and 13 Heat Pump Water Heaters were installed.

BPA acquired conservation resulting from measures implemented by Chehalis, Kalispel, Coeur d'Alene, Nez Perce, Fort Bidwell, Blackfeet, and Yakama tribes as well as Rural Nevada Development Corporation, which serves the Shoshone-Paiute Tribe. Several tribes completed energy audits, installed insulation, and energy efficient appliances, including washers, dryers, and ductless heat pumps in 55 tribal homes in the service territories of BPA customers.



Efficient window retrofits installed at the Rhine Village apartments in White Salmon, WA resulted in 17,965 kWh of energy savings annually and improved comfort for residents.

## Utility Distribution Sector

The Utility Distribution sector offers utilities opportunities to upgrade aging distribution infrastructure to increase their system performance, resulting in energy savings. In FY 2024, BPA Utility Distribution sector captured 0.2 aMW of energy savings. Re-conductor projects and substation power transformer replacements were key drivers for savings. Vigilante Electric Cooperative in Dillon, MT participated in re-conductor projects implementing the use of load flow modeling to provide key inputs in the energy savings calculations. These projects resulted in 199,890 kWh energy savings annually. The City of Troy, Ravalli and Flathead Electric Cooperatives also completed re-conductoring projects.

A new area of focus was Conservation Voltage Reduction (CVR), also known as Voltage Optimization (VO). This measure reduces the voltage delivered to end use customers while maintaining voltage within the lower half of American National Standards Institute (ANSI) standards. CVR delivers net energy savings by decreasing energy consumption across end use devices, especially motors. While CVR is not yet common in the region, two utilities are currently implementing VO projects.

## Engineering Services

BPA's Engineering Services team played a crucial role in supporting energy conservation across all sectors. The

technical expertise provided helped design, evaluate, and quantify the savings potential of custom projects, develop new measures and assess emerging technologies.

BPA engineers are the “face of BPA” when working with utilities and their end use customers. They help customers find technical solutions for custom projects that provide cost effective energy savings. BPA engineers also support project design to maximize savings, quantify energy savings and determine incentive payments.

BPA engineers, to broaden their reach and impact, developed strategic partners across a variety of end



BPA's low income program worked with CAAs, tribes, and utilities on weatherization installations in 548 homes across the region.

users. As one example, the Engineering team cultivated a strong partnership with the Washington Association of Maintenance and Operation Administrators (WAMOA) to support measures implemented in public schools. BPA sponsored an EPM pilot to identify and implement energy efficiency projects in 24 schools in partnership with three utilities. Engagements with Energy Service Companies (ESCOs) and others provided “boots on the ground,” helping to identify and execute energy conservation projects efficiently.

Collaborating with industry professionals, the BPA engineers identified commercial savings opportunities and provided design support processes and tools to more effectively deliver savings. BPA worked with Coolsys, a refrigeration/HVAC contractor, to complete refrigeration projects to deliver significant energy savings in grocery



stores across the region. To support this initiative, BPA engineers introduced new UES measures for refrigeration floating controls as well as streamlining processes and creating tools including a new energy savings calculator to quantify energy savings to shorten the analyses time for each of the sites. These process improvements allowed Coolsys to more efficiently report information to BPA to determine energy savings and incentives for the project.

In addition to field support, BPA engineers played a critical role in emerging technology research, collaborating with national and regional partners to evaluate the performance of new technologies, quantify potential savings, and contribute to regional and national working groups on next generation conservation technologies.

## Market Transformation

Market Transformation savings are an integral part of BPA’s portfolio and resulted in 7.26 aMW of energy savings in FY 2024. The Northwest Energy Efficiency Alliance (NEEA) made up of more than 140 Northwest utilities, works to accelerate the innovation and adoption of conservation producing products, services, and practices in the region.

For example, the advanced Heat Pump initiative is an integral part of BPA’s residential HVAC program. Across the region, NEEA installed and studied 30 window unit ductless minisplit heat pumps in homes. A heat pump symposium held in May brought regional stakeholders together to discuss how NEEA’s program could effectively meet regional needs.

In FY 2024, NEEA had 28 Market Research and Evaluation studies underway related to its initiatives. This work included completion of over 560 site visits as part of the Commercial Building Stock Assessment to study the characteristics and energy consumption of commercial buildings in the Northwest. The NEEA research and



A new rooftop HVAC system at Omak High School, installed with the support of WAMOA, resulted in 317,236 kWh in energy savings annually.

evaluation efforts help BPA and the region understand how to overcome barriers to implement existing and future conservation producing technologies.

## Evaluation and Market Research

BPA’s Planning, Market Research, and Evaluation team advanced several key initiatives, including refinements to savings forecasts, delivering four interim market models for measuring Momentum Savings, and completing a nonresidential lighting program evaluation.

BPA refreshed its 2022-2027 Energy Efficiency Action Plan, which serves as the agency’s roadmap for acquiring 300 aMW of energy savings over the six year period. Based on updated FY 2022–2023 results, new market

TABLE 3: NEEA Reported Savings by Sector, 2024

Sector	Savings (aMW)
Residential	6.8
Commercial	1.0
Industrial	0
Agricultural	0
Total	7.8

drivers, and emerging data, BPA reduced its savings forecast from 358.4 aMW to 340.7 aMW. Key drivers for the adjustment included a lower than anticipated forecast for Commercial sector savings, Oregon code changes reducing nonresidential lighting savings in later years, and a slight reduction in NEEA's energy savings forecast.

BPA expects incremental adjustments to planning forecasts given the time horizon covered by the Energy Efficiency Action Plan. [Table 4](#) represents the overall forecast change by savings type. BPA remained focused on conservation selected by the Council's 2021 Power Plan and BPA's 2022 Resource Program, prioritizing measures that deliver savings with the cost and shape best suited to meet system needs. The agency continued to explore new opportunities to provide a comprehensive portfolio that serves utilities of all sizes and geographies.

BPA completed two important planning studies: the Conservation Potential Assessment (CPA) and Demand Response Potential Assessment (DRPA). These studies quantify available conservation and demand response resources and their associated costs, helping inform BPA's Resource Program and potential power needs in the BPA territory.

New models were developed to forecast Momentum Savings from HVAC, lighting, and adjustable speed drives (ASDs). These interim forecasts confirmed that BPA is expected to meet the 30 aMW Momentum Savings goal.

For residential HVAC, sales of most equipment types continued to decline, except for inverter driven heat pumps, which maintained volume. On the commercial side, BPA's inaugural commercial HVAC market model highlighted variable refrigerant flow systems with energy recovery as the most significant source of energy savings in the current new construction and major renovations market. In the nonresidential lighting market, BPA's model suggests a nearly transformed market, with aggressive growth in LED luminaires through 2027. The remaining opportunities lie in niche markets that are prime targets for regional programs. BPA's ASD market model provides the most comprehensive and current characterization of the region's commercial and industrial pump and fan motor stock and energy consumption. The team's aggregation and analysis of metered data from hundreds of motor-driven systems significantly improved the understanding of pump and fan load profiles and confirmed the significant energy savings from ASDs. These forecasts directly inform BPA's energy efficiency strategy and measure development.

**TABLE 4:** BPA Energy Savings Forecast by Sector and Rate Period

Savings Category	FY 22-23 (aMW)		FY 24-25 (aMW)		FY 26-27 (aMW)		Total Forecasted Energy Savings (aMW)		Change	
	Original Forecast	Actual	Original Forecast	Updated Forecast	Original Forecast	Updated Forecast	Original	Actuals + Updated	aMW	%
BPA Programs	90.6	79.1	95.9	95.9	90.3	88.3	276.8	263.3	-13.5	-5%
Market Transformation	10.3	10.5	17.5	14.7	23.6	22.2	51.6	47.4	-4.2	-9%
Total Programmatic Savings Forecast	100.9	89.6	113.4	110.6	114.1	110.5	328.4	310.7	-17.7	-5%
Momentum Savings							30.0	30.0	0.0	0%
<b>Total Savings Forecast</b>	<b>100.9</b>	<b>89.6</b>	<b>113.4</b>	<b>110.6</b>	<b>114.0</b>	<b>110.5</b>	<b>358.4</b>	<b>340.7</b>		<b>-5%</b>

Note: BPA corrected Market Transformation savings. A busbar adjustment was applied that should have been included in the original Action Plan forecast.



BPA completed an impact evaluation of Nonresidential Lighting Measures, which showed a 93 percent realization rate, indicating strong alignment between reported and evaluated savings. The evaluation identified two areas for improvement, better coordination on busbar factors between Option 1 and Option 2 utilities, and improved classification of process lighting (i.e., lighting used for non-visual purposes).

Ongoing evaluations include impact evaluations of nonindustrial custom measures and residential air source/variable speed heat pumps and a process evaluation of the CRH program. Results from these studies will be shared in early 2026.

## Compliance and Oversight Reviews

BPA's Contract Administration team reviewed 29,434 applications to ensure they were accurately submitted to the BPA Energy Efficiency Tracking System (BEETS) and met all program requirements. This process ensures that BPA acquires conservation that is reliable, compliant, and cost effective.

Oversight, including a detailed review of invoices and documentation, end user verification, and product and installation compliance, was conducted on \$17.6 million of the portfolio, representing 32.8 percent of all dollars submitted to BPA. In FY 2024, 595 applications received a more rigorous review.

The team also supported key initiatives including providing critical compliance and risk management insight. Notable contributions resulted in language and reporting requirements improvements for allowable LI repair costs, clearer IM reporting language, more concise requirements, and implementing a measure review protocol that automatically identifies measures not previously selected for oversight to balance compliance requirements across its portfolio.

## Customer Service

Customer service is a vital part of BPA's EE program. BPA's energy efficiency representatives (EERs) and marketing specialists work with customers to ensure the success of their energy efficiency programs. Whether helping with reporting and budget transfers, or creating custom marketing materials, BPA is always standing by to help.

BPA provided customer support for BEETS with all remaining customers receiving training to fully migrate to the new reporting platform and use it effectively.

There was a marked increase in customer engagement with over 76 customer visits including account planning meetings, annual meetings, and webinars.

BPA held five annual regional customer roundtable meetings to solicit program feedback, address implementation barriers and share successes. The agendas included topics like program sector strategies, utility distribution system efficiency offerings, a LI program panel, and customer success stories where BPA provided customers with the opportunity to present their successful programs and share best practices.

New marketing products were developed including updated customizable measure templates. BPA's marketing specialists worked with utilities to provide recommendations to improve the efficiency, visibility, navigation, and design of their webpages with a focus on improving search engine optimization and user experience.



The Montana customer roundtable hosted by Mission Valley Power in Pablo, MT provided utility staff an opportunity to share knowledge and best practices.

# Appendix A

FIGURE 1: BPA’s Annual Programmatic Savings (aMW), FY 2019-2024

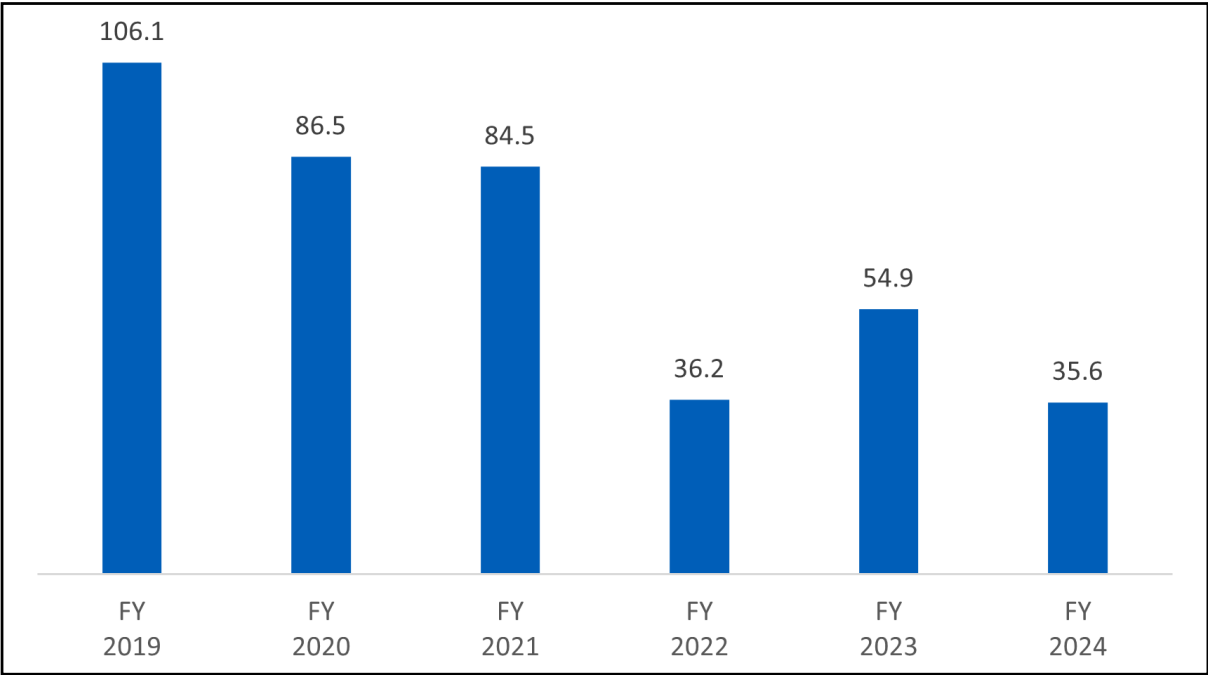


TABLE 5: BPA’s Annual Conservation Savings, FY 1982-2024 (aMW)

	Total FY82-2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY82-2024
Residential	506.3	12.4	9.9	10.0	9.3	8.4	7.5	563.7
Commercial	390.6	23.3	10.6	14.3	8.8	12.2	6.9	466.7
Industrial	284.7	15.1	10.9	12.6	7.9	22.4	10.3	363.9
Agricultural	63.6	5.6	1.0	1.5	1.3	2.3	1.6	77.0
Multi-Sector	108.9	0.0	0.0	0.0	0.0	0.0	0.0	108.9
Utility System Efficiency	9.3	0.3	0.0	0.5	0.2	0.6	0.2	11.3
Federal	7.1	1.4	6.6	1.1	2.9	2.4	1.3	22.8
Sectors Subtotal	1370.6	58.1	39.1	40.0	30.3	48.2	27.9	1614.2
Residential Building Codes	128.6	-	-	-	-	-	-	128.6
Commercial Building Codes	59.9	-	-	-	-	-	-	59.9
Building Codes Subtotal	188.5	-	-	-	-	-	-	188.5
NEEA Reported Savings	264.8	29.9	27.0	29.3	5.8	6.7	7.8	371.3
BPA Momentum Savings	306.0	18.1	20.4	15.2	0.0	N/A	N/A	359.7
TOTAL SAVINGS	306.0	18.1	20.4	15.2	0.0	N/A	N/A	359.7

Data in this document may include corrections to prior years’ data. This data should be used as official data until the next Annual Review.



**TABLE 6:** BPA's Annual Conservation Savings by Sector, Funding Source, FY 2019-2024 (aMW)

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY2019- 2024
<b>Programmatic Residential</b>							
Low Income Weatherization, State Implemented	0.2	0.1	0.2	0.1	0.1	0.2	<b>0.9</b>
Programmatic Low Income Weatherization, Utility Self-Funded	0.1	0.0	0.1	0.1	0.0	0.0	<b>0.4</b>
Programmatic Low Income Weatherization, EEI Funded	0.3	0.2	0.2	0.2	0.3	0.3	<b>1.5</b>
Programmatic Utility Self-Funded	5.7	1.1	0.9	2.6	2.1	2.7	<b>15.1</b>
Programmatic EEI Funded	6.2	8.4	8.7	6.4	5.8	4.2	<b>39.5</b>
<b>Residential Subtotal</b>	<b>12.4</b>	<b>9.9</b>	<b>10.0</b>	<b>9.3</b>	<b>8.4</b>	<b>7.5</b>	<b>57.4</b>
<b>Programmatic Commercial</b>							
Programmatic Utility Self-Funded	11.8	0.7	3.8	0.7	0.6	1.0	<b>18.6</b>
Programmatic EEI Funded	11.5	10.0	10.5	8.0	11.6	5.9	<b>57.6</b>
<b>Programmatic Commercial Subtotal</b>	<b>23.3</b>	<b>10.6</b>	<b>14.3</b>	<b>8.8</b>	<b>12.2</b>	<b>6.9</b>	<b>76.1</b>
<b>Programmatic Industrial</b>							
Programmatic Utility Self-Funded	4.1	2.5	2.5	2.5	9.4	2.0	<b>22.9</b>
Programmatic EEI Funded	11.0	8.5	10.1	5.4	13.0	8.3	<b>56.3</b>
<b>Programmatic Industrial Subtotal</b>	<b>15.1</b>	<b>10.9</b>	<b>12.6</b>	<b>7.9</b>	<b>22.4</b>	<b>10.3</b>	<b>79.2</b>
<b>Programmatic Agricultural</b>							
Programmatic Utility Self-Funded	1.7	0.0	0.2	0.0	0.3	0.3	<b>2.5</b>
Programmatic EEI Funded	3.9	1.0	1.3	1.3	2.0	1.3	<b>10.8</b>
<b>Programmatic Agricultural Subtotal</b>	<b>5.6</b>	<b>1.0</b>	<b>1.5</b>	<b>1.3</b>	<b>2.3</b>	<b>1.6</b>	<b>13.3</b>
<b>Programmatic Utility Systems Efficiency</b>							
Programmatic Utility Self-Funded	0.1	0.0	0.3	0.1	0.1	0.0	<b>0.5</b>
Programmatic EEI Funded	0.2	0.0	0.2	0.2	0.6	0.2	<b>1.4</b>
<b>Programmatic Utility Sys. Efficiency Subtotal</b>	<b>0.3</b>	<b>0.0</b>	<b>0.5</b>	<b>0.2</b>	<b>0.6</b>	<b>0.2</b>	<b>1.9</b>
<b>Programmatic Federal</b>							
Programmatic Federal	1.4	6.6	1.1	2.9	2.4	1.3	<b>15.6</b>
<b>Programmatic Federal Subtotal</b>	<b>1.4</b>	<b>6.6</b>	<b>1.1</b>	<b>2.9</b>	<b>2.4</b>	<b>1.3</b>	<b>15.6</b>
<b>NEEA and Momentum Savings</b>							
NEEA Reported Savings	29.9	27.0	29.3	5.8	6.7	7.8	<b>106.5</b>
BPA Momentum	18.1	20.4	15.2	0.0	N/A	N/A	<b>53.7</b>
<b>NEEA and Momentum Savings Subtotal</b>	<b>48.0</b>	<b>47.4</b>	<b>44.5</b>	<b>5.8</b>	<b>6.7</b>	<b>7.8</b>	<b>160.2</b>
<b>Total Savings</b>	<b>106.1</b>	<b>86.5</b>	<b>84.5</b>	<b>36.2</b>	<b>54.9</b>	<b>35.6</b>	<b>403.8</b>
ALL EEI-Funded Programmatic Savings	34.6	34.8	32.4	24.3	35.7	21.8	<b>183.6</b>
ALL Self-Funded Programmatic Savings	23.5	4.3	7.6	6.0	12.5	6.0	<b>60.0</b>
<b>All Programmatic Savings</b>	<b>58.1</b>	<b>39.1</b>	<b>40.0</b>	<b>30.3</b>	<b>48.2</b>	<b>27.9</b>	<b>243.6</b>

Data in this document may include corrections to prior years' data. This data should be used as official data until the next Annual Review.



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