BONNEVILLE POWER ADMINISTRATION

Eastern Washington Utility Roundtable June 4-5, 2025

City of Richland Public Library, Richland, Washington

Welcome and Introductions

- BPA Vice President of Energy Efficiency, Jamae Hilliard Creecy
- And our attendees, please share:
  - Name and Utility/Organization.
  - Role in EE and how long you've been working in energy efficiency.

Housekeeping

- Thank you to Jackie and Dawn from the City of Richland for coordinating this location for us!
- Please fill out the survey as we cover each topic.
- Safety moment.

Be Thinking About

- What are your goals for the remainder of the rate period and beyond?
- How can BPA help you to reach those goals?
- What else would you like to share with us?

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End Of FY24-25 Rate Period

Eastern Washington Utility Roundtable
June 4, 2025

Tentative Deadlines

TENTATIVE LAST DAY TO:

- LC v6.0
  - **8/1/25** Request LC v6 migration to OLC.
  - **9/5/25** Submit LC v6 in BEETS.
- CUSTOM PROJECTS
  - **Mid September (~9/12)** Guaranteed COTR review of CR.
- BUDGETS
  - **Late September (~9/24)** Submit bilateral transfers.
- BEETS
  - **Mid September (~9/12)** Submit offsetting apps for corrections.
  - **Mid September (~9/19)** Submit apps for guaranteed COTR review.
  - **Late September (~9/24)** Invoice applications for payment.
    - Must be submitted the day before the deadline to accrue performance payment.
  - **Late September (~9/24)** Invoice for performance payment.

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Upcoming Three-Year Rate Period

Eastern Washington Utility Roundtable
June 4, 2025

(Why) A Three Year Rate Period?

- 20-year Regional Dialogue contracts expire at the end of FY28.
- BPA rate periods for EE are in two-year increments, which would leave FY28 stranded.

Complexities of a Three-Year Rate Period

- The 9th Power Plan will tentatively be published in 2026 – possibly changing the underlying details of many measures.
- Activity tends to cluster in the latter part of the rate periods.
- Delayed reporting creates risk that BPA may not reach savings targets.
- There may be significant measure changes from the evolving EE market landscape during three years.

Implementation Manual & Budget

- Two Implementation Manuals.
  - FY26-27.
  - FY28 (full suite of changes).
- Access to the entire three-year rate period budget at the start of the rate period.
- Seamless budget to utilities but allocated by each FY.

Reporting

- Projects to be submitted into BEETS within six months of completion date.
- Projects to be invoiced within 30 days of “Ready to Invoice” status.
- BPA requests utilities report activity into BEETS at least once every six months.

Questions?

BONNEVILLE POWER ADMINISTRATION

BPA Energy Efficiency Action Plan

Eastern Washington Utility Roundtable
June 4, 2025

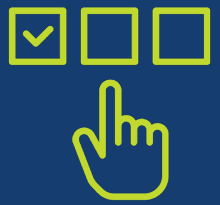
BPA EE Objectives

1

Acquire energy efficiency savings that provide the greatest power resource benefits for the region.

2

Meet BPA's share of the energy efficiency goals established in the 8th Power Plan and prioritize cost-effective measures.

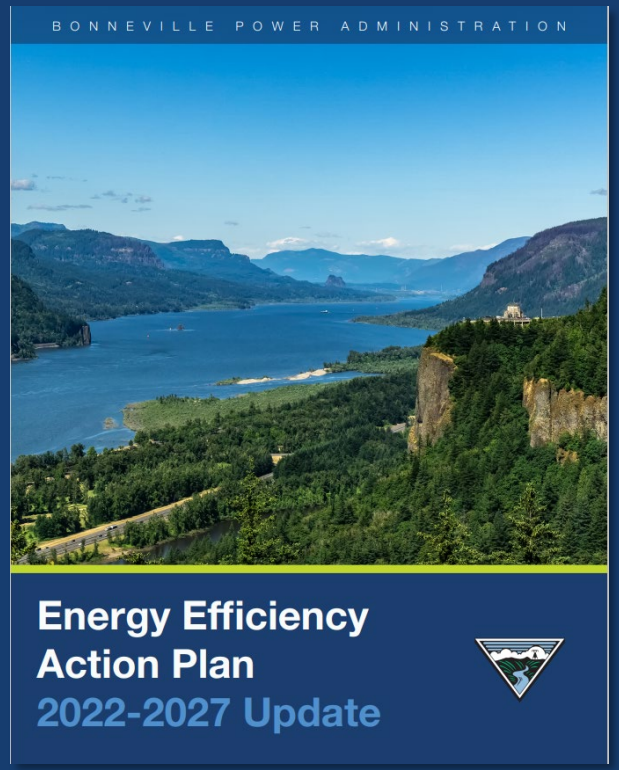


3

Offer a broad suite of measures that supports **all** BPA customers and their rate-payers in all sectors and demographics.

The BPA 2022 – 2027 EE Action Plan

- The BPA 2022-2027 EE Action Plan serves as the roadmap for how BPA and public power will achieve the 300 aMW conservation savings goal.
- In FY22-23, BPA acquired 89.6 aMW of programmatic conservation. EEI acquisition resulted in 79.1 aMW of energy savings. This rate period BPA has acquired 62.17 aMW with a goal of 90 aMW.
- BPA remains on track to exceed its 300 aMW energy conservation goal.



Demand Response, Market Transformation, and Momentum Savings

- Resource Program and Power Plan identified 300 MW of DR **by** end of FY26 of low cost, frequently deployable technologies that provide an energy resource (not capacity) like Demand Voltage Reduction (DVR)
- An additional 18.26 aMW of savings was delivered through Market Transformation activities led by the Northwest Energy Efficiency Alliance.
- Successfully completed building Momentum Savings market models and are on track to deliver 30 aMW energy savings by end of 2027.

Questions?

BONNEVILLE POWER ADMINISTRATION

Residential Energy Efficiency

Jonathon Belmont
Residential Program Sector Lead

Eastern Washington Utility Roundtable
June 4, 2025

Today's Agenda

- Residential Strategic Priorities.
- Rate Period IM Updates.
- Residential Measures in Development.

Residential Strategic Priorities

Residential

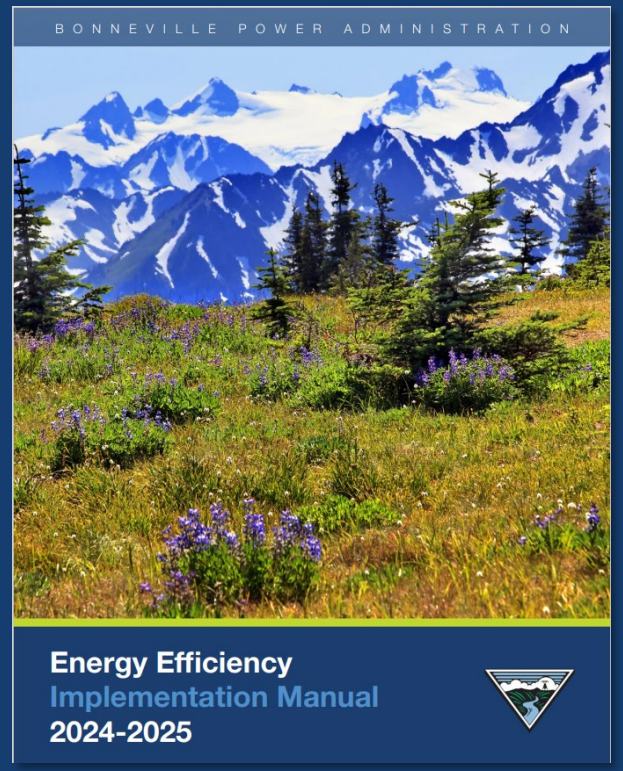
- Supporting measures that reduce residential heating and cooling loads and high-efficiency water heating measures.
- Developing new opportunities to achieve higher savings and customer satisfaction.
- Increasing incentive payments to better align with increasing costs.

2024-2027 Priorities

- Addressing material and installation cost increases.
- Overcoming contractor hesitancies to HPWH installations.
- Increasing coordination with regional actors on HVAC.
- Engaging smaller customers on program opportunities.

FY26-28 Rate Period IM Updates

- Require installed cost for all Residential measures.
- Remove “By Request” measures distribution channel.
- Remove “metal frame only” precondition from double-pane window Prime Window and Patio Door Replacement.
- Allow multifamily new construction custom projects for single systems.



FY26 – 28 Rate Period IM Updates (continued)

Measures	Existing Payments	New Payments
Air-Source Heat Pumps	$1,000 / unit	Increased to $1,250 / unit
Ductless Heat Pumps	$800 / unit	Increased to $920 / unit
Variable Speed Heat Pumps	$200 – $1,200 / unit	Increased to $600 – $1,560 / unit
Clothes Washers	$25 – $100 / unit	Increased to $36 – $125 / unit
Heat Pump Water Heaters	$700 – $1,100 / unit	Increased to $1,400 – $2,200 / unit
Windows	$2 – $16 / sq ft	Increased to $8 – $20 / sq ft

Residential Measures in Development

- Cold Climate Heat Pumps (ccHP).
- Room/Saddlebag Heat Pumps.
- Central Heat Pump Water Heaters (CHPWH).

Questions?

BONNEVILLE POWER ADMINISTRATION

BPA Low Income Energy Efficiency

Amy Burke
Low Income Lead

Eastern Washington Utility Roundtable
June 5, 2025

Low Income Energy Efficiency

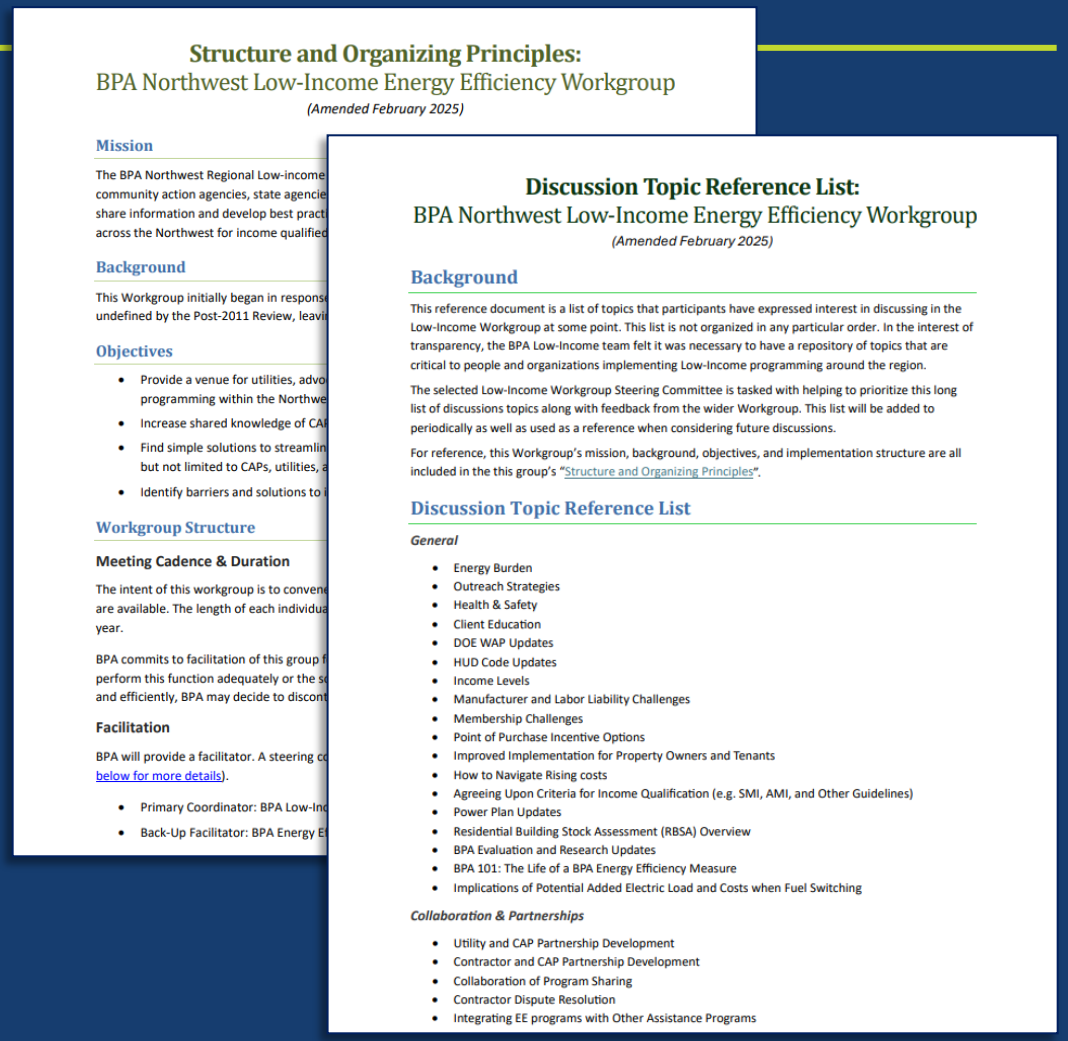
- Income Qualification Clarification.
- Low Income Workgroup.
- Ongoing Efforts & Discussions.
- Highlighted Changes Effective October 1.
- Intro Low Income Webinar *(Coming in July).*
- Available Resources.
- Questions?

Low Income Qualification Clarification

"Low income household eligibility is based on gross income and is defined in the Federal Weatherization Assistance Program (WAP) as 200 percent of the poverty income levels. ***Alternatively, approved statewide or tribal eligibility definitions may substitute for federally established qualifying low income levels, if provided."***

Low Income Energy Efficiency Regional Workgroup

- Hosted three times a year.
- Presentations & facilitated discussions.
- Selected Steering Committee.
- Next meeting coming June 2025.
- Posted on Low Income Page:
  - Workgroup Charter.
  - Discussion Topic Reference List.
  - Resources from previous meetings.



Structure and Organizing Principles:
BPA Northwest Low-Income Energy Efficiency Workgroup
(Amended February 2025)

Mission

The BPA Northwest Regional Low-income
community action agencies, state agencie
share information and develop best pract
across the Northwest for income qualifie

Background

This Workgroup initially began in respons
undefined by the Post-2011 Review, leavi

Objectives

- Provide a venue for utilities, advo
programming within the Northwe
- Increase shared knowledge of CA
- Find simple solutions to streamlin
but not limited to CAPs, utilities,
- Identify barriers and solutions to

Workgroup Structure

Meeting Cadence & Duration

The intent of this workgroup is to convene
are available. The length of each individua
year.

BPA commits to facilitation of this group f
perform this function adequately or the s
and efficiently, BPA may decide to discont

Facilitation

BPA will provide a facilitator. A steering c
below for more details).

- Primary Coordinator: BPA Low-Inc
- Back-Up Facilitator: BPA Energy E

Discussion Topic Reference List:
BPA Northwest Low-Income Energy Efficiency Workgroup
(Amended February 2025)

Background

This reference document is a list of topics that participants have expressed interest in discussing in the Low-Income Workgroup at some point. This list is not organized in any particular order. In the interest of transparency, the BPA Low-Income team felt it was necessary to have a repository of topics that are critical to people and organizations implementing Low-Income programming around the region.

The selected Low-Income Workgroup Steering Committee is tasked with helping to prioritize this long list of discussions topics along with feedback from the wider Workgroup. This list will be added to periodically as well as used as a reference when considering future discussions.

For reference, this Workgroup's mission, background, objectives, and implementation structure are all included in the this group's "Structure and Organizing Principles".

Discussion Topic Reference List

General

- Energy Burden
- Outreach Strategies
- Health & Safety
- Client Education
- DOE WAP Updates
- HUD Code Updates
- Income Levels
- Manufacturer and Labor Liability Challenges
- Membership Challenges
- Point of Purchase Incentive Options
- Improved Implementation for Property Owners and Tenants
- How to Navigate Rising costs
- Agreeing Upon Criteria for Income Qualification (e.g. SMI, AMI, and Other Guidelines)
- Power Plan Updates
- Residential Building Stock Assessment (RBSA) Overview
- BPA Evaluation and Research Updates
- BPA 101: The Life of a BPA Energy Efficiency Measure
- Implications of Potential Added Electric Load and Costs when Fuel Switching

Collaboration & Partnerships

- Utility and CAP Partnership Development
- Contractor and CAP Partnership Development
- Collaboration of Program Sharing
- Contractor Dispute Resolution
- Integrating EE programs with Other Assistance Programs

Click on each page to access the documents online.

Low Income Energy Efficiency Regional Workgroup

Open Invitation!

Email aaburke@bpa.gov to get on our mailing list.

Highlighted Changes Effective October 1

- Program name changing from “Low Income Energy Efficiency” to “**Energy Efficiency Income Qualified**”.
- Requiring two fields when entering projects in BEETS.
- Disallowing cost coverage of full roof replacements.
- Implementing new policy for repair cost coverage.
  - For an income qualified project with a measure cost of $1,000 or higher, related repair costs will be capped at 300% of the reported income qualified measure cost.

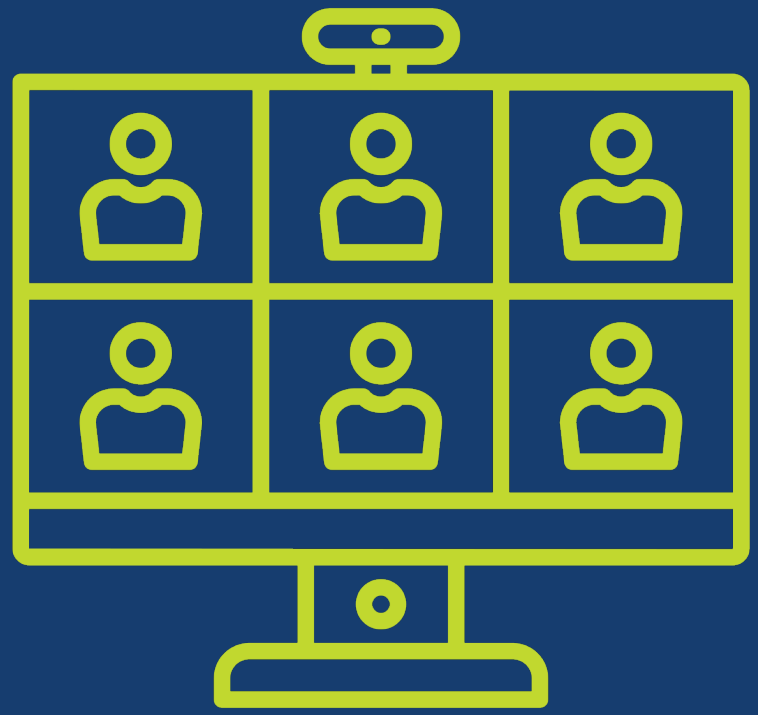
Ongoing Efforts & Discussions

- How to improve support of workforce development.
- Streamline EEI coverage of CAP admin costs.
- Collaborating more with Habitat for Humanity.
- Supporting work in low-income multifamily housing.
- Opportunities for additional measure development.
- Expanding internal staffing support.

Intro to Low Income Webinar *(Coming Soon)*

- Basics of starting a Low-Income Program.
- Available measures & documentation.
- Claiming additional repair costs.
- Outreach recommendations.
- Coordination with CAP agencies.
- Income qualification.

…and more…



Available Low Income Program Resources

- BPA Low Income Page
- Low Income Optional Form & Income Verification Template *(customizable)*
- Low Income New Opportunities Guide
- Contractor Recruiting through Comfort Ready Home

Questions?

Thank you!

Amy Burke

aaburke@bpa.gov

503.230.4364

Inland Power – CARE Program

Haley Puntney

How it Started

- Needed a beneficial way to spend EEI dollars.
- Found a contractor.
- Crunched a lot of numbers.
- Approval of program.
- Soft launch.

Inland Power and Light Company

Launched end of May 2024

Plenty more in the pipeline

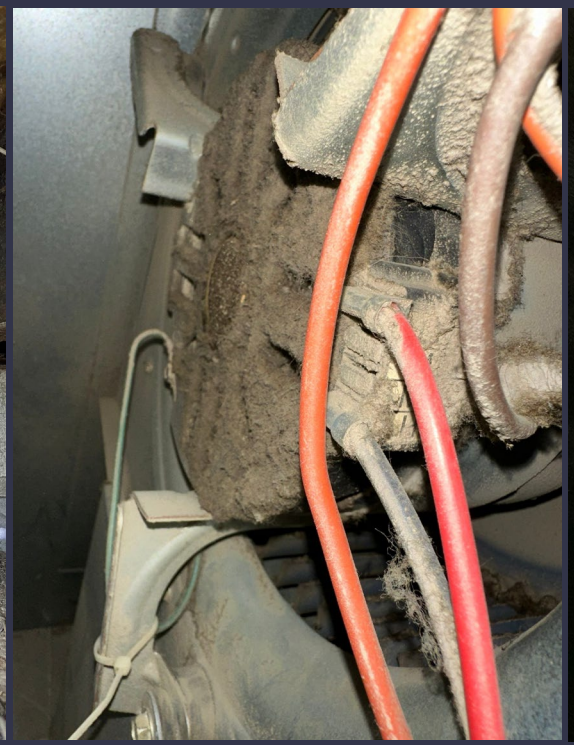
Hiccups

Work done in 60+ homes

No advertising

Community Engagement

How It’s Going



Inland Power and Light Company

Testimonials

“I really like the program. Helped me and my family a lot. I appreciate the help and the program. I hope you keep helping low-income families that are in need. Todd is wonderful as well.”

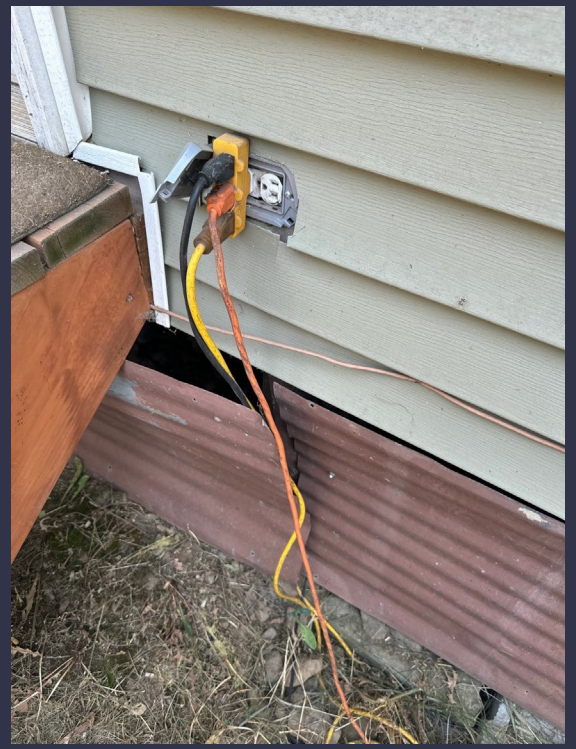
Inland Power and Light Company

“I received assistance thru the CARE program and am very pleased.

Both Carl and Todd were very thorough and professional. They fully explained what they were doing and why. They found multiple defects in my heating ducts, which was affecting how much heat my home was getting.

Todd scheduled by email a date and time to return and make the appropriate fixes to my system. They showed up promptly and were a pleasure to work with. I can't wait to see how much more efficient my system works this winter! As a Senior on a fixed income, this was a real blessing to me. Thank you for making this program available!”

More Pictures



Inland Power and Light Company

Questions?

Inland Power and Light Company

BONNEVILLE POWER ADMINISTRATION

Oregon Trail Electric Cooperative

Susie Snyder and Nini Valerio

Eastern Washington Utility Roundtable
June 4, 2025

Oregon Trail Electric Cooperative

- How we delivered a low-income rebate program in a rural area.
- How we engaged CAP agencies.
- Repair costs and how we are dealing with those.

Time for a break!

BONNEVILLE POWER ADMINISTRATION

Online Lighting Calculator

Eric Mullendore
Commercial and Industrial Sector Lead

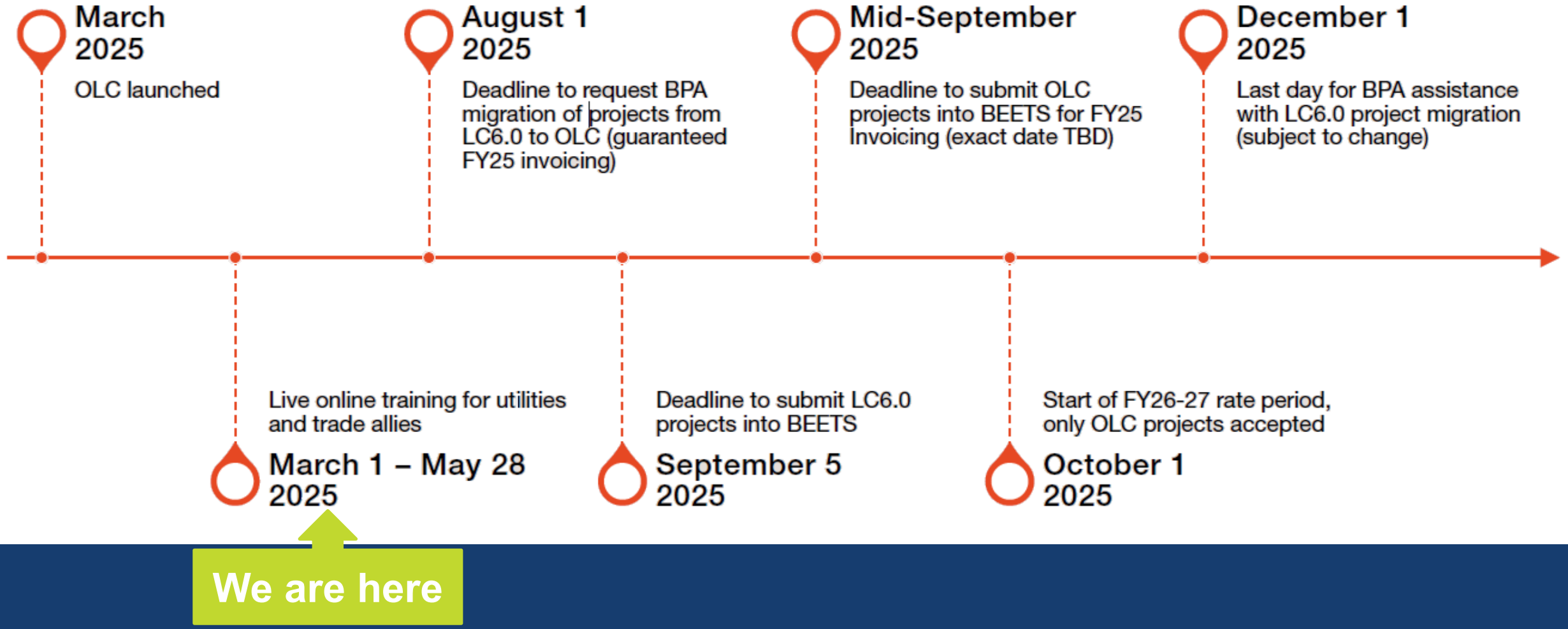
Eastern Washington Utility Roundtable
June 4, 2025

Project Goals

The Online Lighting Calculator (OLC) delivers:

- Reliability.
- Cybersecurity.
- Modernization.
- Centralization.

Project Goals



Support Resources

- Page on bpa.gov with key information and training resources:
  - https://www.bpa.gov/energy-and-services/efficiency/ee-sectors/commercial/online-lighting-calculator
  - User Manual.
  - On-Demand Training Videos.
- Email support requests to lighting@bpa.gov.

Hancock Cloud and MINT

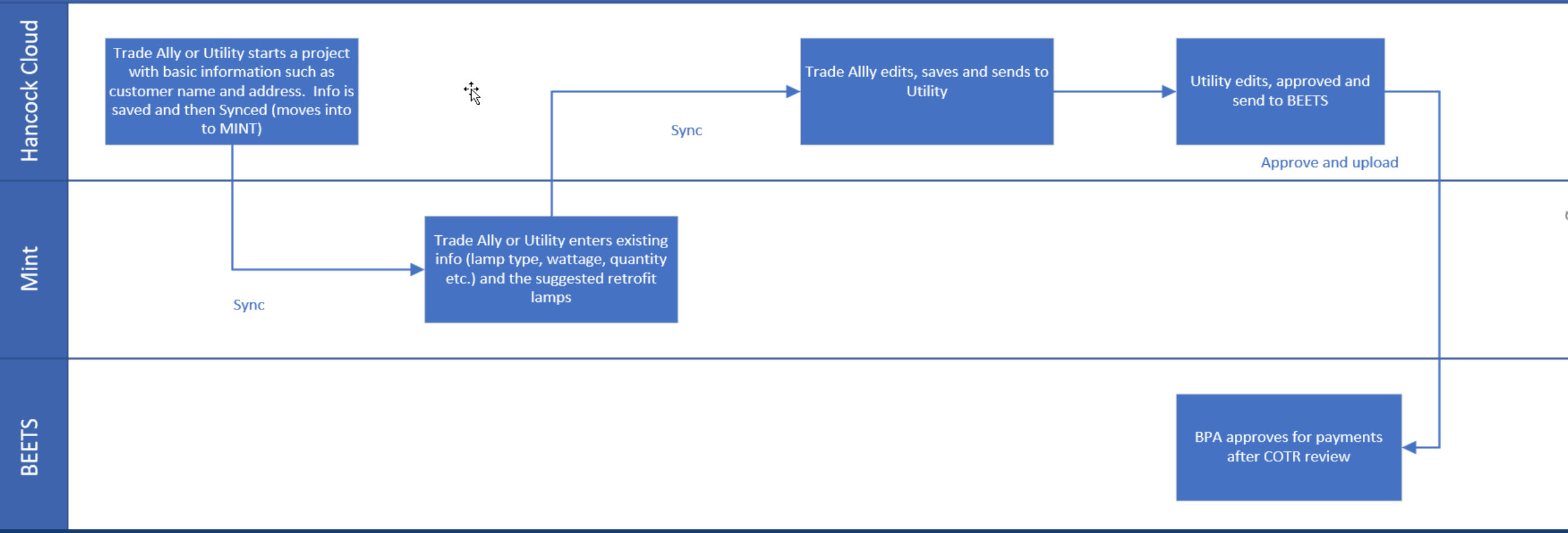
The OLC consists of two elements:

- **Hancock Cloud** is a website, accessed via a browser, that handles a number of administrative functions.
- **MINT** is an application, downloaded on a tablet or desktop, that captures project details and calculations.

Note: Any relatively modern tablet or pc can run MINT. Apple systems must be iOS 18 or higher.

Project Workflow

Basic Workflow for the OLC



Hierarchy of Roles

BPA Admin: Full view to all projects and tables and ability to add others.

BPA User: Ability to do all routine tasks.

Utility Admin: Full view to their (utility specific) projects, change incentive tables and add other users to the utility.

Utility User: Ability to do all routine tasks within their utility.

Trade Ally Admin: Full view to all of their (trade ally specific) projects and add other users to the org.

Trade Ally User: Ability to do all routine tasks within their trade ally org.

Getting Started

- Hancock Cloud is here:
- bpa.hancocksoftware.com/HEEC/#/login

- User names and logins to be provided by BPA. (They are the same for the Cloud and MINT.)

- Upload MINT from the Apple app store or this link: bpa.hancocksoftware.com/mint

- Run the installation .exe, an install wizard will assist you with the install process.

Questions?

BONNEVILLE POWER ADMINISTRATION

Utility Roundtable

Eastern Washington Utility Roundtable
June 4, 2025

Utility Share Outs

- **What's on your mind? Please share or ask <u>anything</u> you like!**
  - Recent successes?
  - Energy Efficiency budget status: need more or give to neighbor?
  - Concerns/challenges now or in the future?
  - Future opportunities or areas to improve?
  - What are you excited about?

Thank you and please join us for dinner & networking at:

Budd's Broiler
450 Columbia Point Dr.
Richland, WA

Adjourn!

BONNEVILLE POWER ADMINISTRATION

Good Morning!
Eastern Washington Utility Roundtable
June 5, 2025

City of Richland Public Library, Richland, Washington

BPA Energy Efficiency Marketing Team

Eastern Washington Utility Roundtable
June 5, 2025

MEET THE MARKETING TEAM

Mike Gross
Marketing Lead

Rachael Ettelman
Marketing Specialist

Maggie Bagan
Marketing Specialist

Ming Kust
Marketing Specialist

Robin Moodie
Marketing Specialist

COLLECTIVE SKILLS

- Graphic Design.
- Production Design.
- Technical, Public Relations and Creative Copywriting/editing.
- Presentations.
- Instructional and Social Media Videos.
- Web Design.
- Marketing Strategy and Planning.

MARKETING TEAM PUBLICATIONS

- Implementation Manual.
- Energy Conservation Annual Review.
- Energy Efficiency Action Plan.
- Energy Efficiency Quickstart Guide.

SERVICES

- Photos and graphic design production for images, logos, and icons.
- Marketing materials customization.
  - Custom fillable forms.
  - Social media content.
  - Flyers.
  - Bill stuffers/post cards.
- Consulting on marketing projects and campaigns.

SERVICES

Press Kits

- Press releases.
- Articles.
- Case studies.
- Project Success Posters.

COLUMBIA RIVER PUD
A COMMUNITY-OWNED UTILITY

HISTORIC BUILDING
BENEFITS FROM MODERN UPGRADES

PROJECT BACKGROUND

Built in the early 1900's, the John Gumm building served as the schoolhouse in St. Helens, Oregon until 1999. Columbia County purchased and remodeled the treasured historical building now known as the John Gumm Civic Office. As part of a larger multi-phase effort to enhance the functionality and capacity of their facilities, Columbia County worked with Columbia River PUD to find energy efficiency incentives. The utility identified a variety of attainable upgrades and incentives including high performance windows, lighting retrofits, insulation, heat recovery system, and variable refrigerant flow HVAC system upgrades.

RESULTS

- The building upgrades will save an estimated 290,723 kWhs annually.
- Columbia River PUD provided an incentive payment of $96,410.
- The efficiency upgrades will save time and money on maintenance.
- Improved workflow, safety, and operational flexibility to accommodate future growth, ultimately improving our ability to serve the community.

290,723
kWh Annual Energy Savings

$96,410
Columbia River PUD Incentive Payment

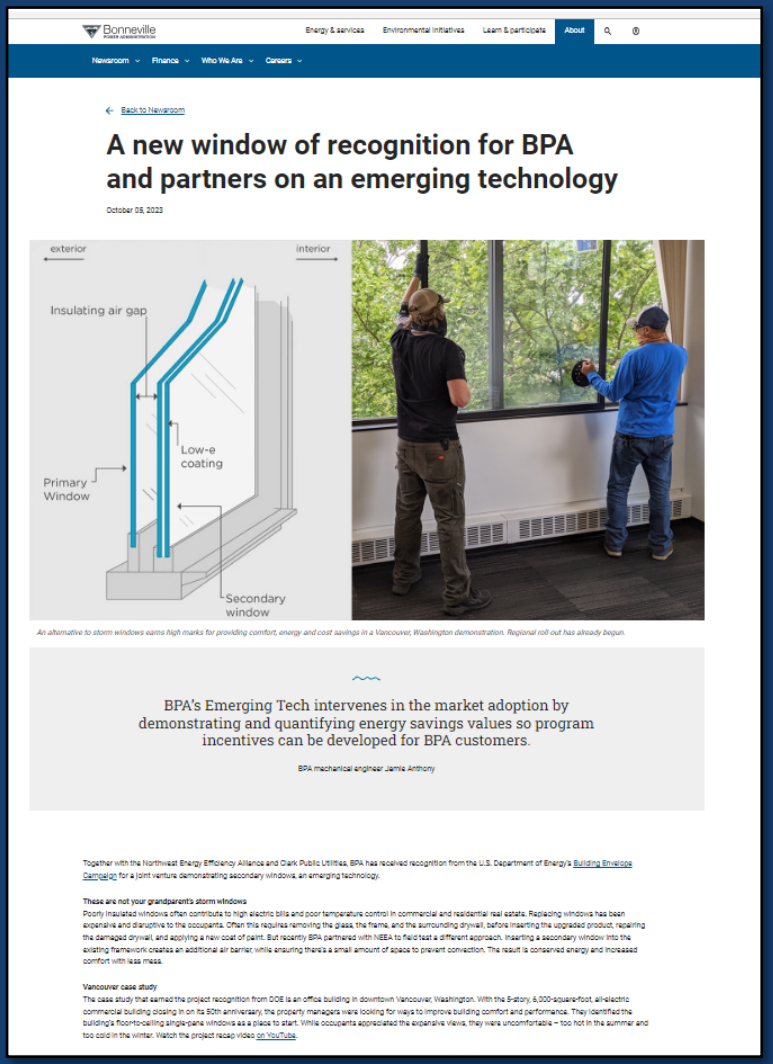
John Gumm building exterior with new windows

New variable refrigerant flow HVAC system

What ideas do you have to save money?

Columbia River PUD offers multiple energy efficiency incentives for residential, commercial and other types of customers.

Columbia River PUD
(503) 397-1844
www.cpud.net



Bonneville

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Back to Newsroom

A new window of recognition for BPA and partners on an emerging technology

October 05, 2023

An alternative to storm windows earns high marks for providing comfort, energy and cost savings in a Vancouver, Washington demonstration. Regional roll out has already begun.

BPA's Emerging Tech intervenes in the market adoption by demonstrating and quantifying energy savings values so program incentives can be developed for BPA customers.

BPA mechanical engineer Jamie Anthony

Together with the Northwest Energy Efficiency Alliance and Clark Public Utilities, BPA has received recognition from the U.S. Department of Energy's Building Envelope Campaign for a joint venture demonstrating secondary windows, an emerging technology.

These are not your grandparent's storm windows

Poorly insulated windows often contribute to high electric bills and poor temperature control in commercial and residential real estate. Replacing windows has been expensive and disruptive to the occupants. Often this requires removing the glass, the frame, and the surrounding drywall, before inserting the upgraded product, repairing the damaged drywall, and applying a new coat of paint. But recently BPA partnered with NEEA to field test a different approach. Inserting a secondary window into the existing framework creates an additional air barrier, while ensuring there's a small amount of space to prevent convection. The result is conserved energy and increased comfort with less mess.

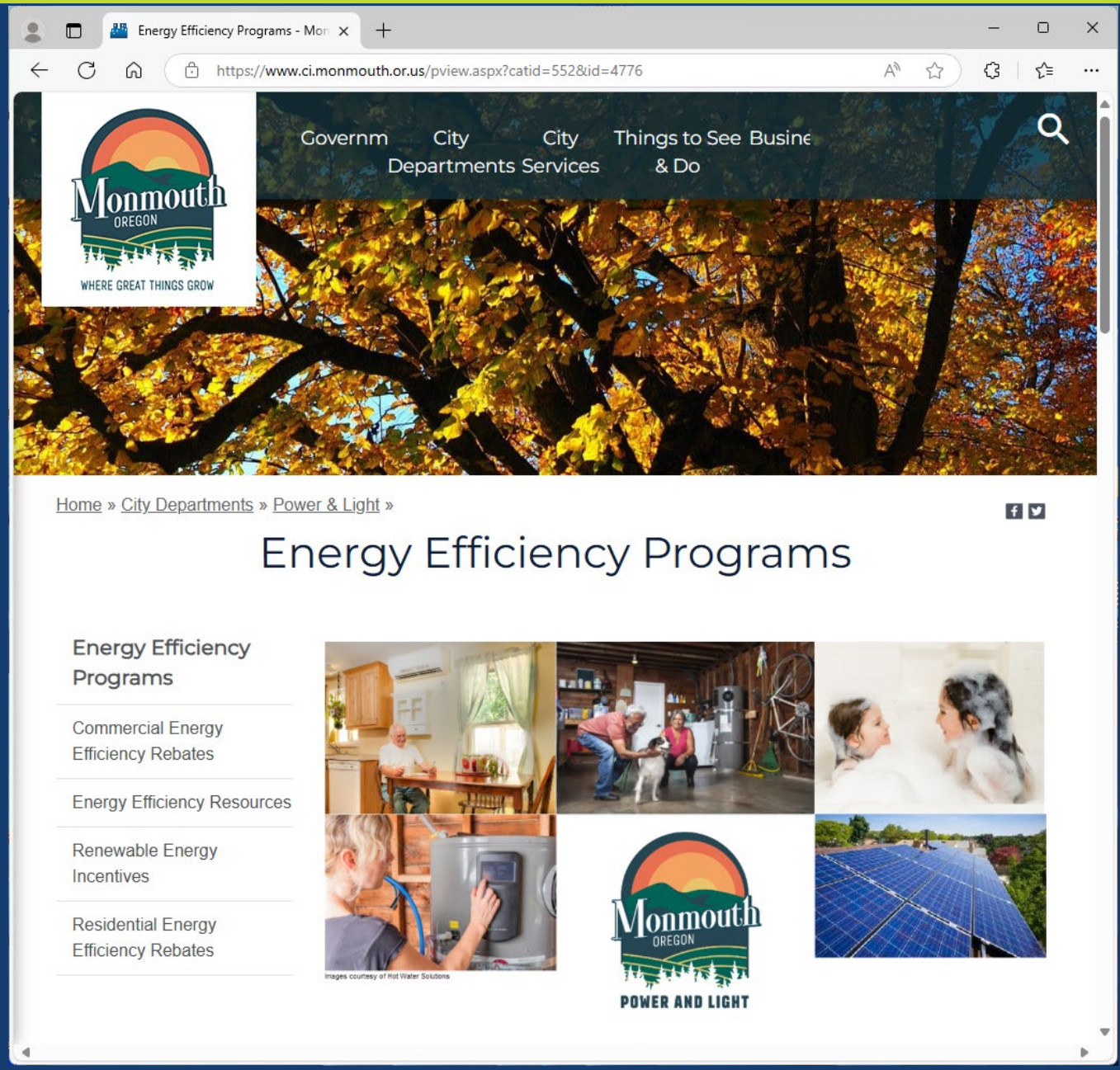
Vancouver case study

The case study that earned the project recognition from DOE is an office building in downtown Vancouver, Washington. With the 8-story, 6,000-square-foot, all-electric commercial building closing in on its 50th anniversary, the property managers were looking for ways to improve building comfort and performance. They identified the building's floor-to-ceiling single-pane windows as a place to start. While occupants appreciated the expansive views, they were uncomfortable – too hot in the summer and too cold in the winter. Watch the project recap video on YouTube.

NEW SERVICES

Website Recommendations

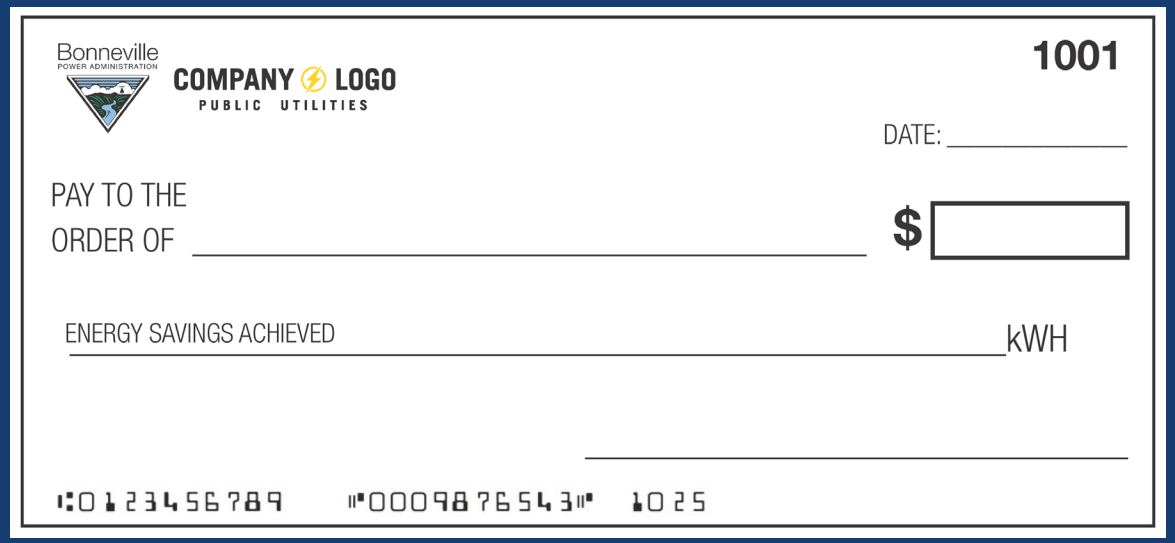
- Review existing website and make recommendations.
- Graphics production.
- Search engine optimization.
- Improve user experience.
- Increase program visibility.

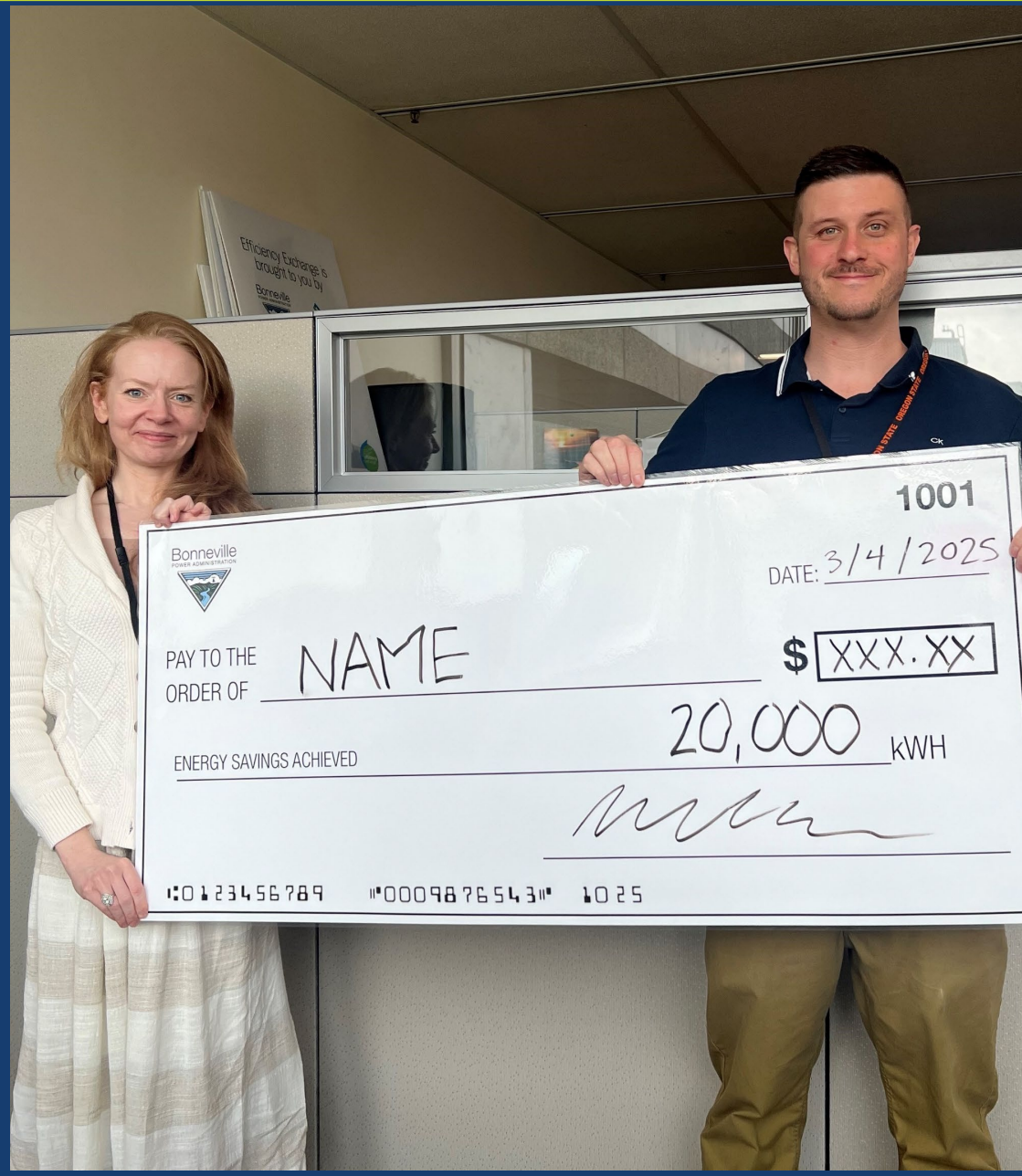


NEW SERVICES

Big Check.

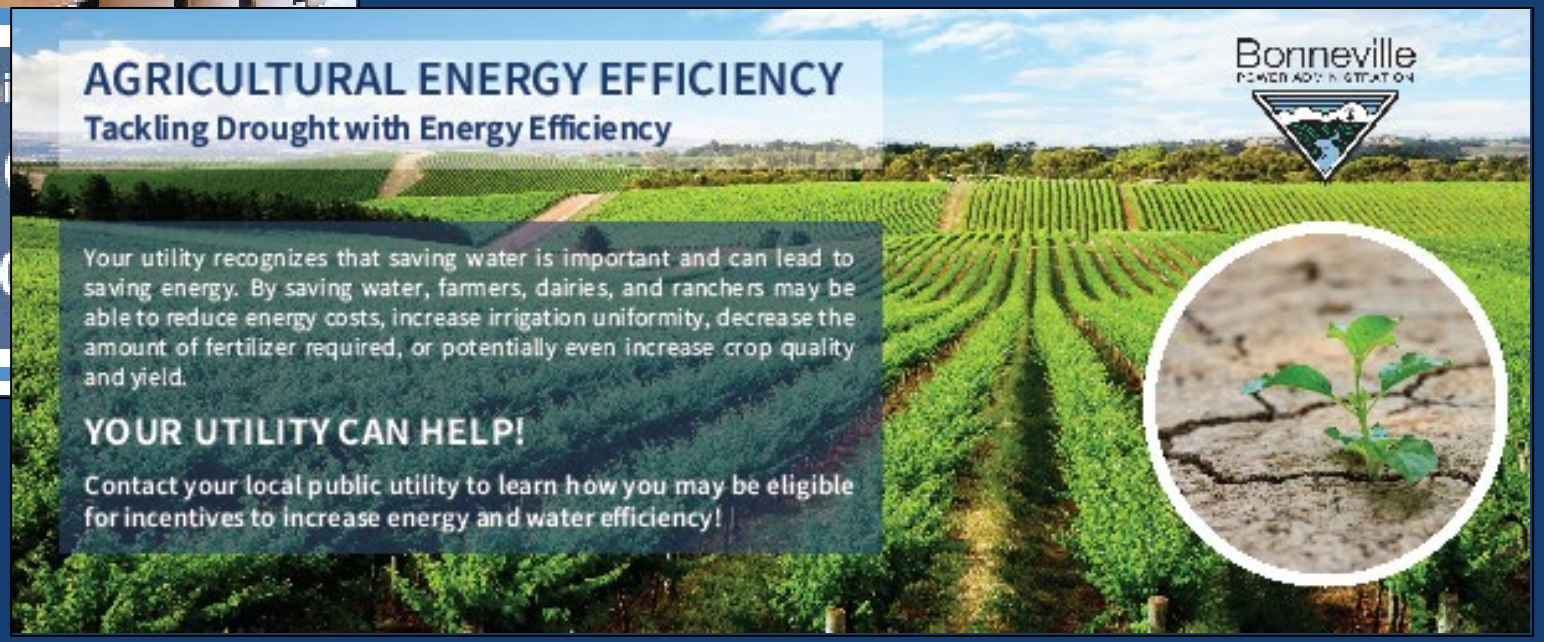
- Customized with logo.
- Re-usable with dry erase markers.
- Great for photo ops for case studies, articles, etc.





UPDATED TEMPLATES

UPDATED TEMPLATES



Questions?

BONNEVILLE POWER ADMINISTRATION

Agricultural Energy Efficiency

Eastern Washington Utility Roundtable
June 5, 2025

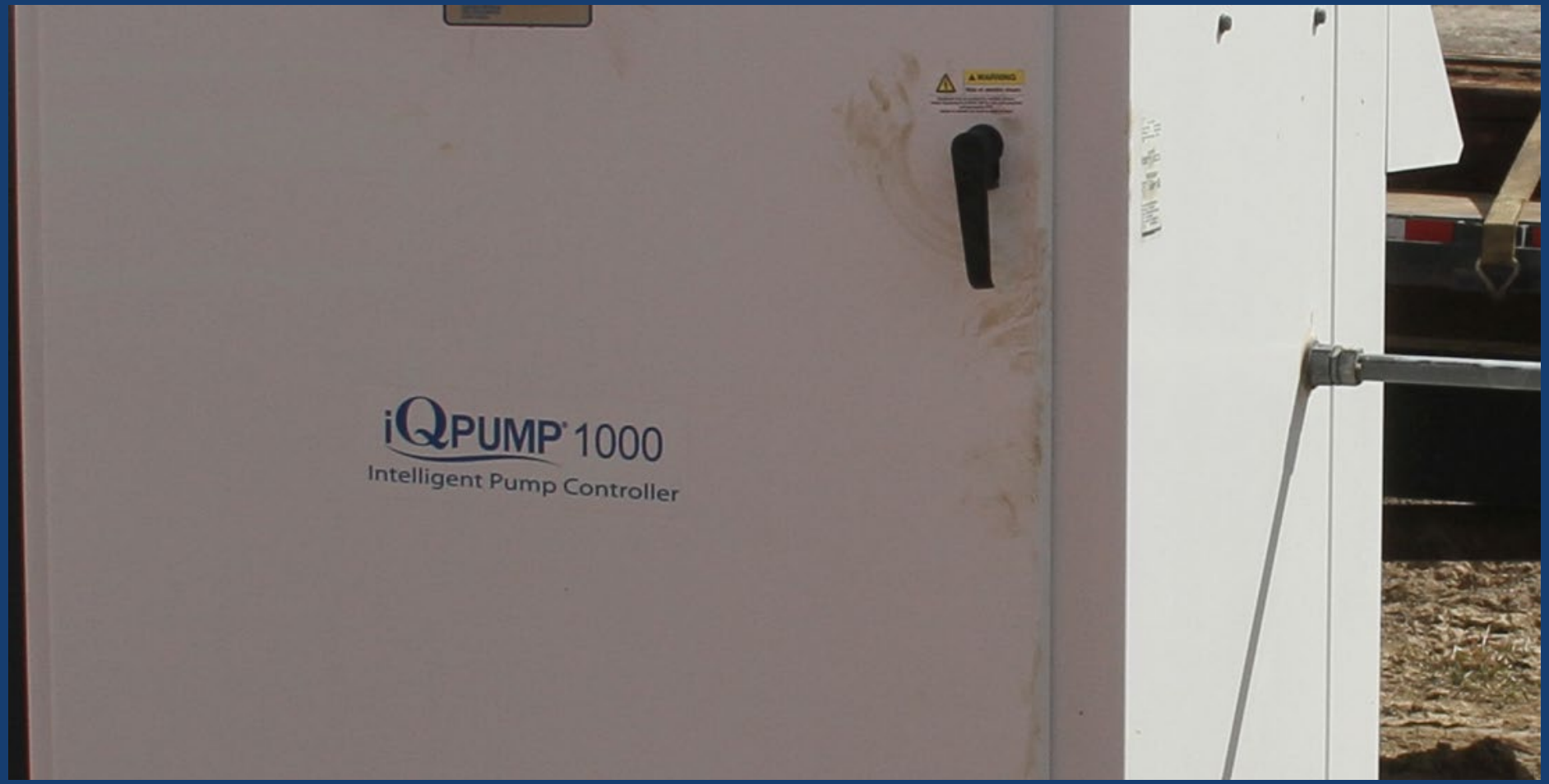
Rebates for VFDs on Ag Pumps - Overview

- New Pump – Turbine or Centrifugal.
- Existing Pump –Turbine or Centrifugal.
- Rebated on the motor hp (not the pump or VFD hp).
- Eligibility also based on the head pressure/flow rate.
- BPA engineers will complete the form for you!

Vertical turbine pump, all we can see is the motor

VFD (white) & Transformer (gray)

VFD Brand and Model



End suction centrifugal pump

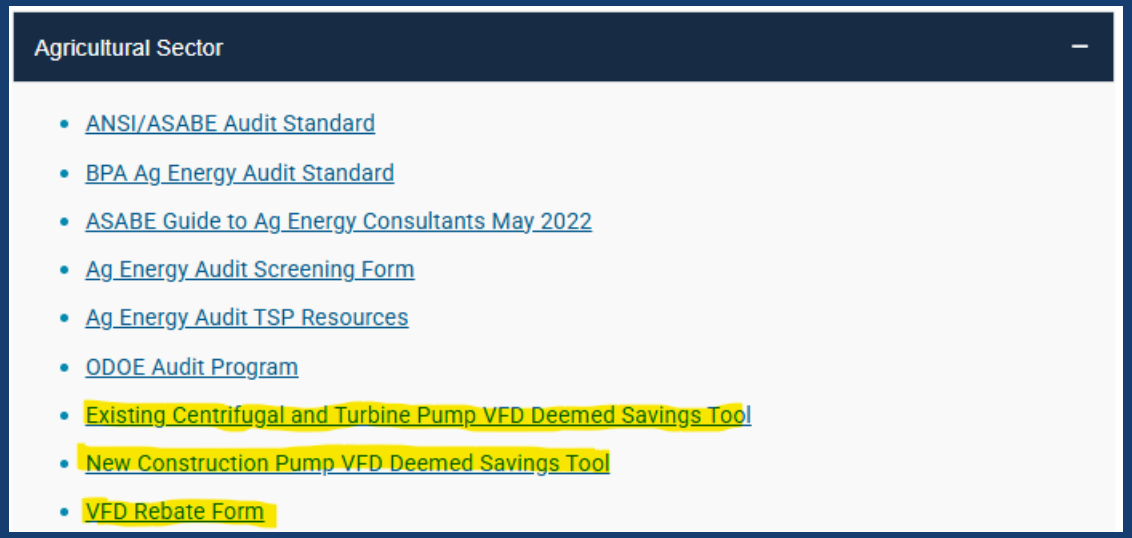
Motor Nameplate (for HP)

Pump Nameplates
Contain Phone Number & Serial Number
(to call vendor for well info for calculator)

Pump Nameplate found on the discharge head under the motor

- Calculators (New/Existing Pump).
- Easy VFD Application Form (for your member).
- BPA Engineers will complete the calculator for you!

https://www.bpa.gov/energy-and-services/efficiency/document-library



1	**AGRICULTURE NEW CONSTRUCTION - TURBINE AND CENTRIFUGAL PUMP VFD CALCULATOR**				
2				Version Date: 3/1/2025	
3	***Please fill in all of the green highlighted fields. Add any explanatory notes where needed.***				
4	Use this tool to determine eligibility and energy savings related to VFDs installed on new pumping plant installations in Ag applications.				
5					
6	**A. IRRIGATOR INFORMATION**				
7	Estimated Date of VFD Installation:	January 2, 2025			
8	Irrigator Member Name:	Jack N. Beanstalk			
9	Address:	Cornstalk Lane			
10	City,State,ZIP:	Idaho Falls, ID			
11	Serving Electric Utility:	Rural Coop	phone#		
12	Account Number or	123456			
13	Meter Number	54123			
14	Estimated Annual Energy Usage	306,414	kWh per year		
15	Melded Average Cost per kWh:	0.065	$/kWh		
16					
17	**B. MOTOR DATA**				
18	Irrigation Pump Rated HP for VFD:	200	HP		
19	Total Rated HP on meter: (from below)	273	HP		
20					
21	**C. PUMP DATA**				
22	Pump Type (Centrifugal or Turbine):	Turbine	use pull down		
23	Pump Manufacturer:	USA Pumps			
24	Pump Model:	123-abc			
25	Rated Head (or TDH) (nameplate or curve):	550	feet	WHP check =	167
26	Rated Flow (from nameplate or curve):	1,200	gpm	EHP check =	231
27	Pump Depth (feet):	400	feet	use zero for centrifugal	
28	Estimated Operational Lift (feet):	360	feet		
29	Maximum Expected Lift (or inlet pressure in feet):	370	feet	(note 2.31 feet per PSI)	
30	Lowest Expected Lift:	350	feet		
31	Discharge pressure Maximum Lift (psi):	90	psi gauge at pump		
32	Discharge pressure Minimum lift (psi):	105	psi gauge at pump		
33	Expected lowest discharge pressure with VFD (psi):	85	psi gauge at pump		
34	Highest Expected Flow (gpm):	1,200	gpm	two pivots	
35	Lowest Expected Flow (gpm):	900	gpm	one pivot	
36	Highest Total Dynamic Head calcuted (ft):	583	feet		
37	Lowest Total Dynamic Head calculated (ft):	551	feet		
38	Variation in Flow requirements during season (calc):	25%	Variation in flow must be at least 20% percent for Turbines, or		
39	Variation in Head during season (calc):	6%	variation in head requirements of at least 10% percent for turbines and 20% for Centrifugal		

41	**D. METER USAGE ESTIMATES**						
42							
43	Equipment Description	Rated Load	Units (kW or HP)	Equipment load as percentage of metered load	Motor Load Factor	Estimated hours of Operation (for pivots assume 33% run time)	Estimated Annual Energy Consumption (kWh)
44	Main Pump (where VFD to be installed)	200	HP	73.3%	0.9	1,800	241,704
45	Centrifugal Booster Pump (if any)	50	HP	18.3%	0.8	1,800	53,712
46	Pivot 1 (6 towers at 1 HP each)	6	HP	2.2%	1	594	2,659
47	Pivot 2 (10 towers at 1.5 HP each)	15	HP	5.5%	1	594	6,647
48	End gun booster pump (pivot 2)	2	HP	0.7%	0.9	1,260	1,692
49				0.0%			0
50				0.0%			0
51				0.0%			0
52	**TOTALS =**	**273**				Estimated Usage Total =	**306,414**
53							
54							
55	**E. CROP AND IRRIGATION SYSTEM TYPE DATA**						
56							
57		**Year**	**Metered kWh**	**Crops grown**	**Acres**	**Irrigation System type**	
58							
59	1 year post installation of VFD	2025	?	wheat, alfalfa	120,120	pivot with drops	
60							

63	**F. DEEMED ENERGY SAVINGS AND INCENTIVE**			
64	Deemed Site Savings per unit (kWh/HP)		**440**	**kWh/HP**
65	New Construction Pump VFD Incentive Rate ($/HP)		**$100**	
66	**Site** Annual Energy Savings (kWh/HP*HP)		**88,000**	**kWh/year**
67	**Busbar** Annual Energy Savings (site savings * 1.11183))		**97,841**	**kWh/year**
68	New Construction Pump VFD Incentive		**$20,000**	
69				
70	Incremental Cost of VFD =		**$50,000**	
71	Simple Payback with incentive =		**5.2**	**years**
72				
73	If any questions, please call Travis Wood at 208-612-2131			
74				
75	**ENTER THE FOLLOWING VALUES IN THE DEEMED MEASURE UPLOAD:**			
76	**UES REFERENCE NUMBER =**	AMDMC40240	DEV	**Ref No**
77	**QUANTITY =**	200		**HP is Unit**
78	**CALCULATOR SAVINGS PER UNIT =**	440.00		**kWh/HP**
79	**CALCULATOR BC Ratio =**	1.96		

Questions?

BONNEVILLE POWER ADMINISTRATION

Distribution System Improvements

Tony Koch
Customer Service Engineer

Eastern Washington Utility Roundtable
June 5, 2025

Utility Distribution Strategic Priorities

Utility Distribution

Increased communication with utility management to promote the value of Distribution System Improvements.

2024-2027 Priorities

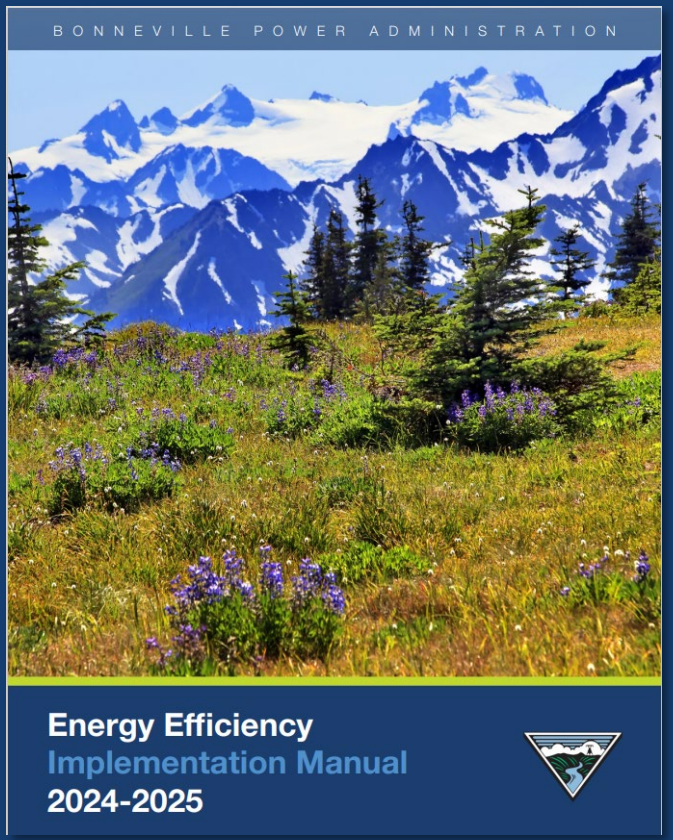
Combining System Improvement outreach with Conservation Voltage Reduction (CVR) and Daily Demand Voltage Reduction (DVR).

Implementation Manual – Section 12
What Measures are in this Sector?

Two main groups: FY24+

1. Re-conductor & Transformers (35 year measure): **$0.38/kWh** (a $.03 increase).
   - Several other measures: voltage increase, power factor correction, etc. but they are infrequently submitted/reported.

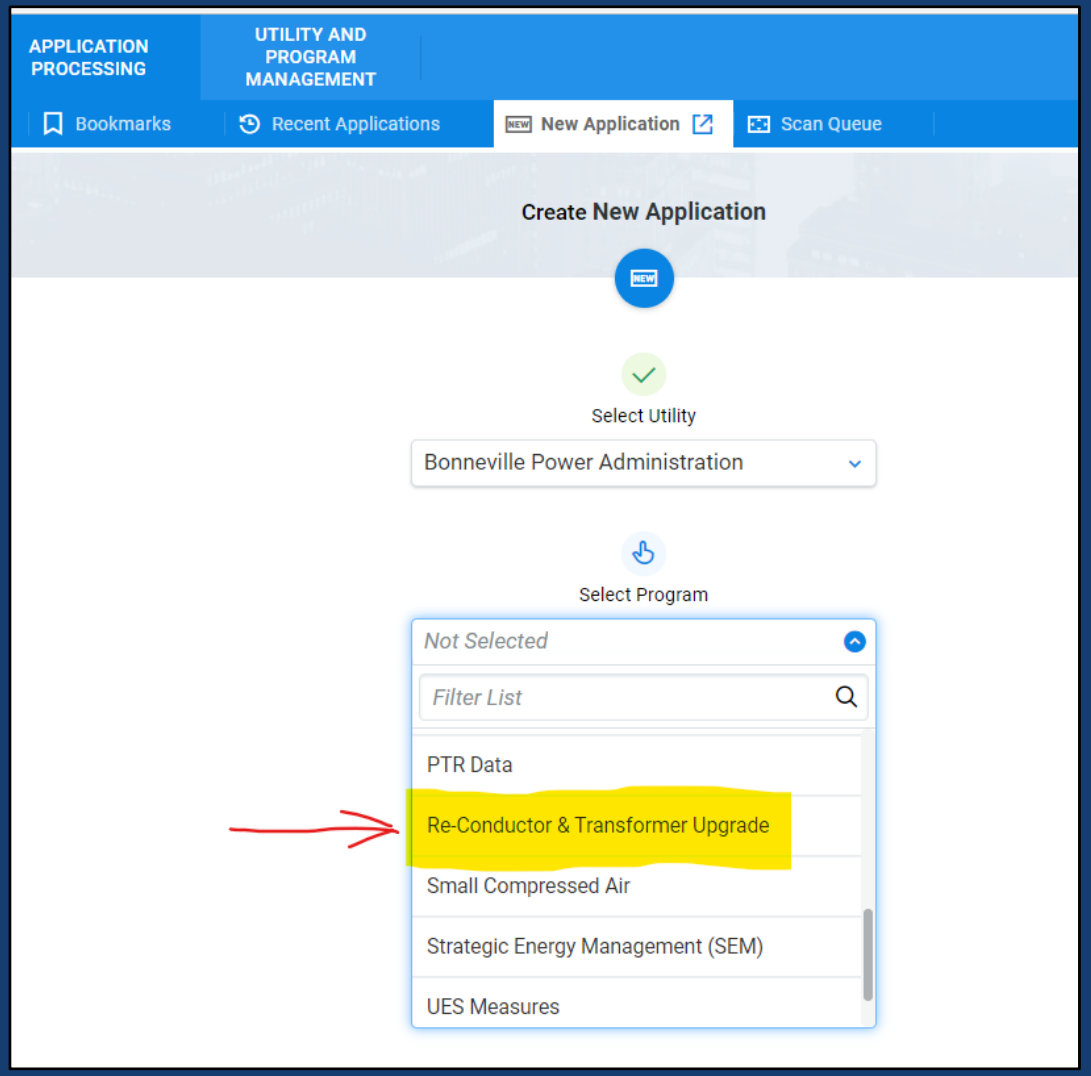
2. CVR / VO (10 year measure life): **$0.33/kWh** incentive (a $.08 increase).
   - Conservation Voltage Reduction, also referred to Voltage Optimization.



Reconductor-Transformer (RT) Calculator: Program in BEETS

What is it?

- New streamlined process for these two measures, an alternative to custom project submittal.
- Project support document files can be attached to the calculator (all in 1 file).
- More automated data entry fields.
- Can handle up to 6 transformer and 6 reconductor measures in 1 file.



Utility Project Submittals in FY22 - FY23

Re-conductor & Transformers

(35 year measure)

$0.38/kWh

(FY24+ rate)

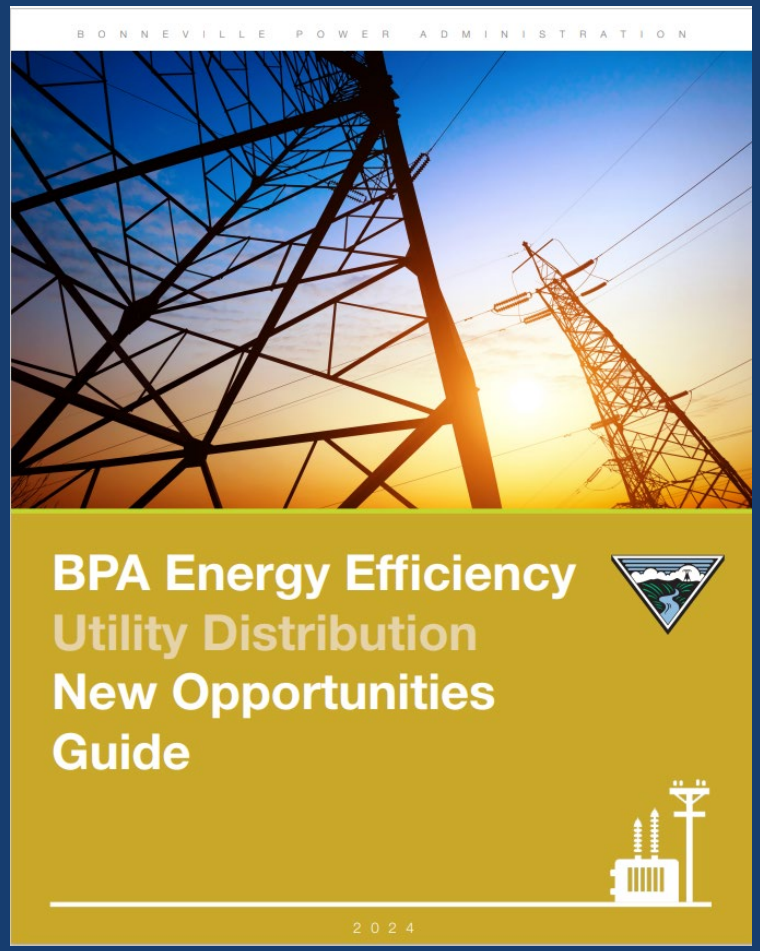
Utility	Program / Savings Type	Busbar Savings (kWh)
Inland (east-side)	Re-Conductor & Transformer	605,779
Central Lincoln	Re-Conductor & Transformer	224,824
Fall River (eastside)	Re-Conductor & Transformer	303,626
Yakama (eastside)	Re-Conductor & Transformer	114,994
Idaho County (eastside)	Re-Conductor & Transformer	143,593
Vigilante (eastside)	Re-Conductor & Transformer	1,345,572
East End (eastside)	Re-Conductor & Transformer	94,420
Oregon Trail (eastside)	Re-Conductor & Transformer	828,630
Benton PUD (eastside)	Re-Conductor & Transformer	23,299
Kittitas (eastside)	Re-Conductor & Transformer	204,310
Coos-Curry	Re-Conductor & Transformer	616,676
Columbia REA (eastside)	Re-Conductor & Transformer	147,060
Okanogan PUD (eastside)	Re-Conductor & Transformer	59,318
Columbia River	Re-Conductor & Transformer	64,899
Idaho Falls Power (eastside)	Re-Conductor & Transformer	165,790
Benton (eastside)	Custom Projects Option 1 (Reconductor)	181,505
Inland (east-side)	Custom Projects Option 1 (Reconductor)	121,006
Tillamook	Custom Projects Option 1 (Voltage Increase)	436,511
Yakama (eastside)	Custom Projects Option 1 (Reconductor)	562,794
Tacoma Power	Custom Projects Option 2 (CVR)	637,499
Okanogan PUD (eastside)	Custom Projects Option 1 (Reconductor)	112,161
DOE-RL (eastside)	Custom Projects Option 1 (Reconductor)	179,502
Kittitas (eastside)	Custom Projects Option 1 (Reconductor)	182,598
Vigilante (eastside)	Custom Projects Option 1 (Reconductor)	184,583
	Total (kWh/year)	**7,540,948**
	Total (aMW)	**0.86**

89

Utility Distribution: New Opportunities Guide

A marketing document to share with other staff…

https://www.bpa.gov/-/media/Aep/energy-efficiency/utility-toolkit/uds-nog.pdf



Contact Info for Technical Customer Service Support

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Mechanical Engineer

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206.220.6777

Time for a break!

BONNEVILLE POWER ADMINISTRATION

BPA Program Support

Comfort Ready Home
Energy Smart Industrial

Eastern Washington Utility Roundtable
June 5, 2025

Energy Smart Industrial Program Update

Tony Simon & Austin Rogers

June 5, 2025

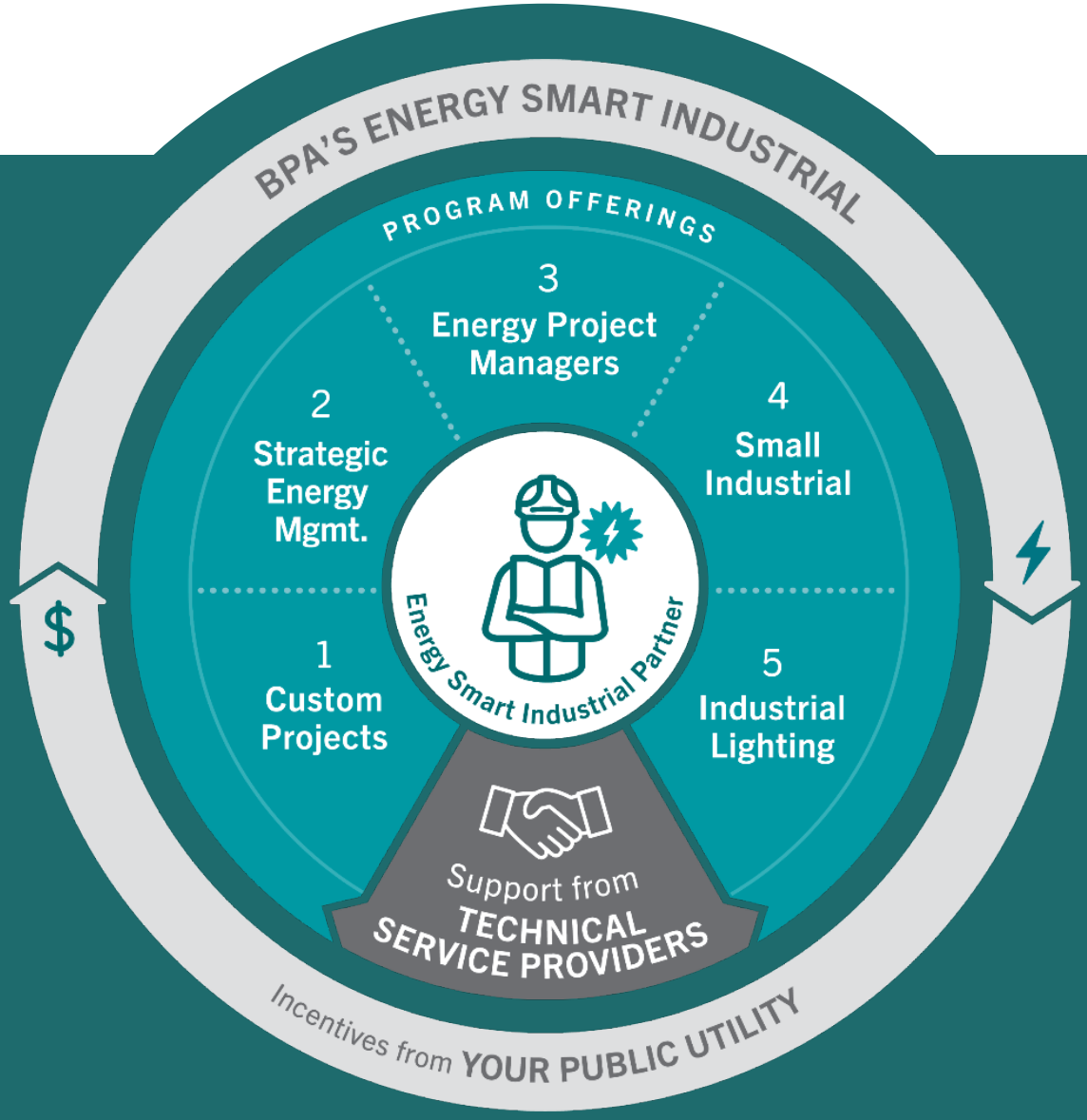
Energy Smart Industrial

What is the ESI Program?

Energy Smart Industrial

Assists the public utilities and the industries of the Pacific Northwest with ELECTRICAL energy efficiency

- Provides technical expertise and cash incentives to implement energy efficiency projects
- Serves industries of all types, sizes, and budgets (including wastewater)
- The ESIP serves as a single point of contact for utilities and industries



ESIP Territories

Energy Smart Industrial

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bill.kostich@energysmartindustrial.com

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victoria.landwehr@energysmartindustrial.com

Nosh Makujina
NE Oregon, S Idaho, NW Nevada, & W Montana

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Jimmy Sauter
East-Central / NE Washington, N Idaho, & W Montana

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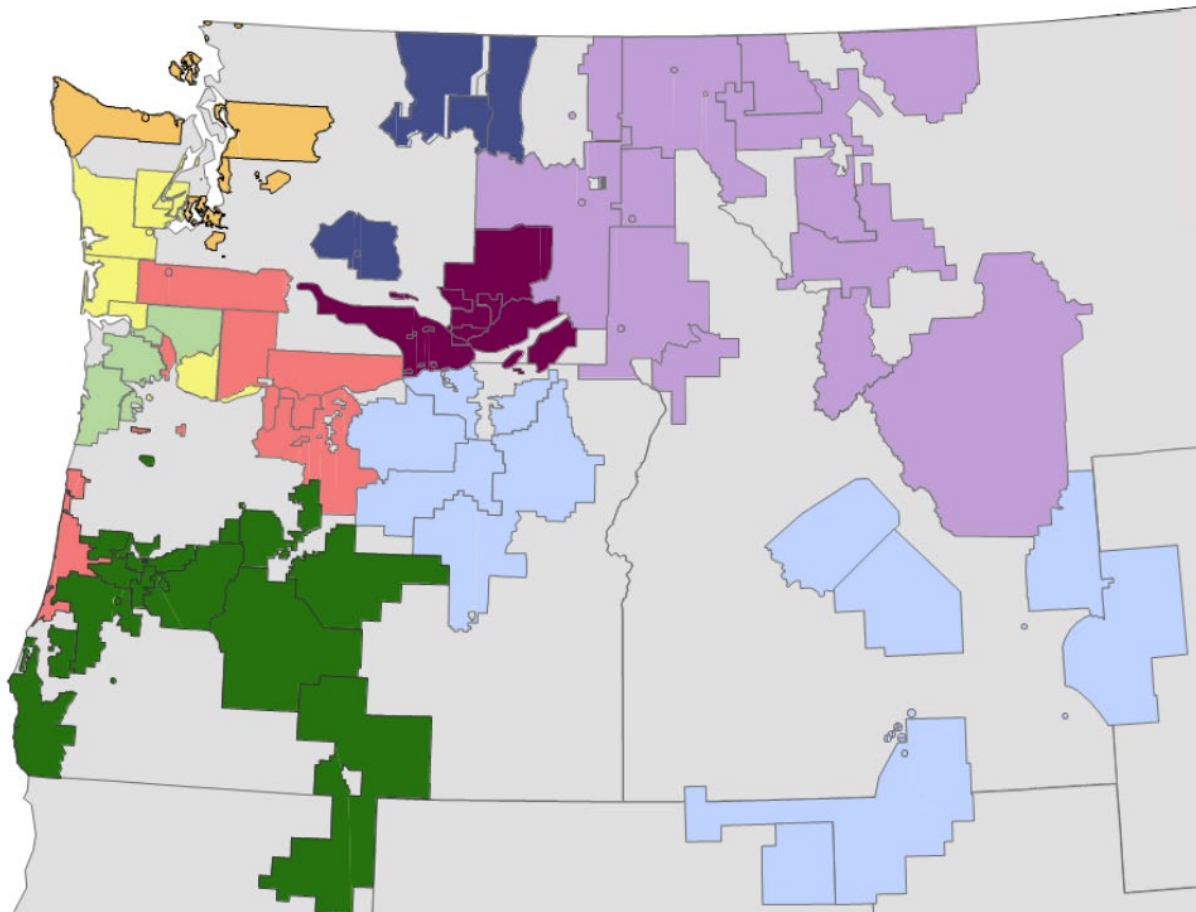
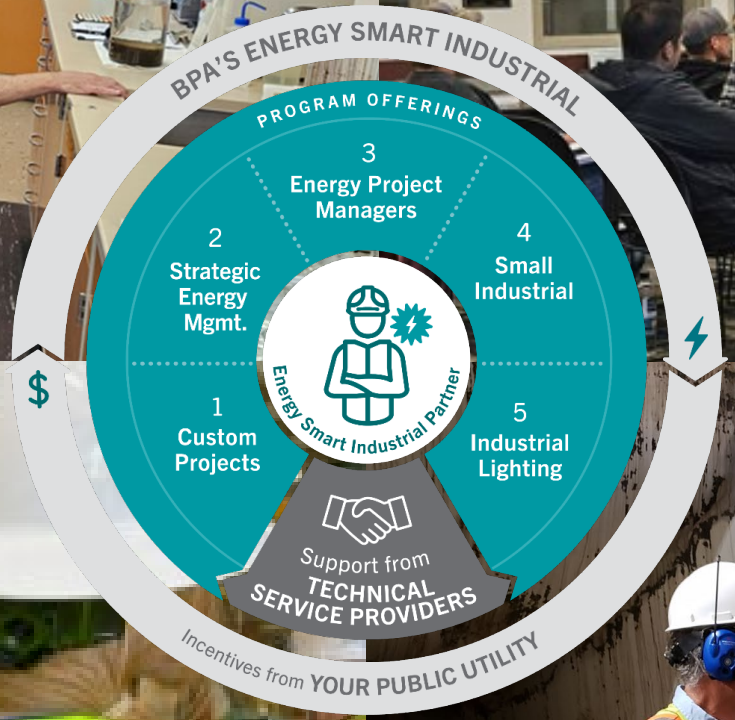
jimmy.sauter@energysmartindustrial.com




PUD NO. 1
OF
OKANOGAN


BPA'S ENERGY SMART INDUSTRIAL
PROGRAM OFFERINGS
3
Energy Project Managers
2
Strategic Energy Mgmt.
4
Small Industrial
1
Custom Projects
5
Industrial Lighting
Energy Smart Industrial Partner
Support from
TECHNICAL SERVICE PROVIDERS
Incentives from YOUR PUBLIC UTILITY
$


LOWER
VALLEY
DATE 10/20/21
Simplot - Smoky Canyon Mine
Thousand Seventy Three & 60/100
******$63,073.60


BPA'S ENERGY SMART INDUSTRIAL
PROGRAM OFFERINGS
3
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Support from
TECHNICAL
SERVICE PROVIDERS
Incentives from YOUR PUBLIC UTILITY


BENTON
RURAL ELECTRIC
ASSOCIATION
DATE Sept 5, 2024
PAY TO THE ORDER OF: Columbia River Seed
$ 59,584 00
fifty-nine thousand five hundred eighty-four 00/100 DOLLARS
MEMO Energy Efficiency
Benton REA

Extending Strategic Energy Management's (SEM) Reach

Energy Smart Industrial

ESI is innovating to deliver a ***full SEM experience*** to industrial participants across a ***wide spectrum*** of scales and geographies.

Continuous Enrollment

Sites start when the time is right for them

Opportunity Identification

Multi-day tune-ups

or

One-day treasure hunts

Right-sized M&V

Engineering calculations

or

Whole-facility energy model

Flexible Learning

Peer learning webinars

and

Self-paced learning

All SEM engagements include:

2-year performance period • Regular check-ins • Eligibility for Performance Tracking System

SEM Outreach Materials

Energy Smart Industrial

Are your operations wasting money?

Your facility, systems, and people are unique.

Maximize your energy potential through Strategic Energy Management (SEM), provided through your local utility. Together we'll dive deep into understanding your facility's operations, find ways that it can run more efficiently, and ultimately improve your bottom line.

Acquire new skills and tools to reach your goals.

BPA's Energy Smart Industrial program delivers SEM in a comprehensive, tailored manner that adapts to the needs of each participating business and facility.

Through hands-on application, your team will be empowered to achieve lasting energy savings with minimal time, cost, or process disruptions.

Energy efficiency becomes accessible, actionable, and rewards operations of every size.

- ✓ **Launch SEM with gusto!** Industrial facilities are short on staff and long on priorities. ESI SEM helps you find and achieve low and no-cost quick wins.
- ✓ **Build a strong energy team.** Through structured support and self-paced learning, your energy team will develop skills to have greater energy awareness. ESI guides your organization towards self-sustainable energy management practices to deliver continuous value long after our work is complete.
- ✓ **Discover your facility's efficiency potential.** A dedicated engineer will get to know your facility's unique processes and equipment, identify quick wins and assist your energy team with overcoming common efficiency barriers.
- ✓ **Access great tools.** Our self-paced SEM curriculum and project management software will get you started efficiently. They will help you learn and implement new strategies, organize projects, facilitate collaboration, and ensure long-term savings persistence.
- ✓ **Secure long-term success.** Beyond identifying savings during the SEM two-year engagement, you will establish the systems and practices to keep energy efficiency initiatives moving forward. Your energy team and facility staff will gain the confidence and capability to continuously improve your site's energy performance without external support.

PARTICIPANT CASE STUDY

Rosboro Lumber in Vaughn, OR

Emerald People's Utility District together with BPA's ESI team offered SEM to Rosboro Lumber, providing their energy team with technical skills, performance incentives, and improved O&M practices. By the second year of participation, the team implemented 15 low- and no-cost improvements that reduced the facility's energy consumption by 10%.

What could this mean for your facility?

For a typical facility using 5 million kWh of electricity each year, reducing their energy usage by 5% would save 250,000 kWh while reducing energy costs by $15,000 annually.

"SEM has been a game-changer. It's opened my eyes to energy savings opportunities, and I'm making smarter decisions because of it."

John Shukle
Electrical Supervisor at Rosboro Lumber

FAQ

What is included in SEM?

TREASURE HUNT: Partner with ESI's technical experts to search for, identify, evaluate, and implement low and no-cost energy saving opportunities at your facility.

TECHNICAL EXPERTISE: Through regular check-ins and individualized engineering support your energy team's knowledge will grow while they gain experience implementing SEM.

ON-DEMAND TRAINING: Self-paced learning modules feature core SEM topics such as how to form an energy team, how to find energy saving opportunities, or how to engage facility staff. Technical training modules can also boost your knowledge of the operation and efficiency of existing equipment and systems within your facility.

PEER NETWORKING: Connect with other industrial SEM participants regularly to share ideas, gain insights, and learn from each other's experience.

How long does a SEM engagement last?

SEM is a two-year commitment, which gives you a chance to identify opportunities, implement projects, and demonstrate improvements over time.

Where do the energy savings come from?

Energy savings primarily come from O&M projects like shutting off idling equipment, scheduling equipment more efficiently, eliminating compressed air leaks, lowering flowrates and operating pressures, and improved equipment sequencing. These savings may also be supplemented by implementing capital projects.

What range of savings is possible?

Savings vary by site, but 3–6% O&M savings is typical in the first year of SEM. Some sites have achieved more than 20% total energy savings at the end of year two.

Let's see how SEM can work for you.
Reach out to your Energy Smart Industrial Partner (ESIP) or electrical utility representative.

Bonneville Power Administration

Energy Smart Industrial is sponsored by Bonneville Power Administration and its Northwest Utilities.

DISCLAIMER Terms and conditions apply. Actual savings will vary by customer's energy use and rate.

REV 2025-05-30

Data Center Resource Materials

Energy Smart Industrial

TRANSFORM YOUR DATA CENTER

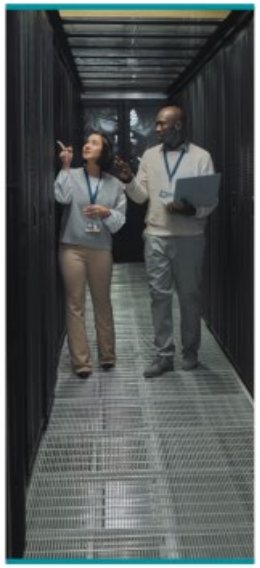
Energy Savings That Power Your Bottom Line

- Earn up to $0.33/kWh of verified savings
- Achieve faster paybacks for efficient upgrades
- Reduce ongoing operational expenses
- Improve your Power Usage Effectiveness (PUE) metrics
- Strengthen your Environmental, Social, and Governance (ESG) performance

Your Partner in Data Center Excellence

Enhance your data center operations with technical support and utility rebates and incentives for qualifying new construction and retrofit energy saving projects. You can get paid to save energy while improving reliability and performance from your electric utility and the Bonneville Power Administration's Energy Smart Industrial (ESI) Program.

Contact your utility for specific eligibility details.



Energy Efficient Upgrades

Controls & Monitoring

- Airflow management systems
- Data center infrastructure management (DCIM) implementation
- Real-time monitoring solutions

Cooling Optimization

- Free cooling solutions
- High-efficiency computer room air conditioning and air handling (CRAC/CRAH) units
- Hot/cold aisle containment
- Variable speed drives for fans and pumps

IT Equipment

- Server consolidation
- Storage optimization

Power Infrastructure

- Advanced power distribution
- High-efficiency engine heaters
- High-efficiency uninterruptible power supply (UPS) systems
- Smart power distribution units (PDUs)
- Transformer upgrades

> "I was really impressed with the skills the ESI team brought to the table. They knew exactly what to monitor and check. They handled the proposal and the incentive paperwork. And they made sure the process was fast and seamless."
>
> **Regional Manufacturing Manager**

Why Act Now?

- Rising energy costs
- Growing pressure for sustainability
- Competitive advantage in your market
- Incentives are available from your public utility!

4 Easy Steps

1. **Confirm Eligibility**
   Contact your utility for eligibility and available incentives.
2. **Project Design**
   The ESI team can conduct a scoping or project assessment and report the energy efficiency measures with detailed price quotations for your experts to prepare a detailed design.
3. **Implementation**
   Once the project design is received, you choose the qualified contractor to implement the plan successfully.
4. **Verification**
   The ESI team verifies the savings based on your project's design, while your utility processes the incentive payment.

Get Started Today

Contact your utility or Energy Smart Industrial Partner.

Energy Smart Industrial

Bonneville Power Administration

Energy Smart Industrial is sponsored by Bonneville Power Administration and its Northwest Utilities.

Energy Smart Industrial

FOCUS ON FRESH TASTE, NOT ENERGY WASTE

New plant saves millions from facility-wide projects

RESER'S FINE FOODS

Project Overview

Reser's Fine Foods production plant in Pasco, Washington.

Reser's Fine Foods built a new production plant in Pasco, WA. From the early stages of design, Reser's and their consultants partnered with ESI to ensure an optimally efficient design. Since, they have continued their energy efficiency progress with a range of additional projects.

Refrigeration

Reser's included a heat recovery system and upgraded essentially every component of the refrigeration system including efficient compressors, evaporators, condensers, and chillers.

Lighting

Reser's installed efficient LED lighting throughout both office and production spaces.

Equipment

And Reser's upgraded many of the water pumps, boiler fans, and an air compressor to variable speed.

Annual Results

7,180,000 kWh
First Year Savings

$360,000
Avoided Energy Cost

3,340 Tons CO_2
Scope 2 Emission Reduction

Bonneville Power Administration | Energy Smart Industrial | Franklin PUD – The Power is Yours

What ideas do you have to save energy?

Jake Wiskerchen, Reser's Fine Foods, 509.542.2500
Maurilio Lopez, Franklin PUD, 509.546.5946
Austin Rogers, ESI Partner, 425.417.8532

A HEALTHY HARVEST OF ENERGY SAVINGS

A blend of SEM and capital projects reaps rewards

Lamb Weston

Project Overview

In 2023, the Lamb Weston vegetable processing plant in Paterson, WA completed several efficiency projects with Benton REA and Energy Smart Industrial. The plant completed a 2-year Strategic Energy Management (SEM) engagement, installed a VFD air compressor and cycing refrigerated dryer, installed VFDs on many pumps throughout the plant, and upgraded a pneumatic conveying system to a mechanical conveying system.

Lamb Weston received nearly $68,000 in rebate incentives from Benton REA.

Optimized Settings

The plant identified the low-cost opportunity to raise the freezer suction pressure. This allows the refrigeration compressors to use less energy without impacting the space temperature.

Upgraded Compressor System

The plant installed a VFD compressor that improved part-load efficiency and an air dryer that cycles on/off based on demand.

Added Pump VFDs

As part of plant-wide electrical upgrades, the plant installed VFDs on many pumps that had previously been throttled and ran continuously at full speed.

Annual Results

830,800 kWh
First Year Savings

$41,500
Avoided Energy Cost

386 Tons CO_2
Scope 2 Emission Reduction

Energy Smart Industrial | BENTON RURAL ELECTRIC ASSOCIATION | Bonneville

What ideas do you have to save energy?

John Timmons, Lamb Weston, 509.875.2734
Chad Smith, Benton REA, 509.781.6727
Austin Rogers, ESI Partner, 425.417.8532

"RUN-AROUND" FOR ENERGY SAVINGS

Stategic Energy Management and Capital Projects Help Save Energy

framatome

Project Overview

The Uranium Recovery Facility's HVAC unit with exhaust heat recovery loop.

HVAC is a critical system at Framatome's new Uranium Recovery Facility, but their energy team has been committed to sustainable operation and helped drive down the operating costs through energy efficiency.

Added Exhaust Heat Recovery

The "run-around" loop uses exhaust air to pre-heat the outside air intake in the winter and to pre-cool the intake in the summer, achieving energy savings year-round. The energy team fine-tuned the heat recovery controls during an SEM cohort to maximize energy savings.

Installed Fan VFDs

Variable frequency drives (VFDs) on the facility's fans ensure that airflow and pressure requirements are met efficiently.

Annual Results

336,000 kWh
First Year Savings

$15,000
Avoided Energy Cost

156 tons CO_2
Scope 2 Emission Reduction

What ideas do you have to save energy?

Dawn Senger, City of Richland, 509.942.7436
Austin Rogers, ESI Partner, 458.212.3740

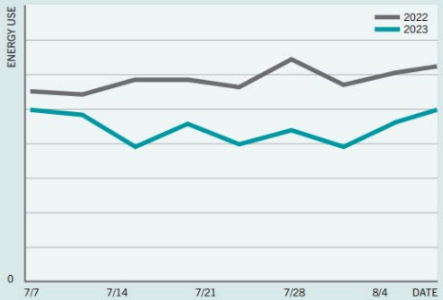
Richland | Energy Smart Industrial

A SMARTER WAY TO KEEP IT COOL

Custom refrigeration projects bring more savings than expected

FruitSmart™

Project Overview



Fruitsmart operates a fruit processing plant and a cold storage in Prosser, WA. In 2023, they implemented several projects to improve refrigeration energy efficiency. The installed measures produced a substantial drop in year-over-year energy—more than originally estimated.

Controls Upgrade

Installing a central refrigeration control system enables more efficient operation in addition to being a huge time-saver for the refrigeration team as they are able to monitor from their office and even after hours from home.

Condenser and Evaporator Fan VFDs

The VFDs allow the fans to run smoothly at lower speeds and lower power rather than cycling fans on and off. This also improves cold storage temperature control.

Annual Results

+1 Million kWh
First Year Savings

90 Avg. NW Homes Powered by Energy Saved

716 tons CO_2
Scope 2 Emission Reduction

Bonneville | Energy Smart Industrial | BENTON P.U.D

What ideas do you have to save energy?

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Terry Mapes, Benton PUD, 509.582.1268
Austin Rogers, ESI Partner, 425.417.8532

ENERGY SAVINGS REPORT

Capital Projects Improve Energy Efficiency and Future Capacity

PORT OF SUNNYSIDE

Project Overview

TOP LEFT: Recirculating pump VFDs. TOP RIGHT: Membrane skid. BOTTOM LEFT: One of the two installed turbo compressors. BOTTOM RIGHT: Incentive giant check ceremony image provided by the Sunnyside Sun.

The Port recently increased the capacity of their industrial wastewater treatment plant, investing in an energy-efficient design to lower operating costs.

Upgraded Turbocompressors

This project consisted of replacing five positive displacement lobe blowers with two more efficient Sulzer HST 350 hp turbocompressor blowers. And with the addition of variable frequency drives (VFDs) on the turbocompressors even greater efficiency was achieved.

Efficient Filtration Design

The Port was presented with several design options and ultimately invested in a system that enables the pumps to meet flow requirements with less energy than alternative designs. In addition, VFDs increase the efficiency of the pumps during operation, maximizing system energy savings.

Annual Results

+2,200,000 kWh
First Year Savings

+$110,000
Avoided Cost

+1,000 tons CO_2
Scope 2 Emission Reduction

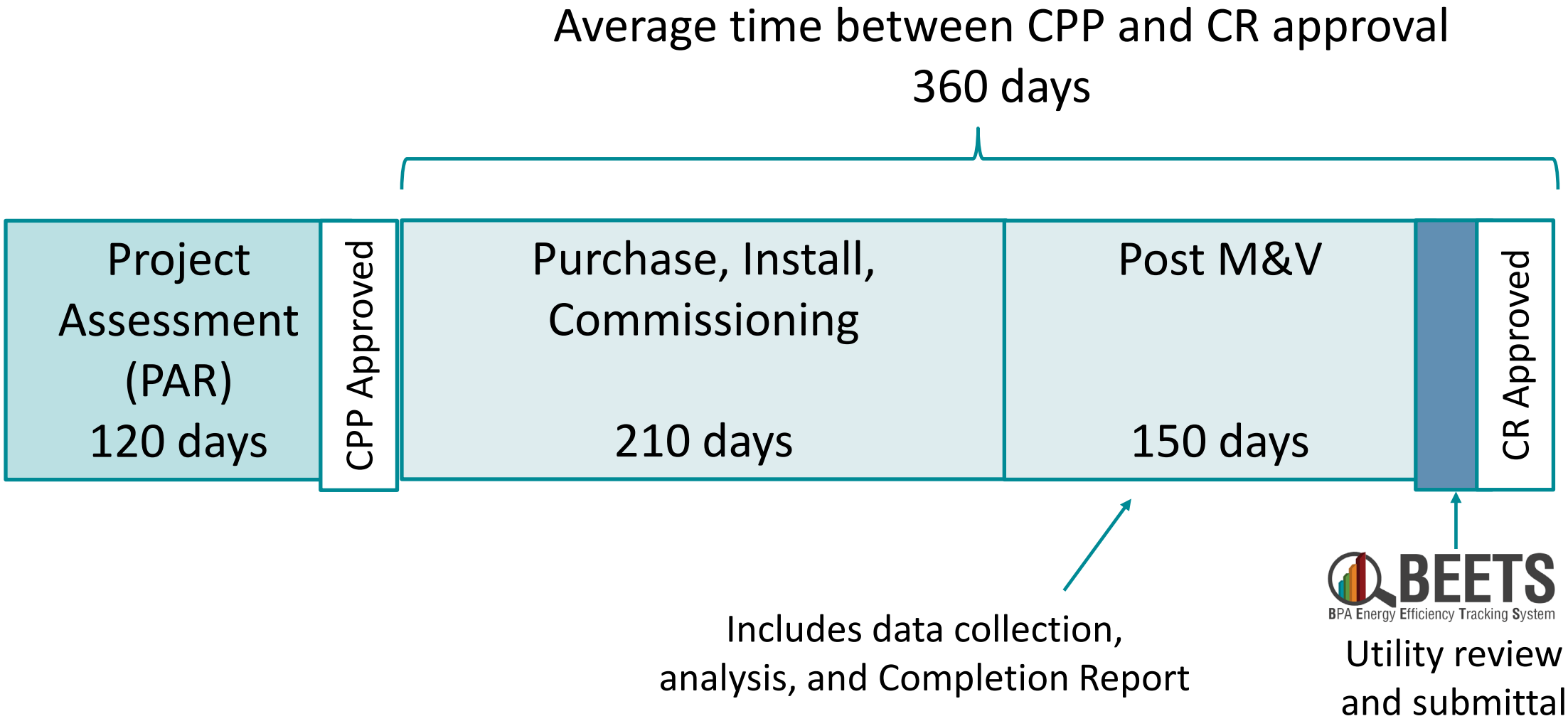
What ideas do you have to save energy?

Travis Jansen, Port of Sunnyside, 509.839.3187
Chad Smith, Benton REA, 509.781.6727
Austin Rogers, ESI Partner, 458.212.3740

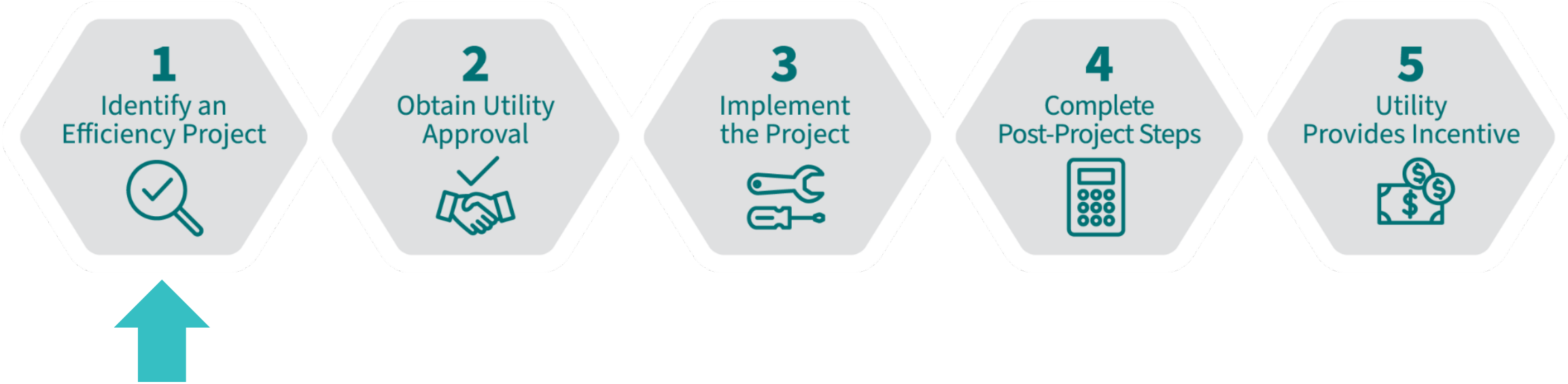
Benton REA | Energy Smart Industrial

Custom Project Lead Time

Energy Smart Industrial



ESI Custom Project Process



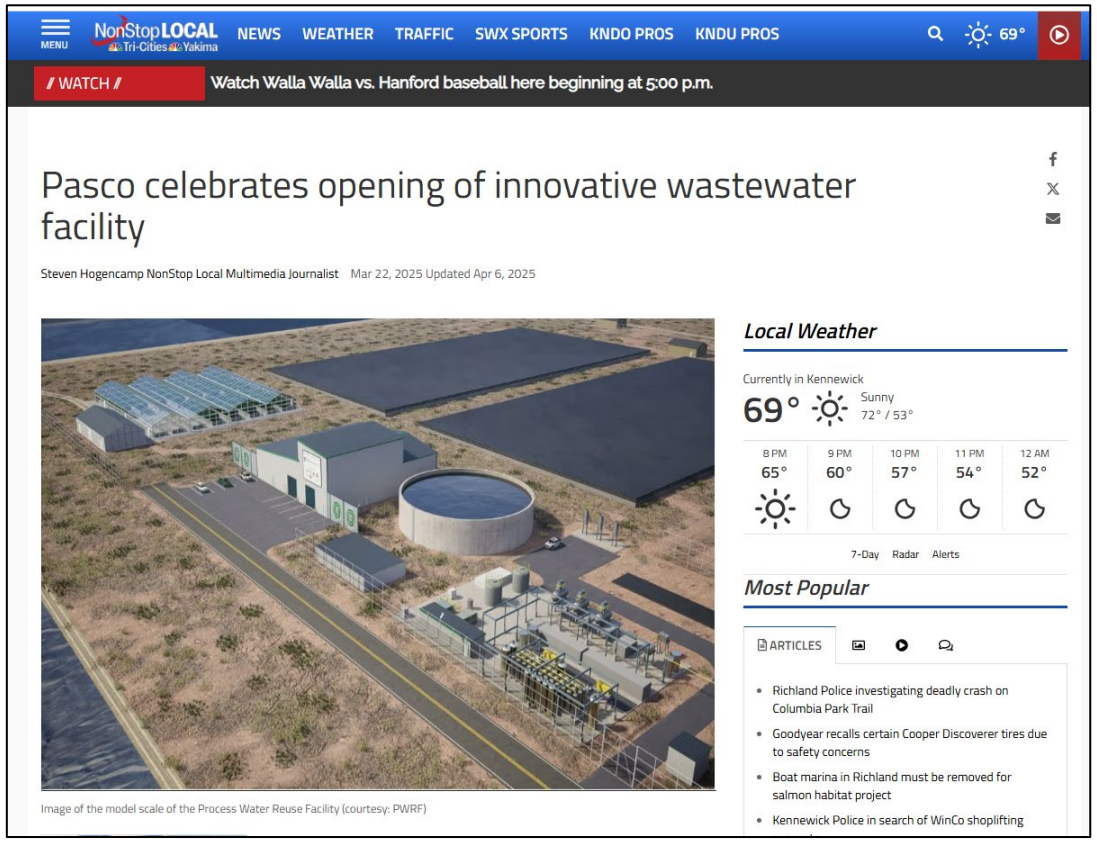
#1 – Call us when you hear about an opportunity

#2 – Share Customer List with ESIP

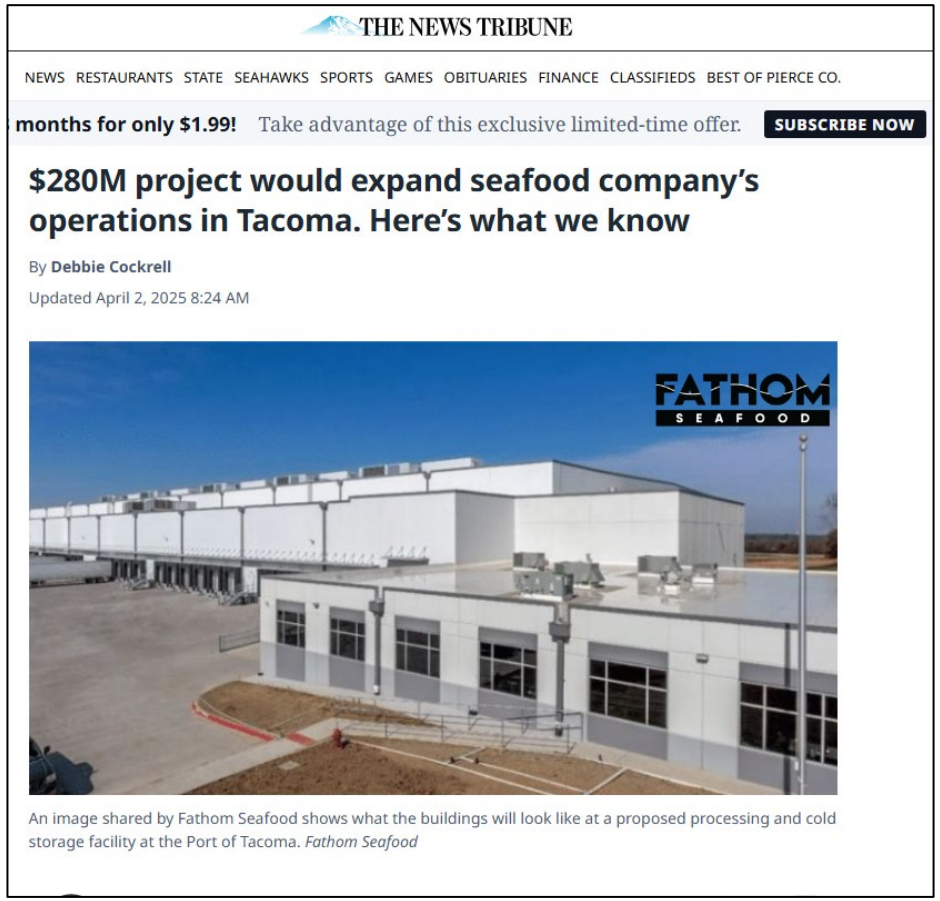
Project Lead Reminder

Let your ESIP know about project leads: new construction, expansions, etc.

Spring 2025 M&V – 2.3 kWh



2026 – 2027



Thank you!

Energy Smart Industrial

Top 10 energy waste reduction **opportunities for food processors**

Energy Smart Industrial

Capital Projects

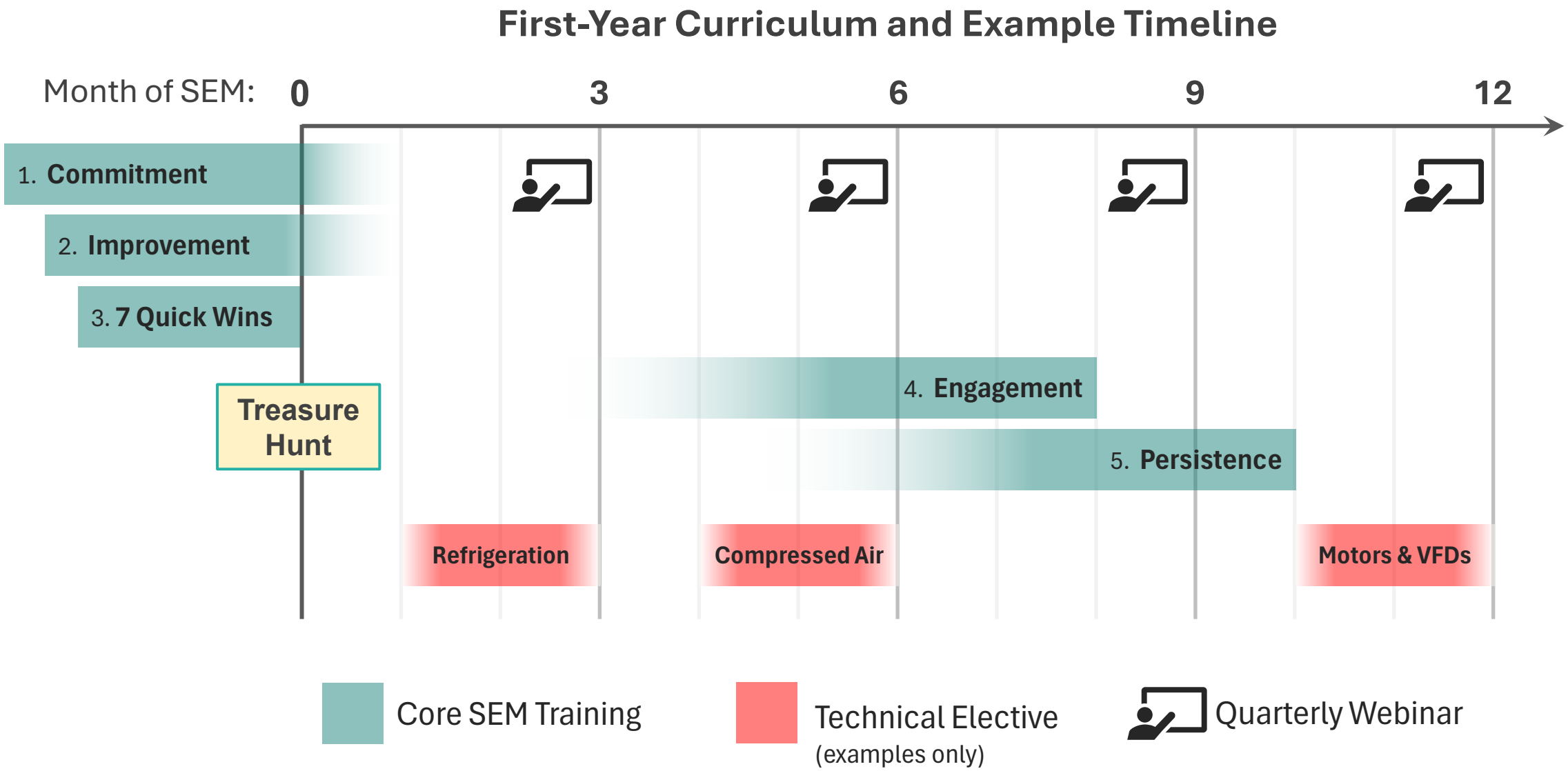
- Efficient condensers
- Refrigeration controls upgrades
- Fan VFDs (condenser and evaporator)
- Compressed air system upgrades
- Wastewater system upgrades

Low-Cost / No-Cost Opportunities

- Optimize suction pressure
- Lower minimum condensing pressure
- Compressor sequencing
- Optimize evaporator fan controls
- Reduce infiltration

SEM Self-Paced Learning

Energy Smart Industrial



For additional support always contact your EER first!

Questions?

Closing Remarks

Thank you, Surveys & Safe Travels!

Adjourn!