

Energy Smart  
Industrial

# Utility Focus Group Meeting

February 14, 2023

FACILITATOR:

**Kyle Barton**

Energy Smart Industrial  
Program Manager  
Energy Efficiency  
Bonneville Power Administration

## Attendees

**Name:**

Alan Fraser  
Bill Hough  
Billy Curtiss  
Amanda Wagnon  
Amy Walton  
Anita Clever  
Dan Kinnaman  
David Harris  
Eric Miller  
Jennifer Langdon  
Kelsey Lewis  
Lori Froehlich  
Maurilio Lopez  
Ryan Perry  
Ryan Westman  
Tara Maynard  
Terry Mapes  
Travis Hardy  
Wade Carey

**Company Name:**

Tacoma Power  
Eugene Water & Elect. Board  
Eugene Water & Elect. Board  
Springfield Utility Board  
Lower Valley Energy  
Klickitat PUD  
Grays Harbor PUD  
Springfield Utility Board  
Benton REA  
Cowlitz PUD  
Snohomish PUD  
Clark Public Utilities  
Franklin PUD  
Tillamook PUD  
Milton-Freewater L&P  
Grays Harbor PUD  
Benton PUD  
Northern Wasco PUD  
Central Lincoln PUD

**Name:**

Brice Lang  
Eric Mullendore  
Jacob Schroeder  
Jennifer Wood  
Jimmy Sauter  
Kyle Barton  
Mike Palmer  
Shelley Layton  
Steve Martin  
Tony Simon

**Company Name:**

Bonneville Power Administration  
Bonneville Power Administration  
Cascade Energy  
Contractor for Bonneville Power Administration  
Cascade Energy  
Bonneville Power Administration  
Bonneville Power Administration  
Cascade Energy  
Cascade Energy  
Cascade Energy

K. Barton: Welcomed everyone, **Slide 3** – did a quick review of the meeting agenda and turned it over to Steve Martin for this month's Safety Update.

| Agenda                               |                         | Energy Smart<br>Industrial  |
|--------------------------------------|-------------------------|-----------------------------|
| <b>1. Welcome and Overview</b>       |                         |                             |
| Safety Update                        | <i>Kyle Barton</i>      | 11:00 – 11:10               |
| <b>2. ESI Program Updates</b>        |                         |                             |
| FY2023 Pipeline and Forecast         | <i>Steve Martin</i>     |                             |
| Blended Industrial SEM Cohort Update | <i>Jacob Schroeder,</i> |                             |
| New SEM Cohort Outreach              | <i>Eric Mullendore</i>  | 11:10 – 11:30               |
| Updates to SEM Measure               |                         |                             |
| <b>3. UFG Open Forum</b>             | <i>All</i>              | 11:30 – 11:50               |
| <b>4. Wrap-up and Reminders</b>      | <i>Kyle Barton</i>      | Remaining Time <sup>3</sup> |

S. Martin: **Slide 4** - this year is off to a strong start, the team is active. Safety culture starts with safety training. And many sites have their own safety training, which the ESI team completes prior to visiting.

Of course job planning and the M&V Safety Policy helps eliminate many of the hazards.



Steve M.: **Slide 5** – Many of the region received snow today. And one of the most hazardous things we all do, is driving. Here are some good reminders.

Winter driving conditions are not behind us, yet.

**Safety Moment** Energy Smart Industrial



  
**Verify you are driving** at the correct speed limit. Keep a safe distance from the car ahead of you to allow time to brake safely.

  
**Remove distractions** in the vehicle. The use of devices, conversations with passengers and eating can all divert a driver's attention.

  
**Increase the awareness** of your surroundings by frequently checking mirrors, particularly while changing lanes.

  
**Don't drive** if you feel tired, lightheaded or stressed. And always wear your seatbelt.


  
**Exercise caution** when emergency vehicles approach. They have the right of way. Watch for flashing lights and listen for sirens.


One **key** winter driving tip - Give yourself plenty of distance to brake safely. Remember, it's always best to slow down whenever the weather is bad.


Following these suggestions will improve our safety while on the road.

**Slide 6** – Each quarter we identify three big items that we're focused on – with 8 months remaining of this biennium.

**ESI Program Update – Q2 areas of focus** Energy Smart Industrial

  
**Prepare to finish the biennium strong**

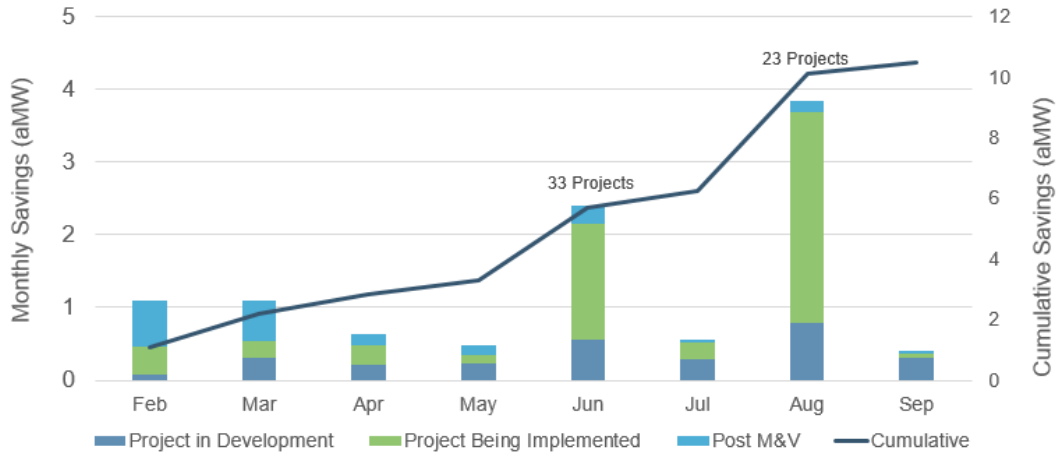
  
**Grow the FY2024 pipeline**

  
**Launch a new SEM cohort**

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Steve M.: **Slide 7** – Some things we can do to finish 2023 strong. There are 200 Option 1 Custom Projects in the pipeline with completion dates through September 2023.

## Option 1 Custom Projects – 200 Projects to Close!



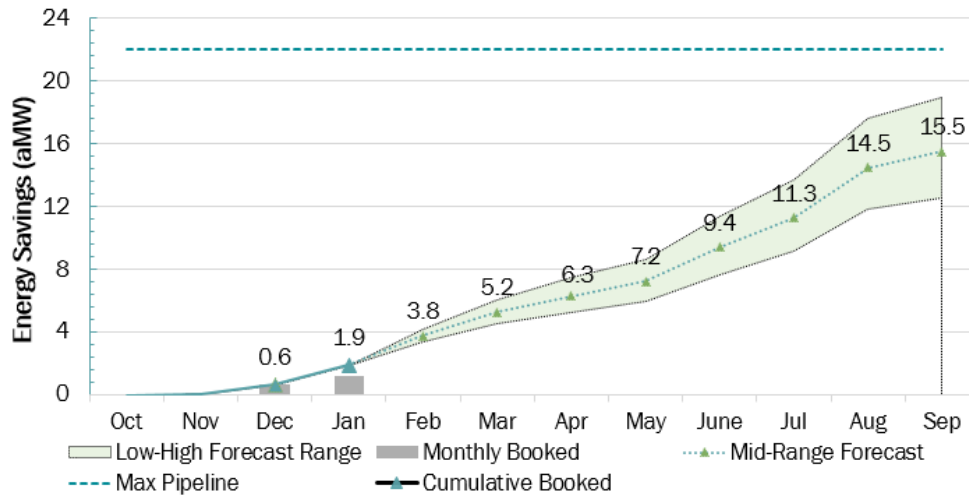
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M&V gets back loaded at the end of the FY, currently 20% of our project volume is in Post M&V status. Our internal goal is to have 50% of this pipeline in Post M&V by the end of March. The data in the chart shows that we've got a spike of projects being implemented in June and August.

We appreciate your support. At times facilities can be motivated by their utility reminding them that the sooner they complete the M&V and provide cost documentation, the sooner they will receive the incentive check.

Steve M.: **Slide 8** – Forecasts have been a bit of a challenge the past few years, and we generally provide a range of outcomes based on historic conversion rates.

## FY 2023 Forecasted Range – all measures

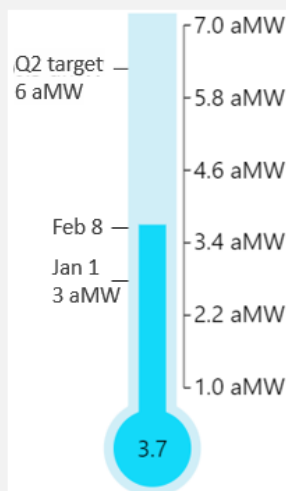


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This year had a slow start plus the launch of BEETS – roughly 60 projects have been submitted and 20 have reached the “ready to invoice” status. There are several factors that we project the end of year to be just above 15 aMW or more, if projects can be converted in the pipeline.

**Slide 9** – The industrial custom project life-cycle is 14 months – the goal we've established is simple. Started the quarter with 3 aMW and the goal is to double it (6 aMW) by March 30. We're a little behind, but we're close to adding a few large projects.

## Key strategies to grow the FY 2024 Pipeline



|                  |   |
|------------------|---|
| Site Visits      | Target 200 per quarter                                  |
| Project Analysis | ESIP scoping<br>TSP Project Assessments                 |
| New EPMs         | Recruit 6-10 new EPMs this quarter                      |
| SEM              | Strong finish to 2022 cohort<br>Launch a new SEM cohort |

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Steve M.: The team has four key areas of focus:

- Site visits – looking at processes and identifying project opportunities.
- Project analysis – ESIPs are doing scoping calcs to identify projects warranting deeper analysis by TSPs
- Energy Project Managers – we have two enrolled and several new prospects. With the reduced savings threshold, no longer requiring salary documentation and other simplifications to the EPM measure.
- Strategic Energy Management – We're working to closeout year 1 of the 2022 Spring SEM Cohort and preparing to launch a new cohort – I'm not going to "steal Jacob's thunder."

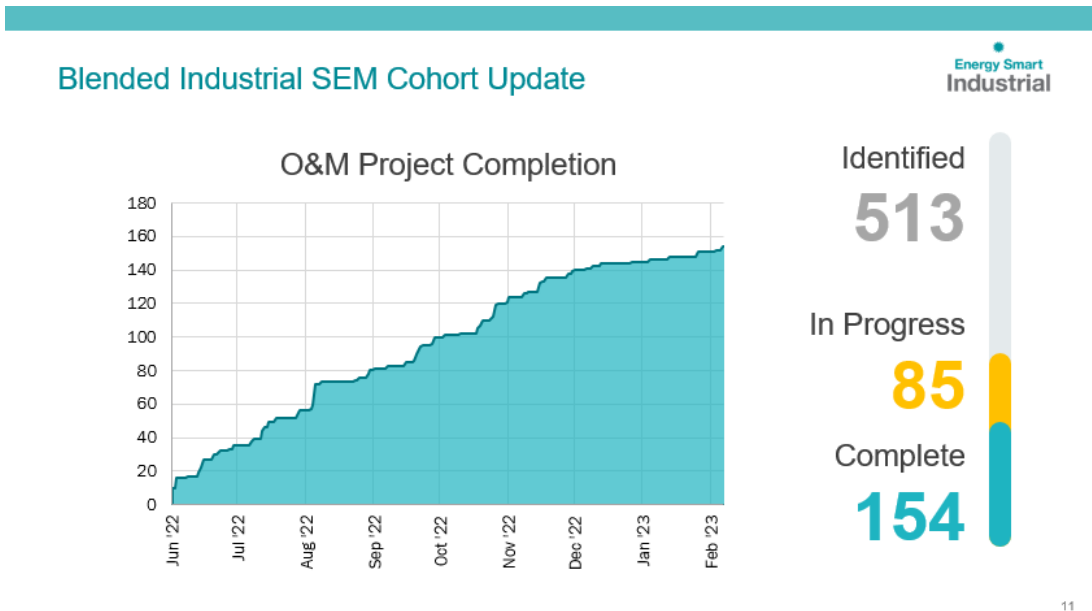
How can utilities help ESI with EPM/SEM recruitments? Introductions and talk to your ESIP about any end users you think could be a good fit.

**Slide 10** – We have a new info sheet – it's a great tool that conveys the value that EPMs can bring your end users. Ask your ESIP for a copy.

The image displays two informational documents from Energy Smart Industrial. On the left is an 'EPM information sheet' with the following text: 'EPM information sheet designed to engage prospects and concisely explain outcomes and steps to enroll. Now available on BPA's website: [esiepmonepaper11.pdf \(bpa.gov\)](#)'. On the right is a flyer titled 'ENERGY PROJECT MANAGER' with the headline 'We're here to help.' The flyer lists benefits such as 'Save more energy and money by maximizing energy savings', 'Reduce project implementation lead times', and 'Develop a pipeline of future EE project opportunities'. It also includes a quote from Zevcha Van-Hoove, Clark Public Utilities, and a line graph showing 'Cumulative Incentive EPM' and 'Cumulative Incentive with EPM Payments' over six projects. The graph shows a steady increase in cumulative incentive, with the 'with EPM Payments' line reaching approximately \$1,000,000 by Project #6.

We have some new and exciting things happening with SEM and Jacob is going to share.

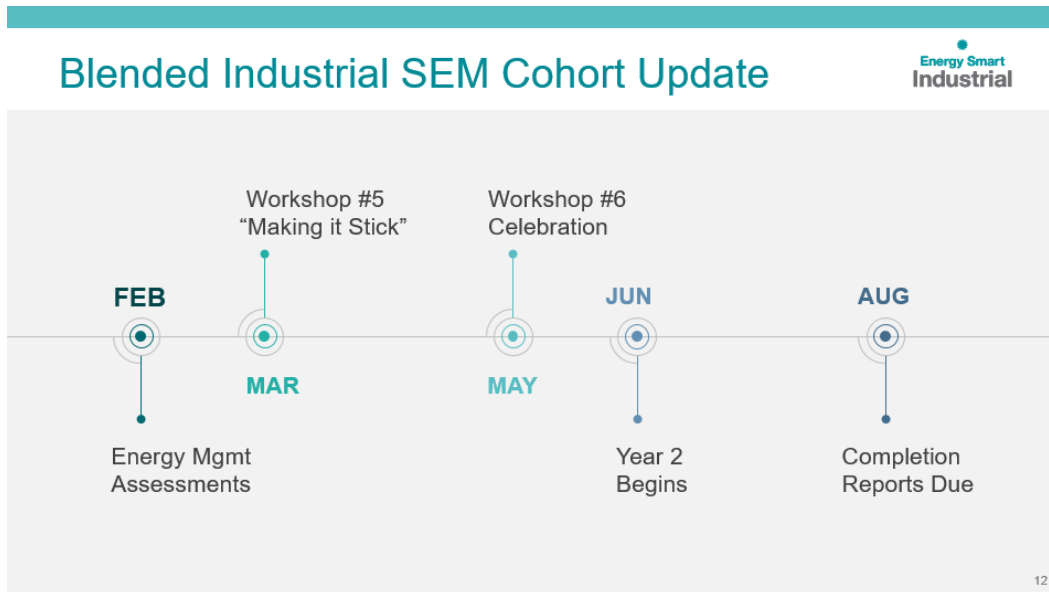
J. Schroeder: I'm "bringing the thunder." **Slide 11** – shows the progress that the 2022 Spring SEM Cohort has made.



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See continual progress, a little slowdown over the holidays, but we're now seeing things pickup.

Jacob S.: **Slide 12** – Our SEM coaches are delivering Energy Management Assessments during site visits to assess their energy management program, strengths, weaknesses and next steps to help them improve.



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In March, Workshop #5 will focus on persistence of savings. May will bring an end to Year 1 and we'll schedule a celebratory Workshop #6 and prepare sites for Year 2 that starts on June 1.

Jacob S.: Our team will do all we can to ensure Completion Reports are submitted before the end of the fiscal year – our goal will have them ready by the end of August.

**Slide 13** – The Year 1 forecasted savings is 4.1 million kWh – with over half of the savings are coming from four timber and wood product industries.

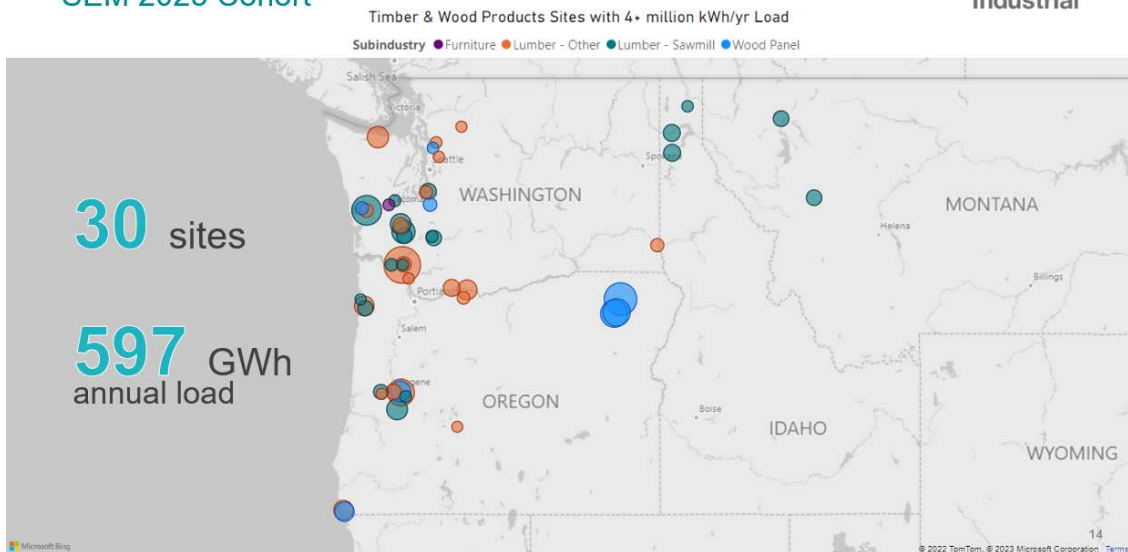
We are hoping to build on this by launching a new SEM Cohort

## Blended Industrial SEM Cohort Update



**Slide 14** – In the past, we have engaged with timber and wood product sites and there are at least 30 sites within BPA's territory with an annual load of over 4 million kWh, many are not currently engaged in SEM.

## SEM 2023 Cohort

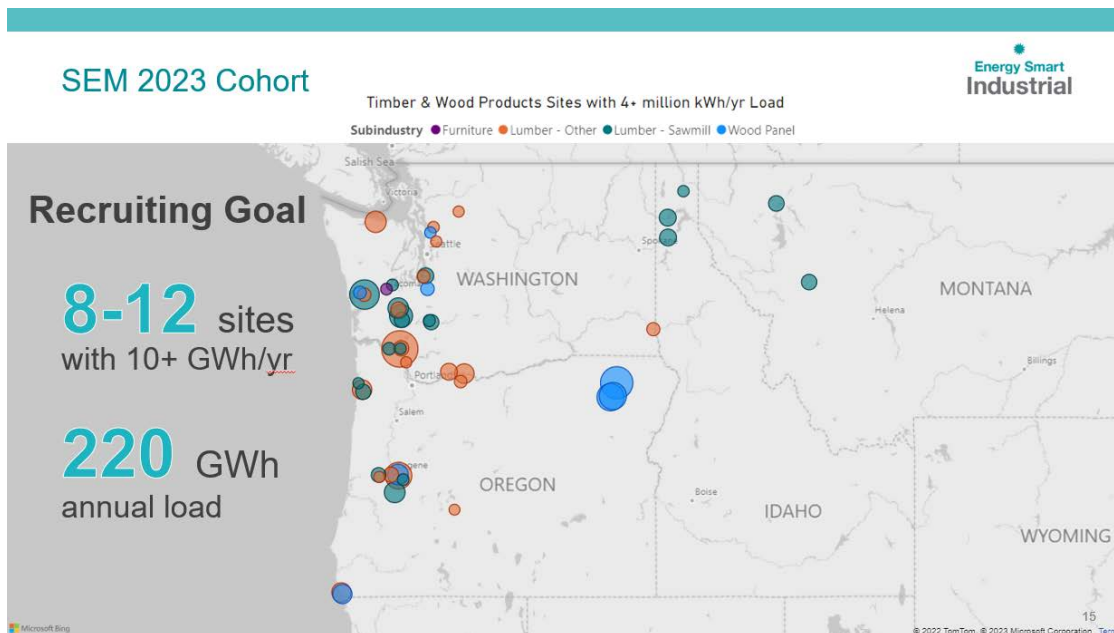


Many of them share common systems to ensure the technical training is relevant to everyone in attendance.



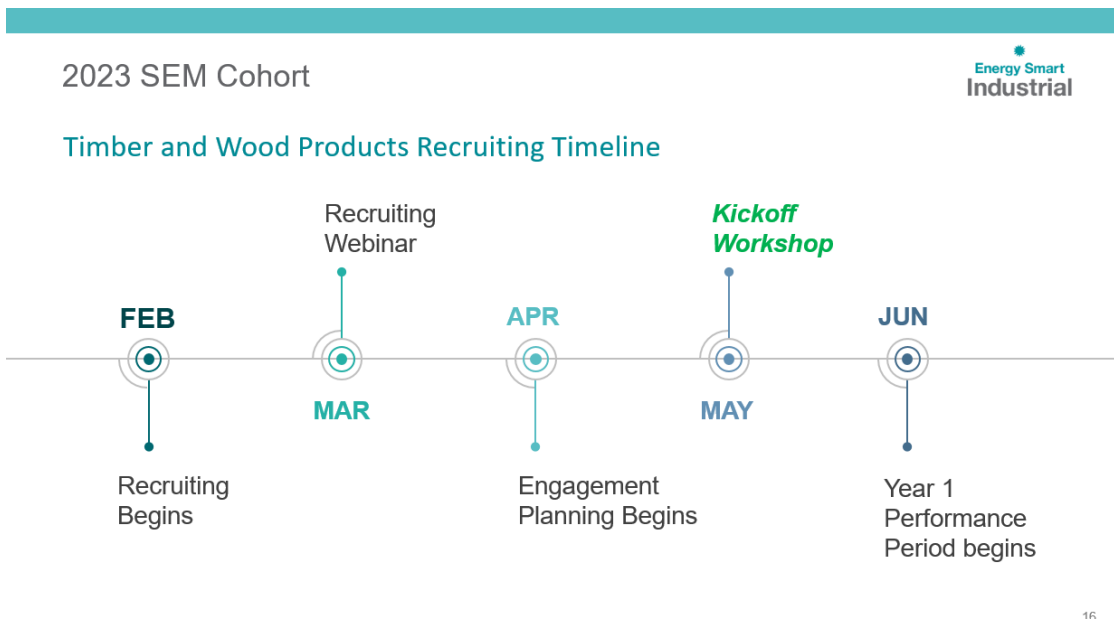
Jacob S.: Our goal is to recruit roughly one-third of these industries in our upcoming cohort.

**Slide 15** – We are targeting 8-12 sites focusing on those with an annual load of at least 10 million kWh.



This could be a combined annual load of about 25 aMW.

**Slide 16** – Our goal is to launch the new cohort in late May so the performance period will begin June 1.

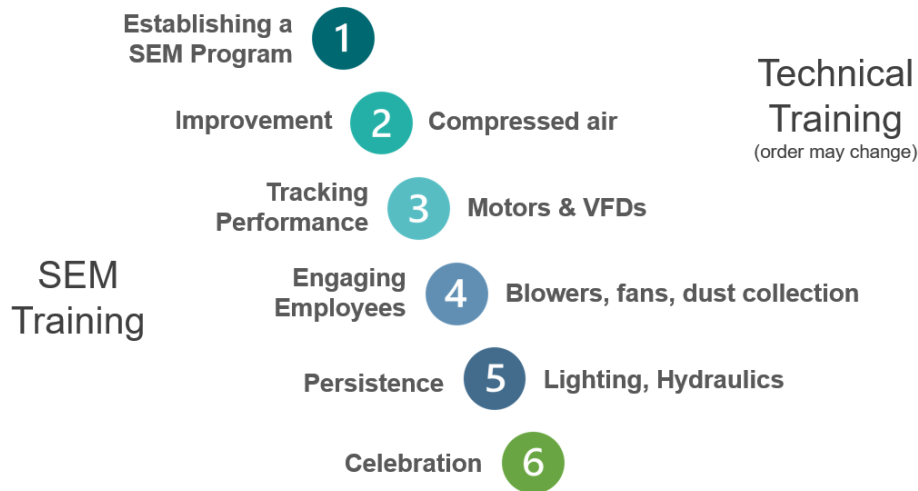


The ESIPs have started recruiting – reaching out to utilities to gauge interest, and to begin reaching out to some of the sites. In late March or early April we will host an informational webinar for utilities and perspective participants to learn more about SEM and meet the delivery team.

Jacob S.: In April we will begin our engagement planning and scoping to prepare for a successful kickoff.

**Slide 17** – As with the 2022 SEM cohort, this cohort will follow a hybrid delivery of remote workshops and in-person treasure hunts, site visits, etc.)

## Timber and Wood Products SEM Curriculum



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There will be six trainings that combines SEM training with technical training. Ensuring the technical topics are relevant to each cohort participant.

**Slide 18** – Here are three characteristics that make for a successful SEM participant.

## SEM Keys to Success



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The ESI Program has prepared a new SEM outreach flyer "hot off the press..."

Jacob S.: **Slide 19** – ESIPs have a one-pager that includes a personalized touch – the ESIP name and contact information. However, if you would like it more customized to include your utility representative contact information, please reach out to your ESIP.

## SEM Outreach Material



**STRATEGIC ENERGY MANAGEMENT**

**ARE YOUR OPERATIONS WASTING MONEY?**

**LOWER UP TO 10% YOUR ENERGY COSTS**

Your facility, systems, and people are unique. Join us on an energy saving journey with our Strategic Energy Management (SEM) program provided through your local utility. Together we'll deep dive into understanding your operations, finding ways your facility can run more efficiently, and ultimately improving your bottom line.

**Earn cash incentives**

**Track results**

**Lower utility bills**

**Learn from your peers**

**Tune your systems**

**Learn new skills and tools to reach new goals.**

**1 We kick it off with gusto!** Industrial facilities are short on staff and long on projects. We take you understand your scope and operations data to find and address low- and no-cost wins.

**2 We build a strong energy team together.** Training individuals about their responsibilities, collaboration and motivation to lead. We help engage your own strategically chosen team to sustain and grow SEM commitment that can last even when you're ready to go.

**3 We get to know you and your facility.** An assigned SEM coach and engineer will get to know your processes and existing equipment to not only find your quick wins, but also help your energy team overcome the operational and technical barriers they face.

**4 We share GREAT tools.** Our SEM workshop curriculum combined with our modeling and project management tools help launch your program. Our energy tracking and project management software addresses the fundamental challenge of SEM: understanding data, ingesting projects, collaborating with your team, long-term engagement, and savings persistence.

**5 We equip you for future success.** We don't give you fish, we teach you how to fish. Through regular coaching, you learn to take the operational insights and accountability techniques that will help set in the savings for years to come.

**FRANK DICK**  
Industrial Professional  
City of Vancouver

**Participant Case Study**

**City of Kanopack's Wastewater Treatment Plant**

Through our SEM Program, Boston Public Utility District provided the City of Kanopack with technical services, performance incentives for energy-efficient equipment, and improvements in operations and maintenance (O&M) practices. Within the first year of participating, the energy team implemented 13 low- and no-cost improvements, reducing their energy consumption by 16%.

**\$100,000**  
SAVED IN THEIR FIRST YEAR

That's a reduction of 1,600,000 kWh.

**“ You're saving kWh; you're saving on the total project dollars from the BPA incentive you get. So, the bigger question is— why wouldn't you do it? ”**

**DAVE ROHRBACH**, Wastewater Plant Manager, Pittsboro

**Call now and let's see how SEM can work for you.**

Reach out to Tony Simon, your Energy Smart Industrial Partner (ESIP), at 505.525.5255, or email: [em.es@energysmartindustrial.com](mailto:em.es@energysmartindustrial.com).

**FAQ**

**What is included in SEM?**

**CONSORT COLLABORATION:** An industry group that is working toward a commitment of about 100 to 150 participants.

**IT & WORKING TOGETHER:** We learn from one another on energy team, training opportunities, sharing an energy culture, and engaging employees in energy management. Each benefits through individualized coaching, and work with each other.

**ON-SITE ACTIVITIES:** These include: Technical audits— energy teams identify and resolve specific energy management issues; Energy Management Assessments, which are the basis of energy management activities; **COACHING:** We also attend each city's energy team meetings and provide individualized coaching of energy teams (champions) to sustain their growth and the successful implementation of SEM.

**Where do the energy savings come from?**

In the past year, savings came primarily from Operations and Maintenance (O&M) projects such as: ducting off-drafting, equipment, including equipment efficiency, monitoring tools, lighting, ventilation and control systems, and Process equipment maintenance. In the past year, these savings are supplemented by larger capital projects.

**What range of savings is possible?**

There is no ceiling, but a goal rate of 10% in the SEM program in the first year within a basic SEM cohort. Long-term savings are also possible, but more likely with continued SEM and capital projects have achieved more than 20% total energy savings over a multi-year horizon.

**How long does an SEM engagement last?**

Engagements are typically 18 months. Some utility programs offer continuous 24 hr and 365 day coverage for all industrial facilities beyond that initial engagement.

**Energy Smart Industrial**

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Up next is Eric Mullendore, he's going to talk about the updated SEM offering.

E. Mullendore: We wanted to provide you with a quick recap on BPA's SEM Persistence Evaluation. **Slide 20** – Two key findings, the effective useful life (EUL) for BPA's SEM measures is 8.5 years, with no significant difference based per SEM measure, equipment, or industry types.

## SEM Persistence Evaluation Recap



- Covered 15 SEM participants and 108 individual measures
- **Key Finding #1:** Overall EUL for BPA's SEM measures is 8.5 years
- **Key Finding #2:** The estimated EUL does not differ significantly based on type of SEM measure, equipment type, or industry type.

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Eric M.:

**Slide 21** – For the existing SEM measure, incentives are based on the total SEM savings; whereas the new Multiyear SEM measure incentives will be based upon the incremental savings that result from the previous year's savings (similar to what utility performance payments are based upon).

**Updates to SEM Measure**

Energy Smart Industrial

| Existing SEM Measure  | New SEM Measure  |
|---|--|
| <ul style="list-style-type: none"><li>• Measure Life: 1 year<sup>1</sup></li><li>• Incentive: \$0.025/kWh based on SEM verified savings</li></ul> | <ul style="list-style-type: none"><li>• Measure Life: 8 years</li><li>• Incentive: \$0.04/kWh based on SEM annual savings achieved</li></ul> |

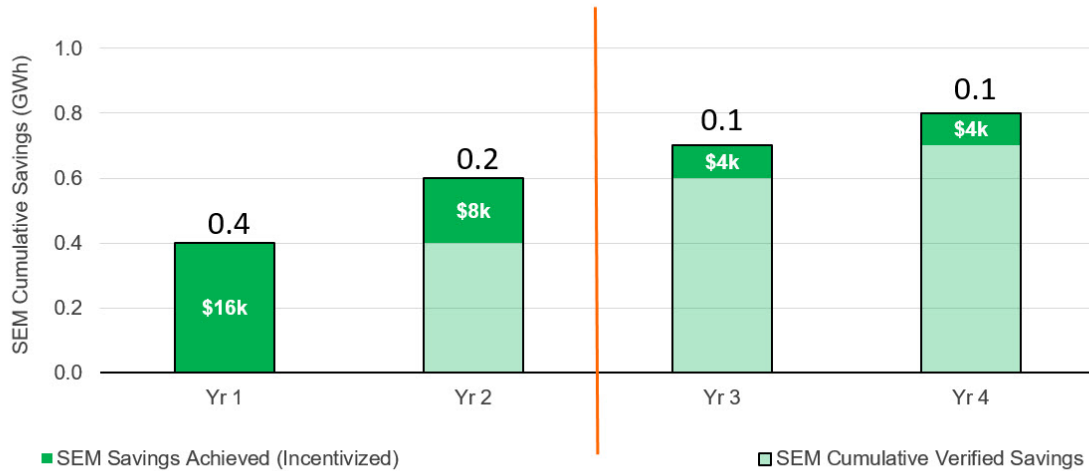
<sup>1</sup>The existing SEM measure creates a multi-year measure from a series of 1-year SEM engagements. The new SEM measure assigns an 8-year measure life to each year's reported incremental savings.

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The existing SEM measure assigns 1-year measure life to Year-1; whereas, the new Multiyear SEM measure assigns an 8-year measure life to Year-1.

Eric M.: **Slide 22** – We wanted to show you how the incentives will look for the new Multiyear SEM measure.

## New SEM Measure – Incentive Structure



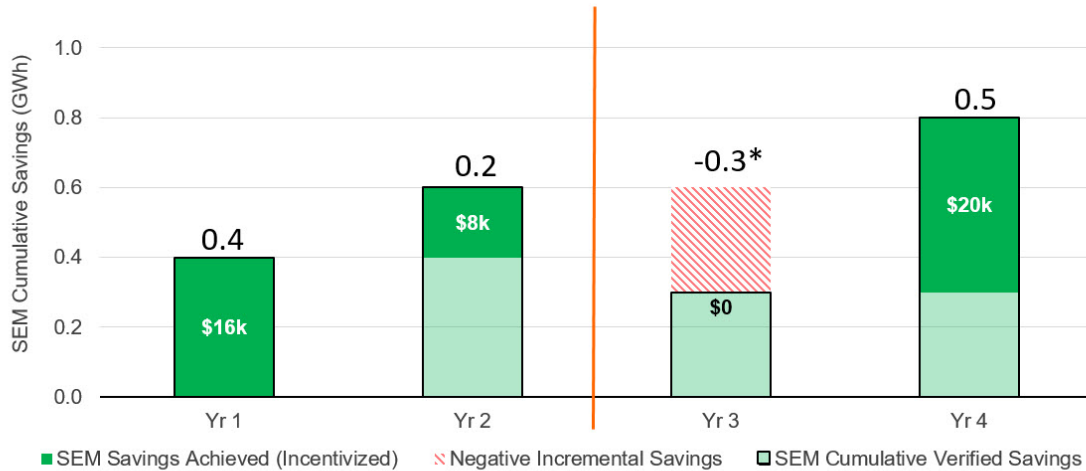
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Terry Mapes, Benton PUD: Asked that the cumulative savings be written in MW or kWh rather than GWh

- First two-year engagement
  - Year-1: \$16,000 incentive for 400,000 kWh of SEM savings achieved
  - Year-2 \$8,000 incentive for 200,000 kWh of SEM savings achieved
- Second two-year engagement
  - Year-3: \$4,000 incentive for 100,000 kWh of SEM savings achieved
  - Year-4: \$4,000 incentive for another 100,000 kWh of SEM savings achieved.

**Eric M.:** **Slide 23** – Here we wanted to show what it looks like when a site experiences an increase in energy use during a SEM engagement under the new Multiyear SEM measure.

## New SEM Measure – Incentive Structure



\*1-937 customers may report differently to State auditors

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- First two-year engagement
  - Year-1: \$16,000 incentive for 400,000 kWh of SEM savings achieved
  - Year-2 \$8,000 incentive for 200,000 kWh of SEM savings achieved
- Second two-year engagement
  - Year-3: \$0 incentives because of the site's increased energy use – utilities would need to report the negative savings (-300,000 kWh) to BPA.
  - Year-4: \$20,000 incentive for the 500,000 kWh of SEM savings achieved.

## Impact on new enrollments



- BEETS will include both SEM measures as separate Measure Reference Numbers (RefNos)
- Enrollment in the existing measure will be capped after 9/30/2023
- New SEM measure will be available for all projects reporting savings after 10/1/2023

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In the upcoming April 2023 Implementation Manual, BPA will be releasing a change that simply states the enrollments for the existing SEM measure will end on September 30, 2023; however, the measure will remain in BEETS for existing SEM cohorts to continue using when reporting to BPA.

The upcoming Timber & Wood Products cohort will use the new Multiyear SEM measure structure.

Any questions or concerns to the proposed shift in the way we will deliver SEM?

*No utilities responded.*

**Slide 25** – We've come to the Open Forum, is there anything that you would like to share? *No utilities spoke up.*



## Utility Focus Group Open Forum

### Discussion with Utility Focus Group Members

- Project Successes
- Feedback
- Other topics

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Up next, Tony Simon will present some project successes.

Tony Simon: **Slide 26** - Don Newton from Flathead Electric was unable to attend today; Weyerhaeuser is Flathead Electric's largest customer.

## SEM Success: SEM Remote at Two Weyerhaeuser Plants



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These pics were from last August's energy scan and treasure hunt. We are seeing great success at this site.

**Slide 27** – Here's a visual of some of their success at the Kalispell Plywood facility.

## SEM Success: SEM Remote at Weyerhaeuser Kalispell



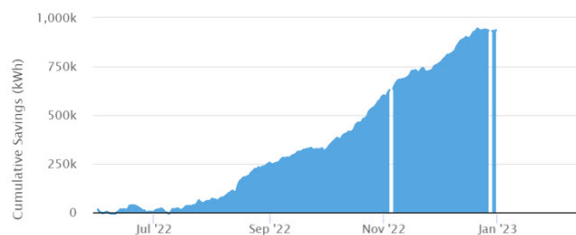
**37** projects completed

**25** in progress

**2 million kWh** of Custom Projects identified

Energy Project Manager (EPM) at the plant

Cumulative kWh Savings



Kalispell Plywood: ~1.3 million kWh/year

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They are currently enrolling an EPM at each Weyerhaeuser plant.

We wanted to share another project success in Benton PUD's territory. I would like to have Terry Mapes talk about it.



Terry Mapes: **Slide 28** – We were ecstatic by TreeTop's energy savings (NOTE: the initial estimated savings was 250,000 kWh; at project completion - the savings increased to over 1,000,000 kWh) – but it created a problem with Benton PUD's workflow process. The pre-approval of projects sets incentive caps, to track and allocate our budget. This particular project's incentives was capped at \$10,000, despite their blistering first year savings! We re-invented our process to add a rule for each year's authorization to proceed...so, we can adjust our incentives caps.

SEM Success: Wastewater Energy Coaching (WEC)

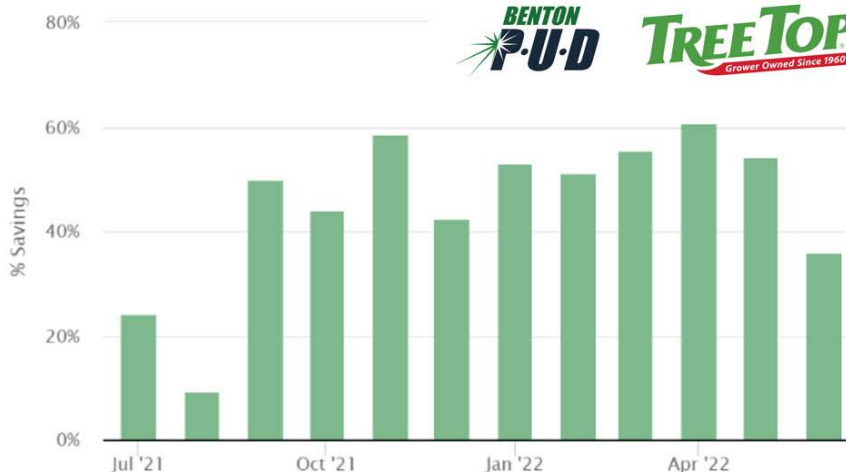


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We want to encourage our customers to continue to save more than originally estimated. We were able to pay TreeTop and increased incentive for their project's 1,000,000 kWh savings.

Tony S.: TreeTop (makes apple juice) has their own wastewater treatment plant with a one-person "energy team" (Luis, pictured here) – so at times we had to host ad-hoc energy meetings over a box of donuts. **Slide 29** – Luis was able to save 30% - exceeding everyone's expectations.

SEM Success: Wastewater Energy Coaching (WEC)



| Annual SEM Busbar Savings                                |               |
|--|---------------|
| 7/1/2021 – 6/30/2022                                     |               |
| Energy Savings   | 1,014,985 kWh |
| Percent Savings  | 38%           |
| Avoided CO <sub>2</sub> *                                | 943,936 lbs   |
| SEM Savings Goals  |               |
| Energy Savings   | 730,000 kWh   |
| Percent Savings  | 30%           |
| Energy Team  |               |
| <b>Sam Landa</b><br>Executive Sponsor                    |               |
| <b>Luis Magana</b><br>Energy Champion                    |               |
| Support  |               |
| <b>Kevin Fischer</b><br><b>Terry Mapes</b><br>Benton PUD |               |
| <b>Austin Rogers</b><br>Energy Smart Industrial Partner  |               |
| <b>Wendy Waudby</b><br>SEM Coach                         |               |
|  | 29            |

Tony S.: We are happy that TreeTop was able to achieve and persist in savings. Let's turn things back over to Eric.

Eric M.: Thanks Tony and Terry for sharing those projects with us. To wrap things up, **Slide 30** – we wanted to share some reminders of some upcoming items.

## Wrap-up and Reminders



- **Implementation Manual Updates Webinar**  
March 16<sup>th</sup> (time TBD)
- **Motor Systems Lunch & Learn:** late March
- **EFX 2023:** May 2–3, 2023

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The invitation for the IM webinar has not yet gone out. Watch the Weekly EE Announcements.

We are excited about this year's Efficiency Exchange, it will be a hybrid event (both virtual and in-person), to be held at the Oregon Convention Center, here in Portland, Oregon.

And we are looking forward to future UFGs and any comments you have from today's meeting – please do not hesitate to reach out.

*Lori Froehlich, Clark Public Utilities: I am excited to hear about the new SEM cohort.*

# Thank you!

For more information, contact:

### Eric Mullendore

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Bonneville Power Administration  
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### Kyle Barton

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Bonneville Power Administration  
[kibarton@bpa.gov](mailto:kibarton@bpa.gov)  
503-230-4378

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**Meeting Adjourned: 11:57 am**