

## Energy Smart Industrial

## Utility Focus Group Meeting

November 16, 2020

Facilitator:

**Eric Mullendore**  
Industrial Program Manager  
Energy Efficiency  
Bonneville Power Administration

### Attendees:

BPA team: Eric Mullendore, Todd Amundson, Melike Kayim, Brent Barclay, Jennifer Wood, and Nathan Kelly.

ESI Cascade team: Steve Martin, Sara York, Shelley Layton, Bob Brennand, Doug Heredos, and Tony Simon.

Utility staff: Alan Fraser (Tacoma), Amy Walton (Lower Valley), David Harris (Springfield Utility Board), Emma Johnson (Seattle City Light), Eric Miller (Benton REA), Jacob Henry (Lewis PUD), Jason Bird (Id Falls Power), Jen Langdon (Cowlitz PUD), Julie Anderson (Franklin PUD), Kim Johnson (Okanogan PUD), Koral Miller (Mason 3), Lori Froehlich (Clark), Matt Walker (Tacoma Power), Natasha Houldson (Tacoma Power), Rich Cole (Grant PUD), Tara Maynard (Grays Harbor PUD), Thomas Elizinga (Consumers Power), Tim Lammers (Columbia River PUD), Wade Carey (Central Lincoln PUD), and Zeecha Van Hoose (Clark).

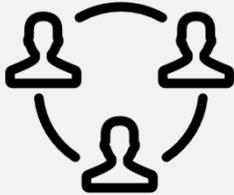
<h1>Agenda</h1>		
<p><b>BPA EE and ESI program updates</b></p> <ul style="list-style-type: none"> <li>• Safety/COVID update</li> <li>• FY20 savings and a look-ahead to FY21</li> <li>• Staffing update</li> <li>• Option 1 CP Impact Evaluation</li> </ul>	<p>Eric Mullendore Bob Brennand</p>	<p>2:00 - 2:30</p>
<p><b>SEM Update</b></p> <ul style="list-style-type: none"> <li>• Program changes for next rate period</li> <li>• FY21 delivery priorities</li> </ul>	<p>Todd Amundson Sara York</p>	<p>2:30 – 2:45</p>
<p><b>UFG Open Forum</b></p>	<p>All</p>	<p>Remaining time</p>

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E. Mullendore: Safety is a priority to both BPA and the Energy Smart Industrial program.

B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

## BPA Priorities COVID-19 Response Period



Health and safety of  
workforce and the  
community



Reliable power and  
transmission  
services



Customer service to  
utility customers

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E. Mullendore: The ESI program has established protocols to minimize the COVID risks. Using a decision tree to decide when it is necessary to perform "field work" and the ESI team is taking steps to ensure and site visits are as safe as possible. Empower staff to stop work anytime they may feel unsafe in the field. The ESI team also connects with utilities prior to any visits.

B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

## Safety Moment

**ENSURE**  
a 6-foot social distancing boundary

A 6-foot social distancing boundary should be maintained at all times while on the site visit and in transit.

Be alert for site employees who are not following proper social distancing guidelines or who are visibly showing indications of sickness.

**WEAR A MASK**  
in public areas

Face masks\* should be worn when working in public areas of a facility or when working in proximity to others.

Face masks are not required when working alone in a private or low-traffic area of the facility.

Note that face masks are a supplement to and not a replacement for social distancing requirements.

**MINIMIZE**  
contact

Limit the number of people with whom you interact to only those who are essential.

Employee development through on-site mentoring is still important and may continue at this time.

Have conversations with site personnel in quiet environments rather than noisy equipment areas.

**WASH HANDS**  
and surfaces regularly

Wash hands as often as possible after touching site surfaces, or use hand sanitizer\* if hand washing is inaccessible.

Use sanitizing wipes\* to clean any shared surface that is touched.

Use care when sanitizing around electrical connections or circuit boards to protect any exposed electronics.

Avoid touching your face.

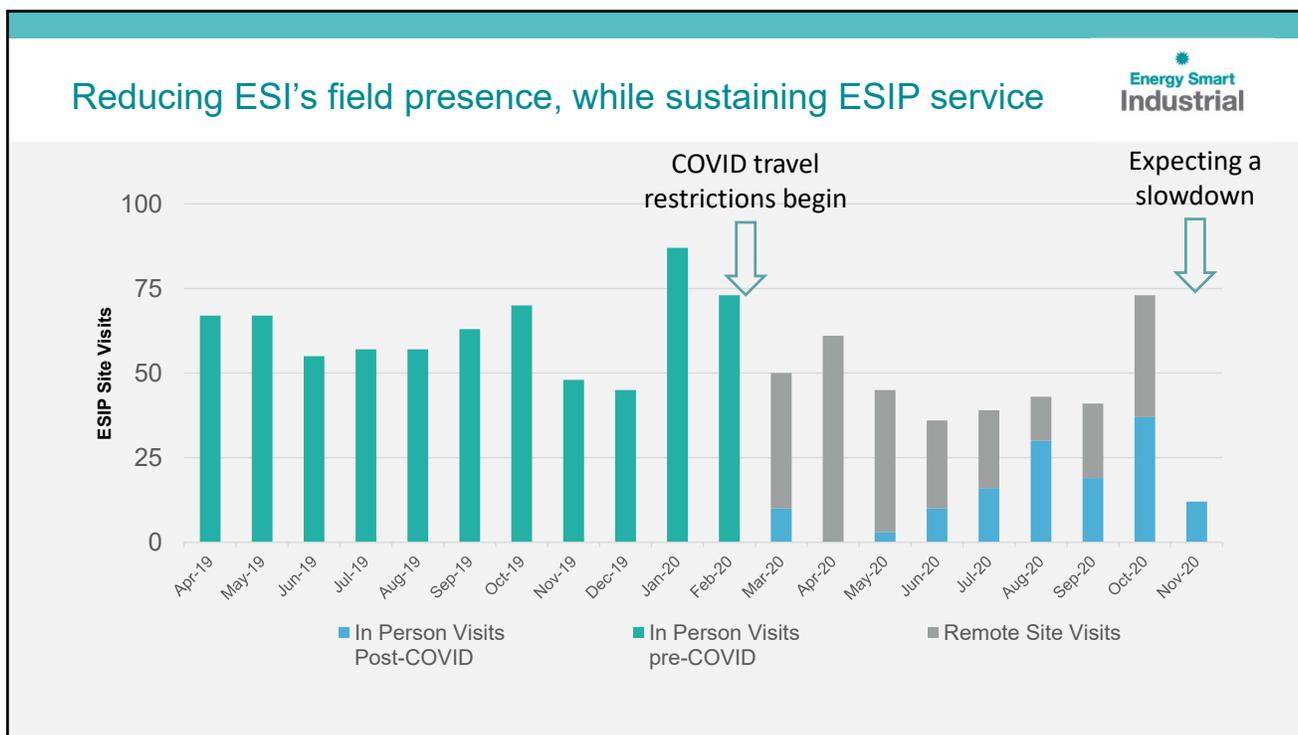
**STOP WORK**  
if health or safety is at risk

Cascade employees are always allowed to stop work at any time if they feel their health or safety is at risk.

Always report anything about the site visit that made you uncomfortable to your manager or the Safety Committee.

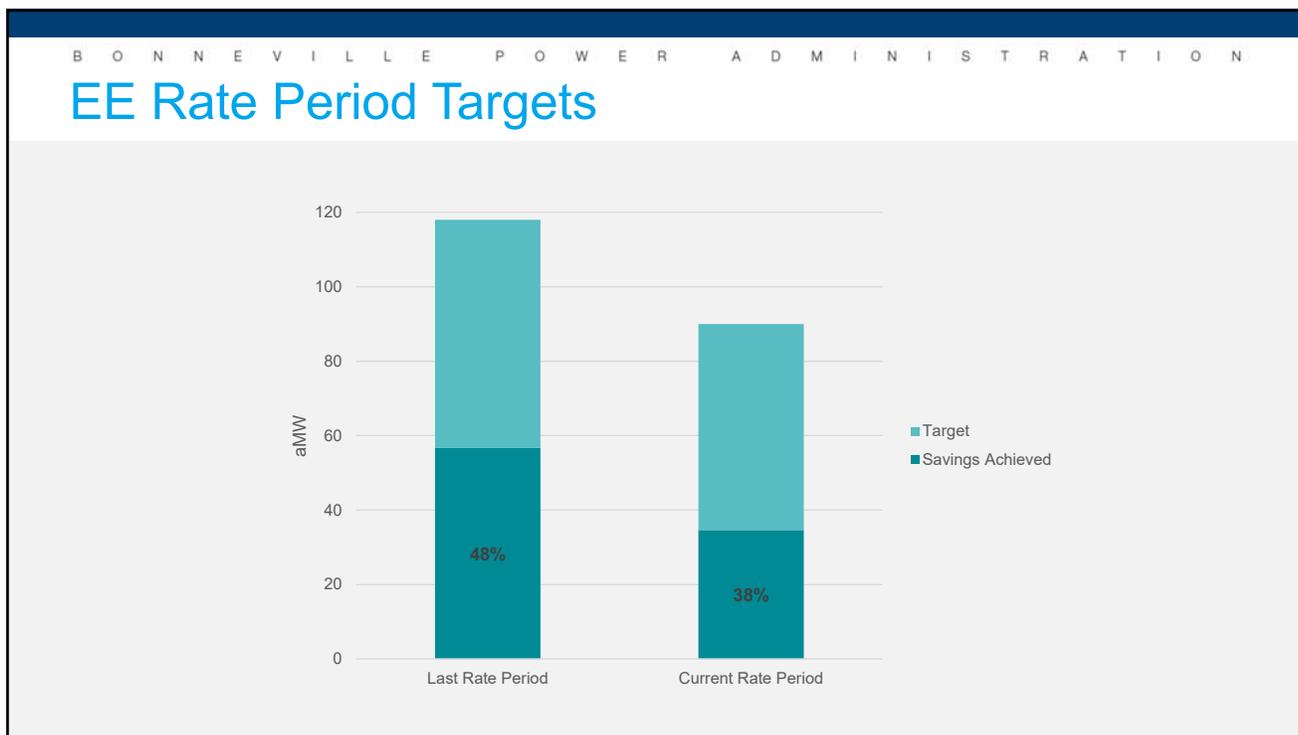
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E. Mullendore: The ESI program has changed because of COVID, regarding field presence. November is ramping down and re-evaluation is happening from the changing conditions throughout the region.



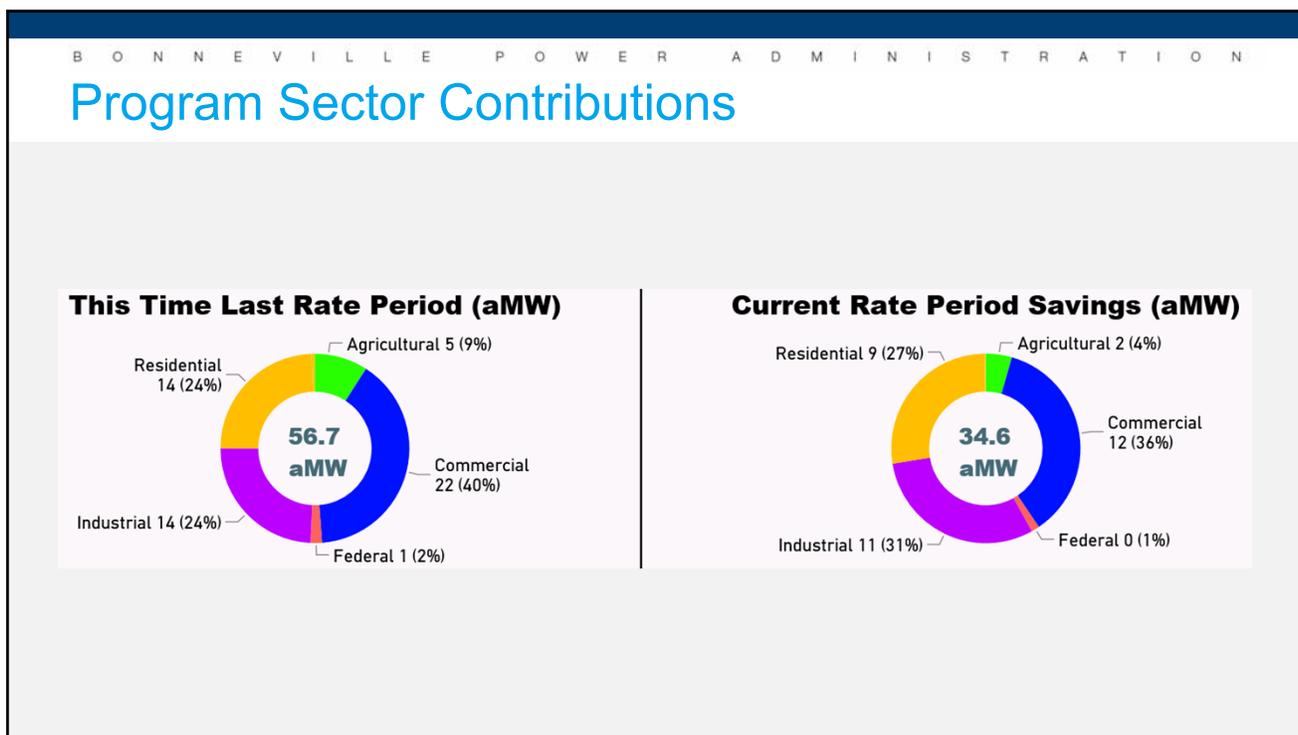
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E. Mullendore: Energy efficiency work within the Industrial sector has also been impacted by COVID. Date in chart below was pulled on Oct 23, 2020. We are behind for the Rate Period; lots of work will need to be done to reach that target. Several industries have been affected, nationally; the ESI team is still optimistic - we've seen delays - not cancellations. It should be noted, the EEI burn rate is higher when compared with the savings achieved in the current rate period.



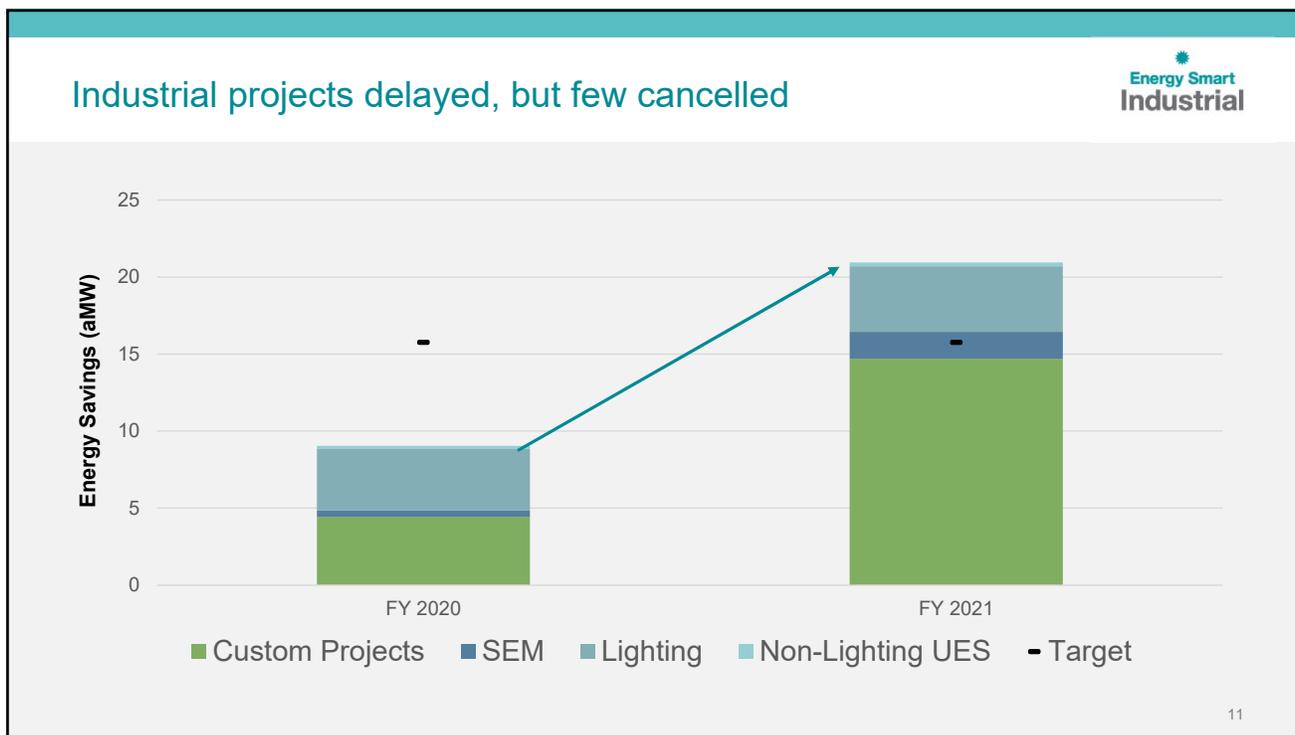
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E. Mullendore: Other sectors also affected, both Residential and Agricultural have seen considerable downturn. As a general rule, energy-efficiency within the Industrial sector has not been greatly affected. A lot of the core industries in the NW have seen an increase.



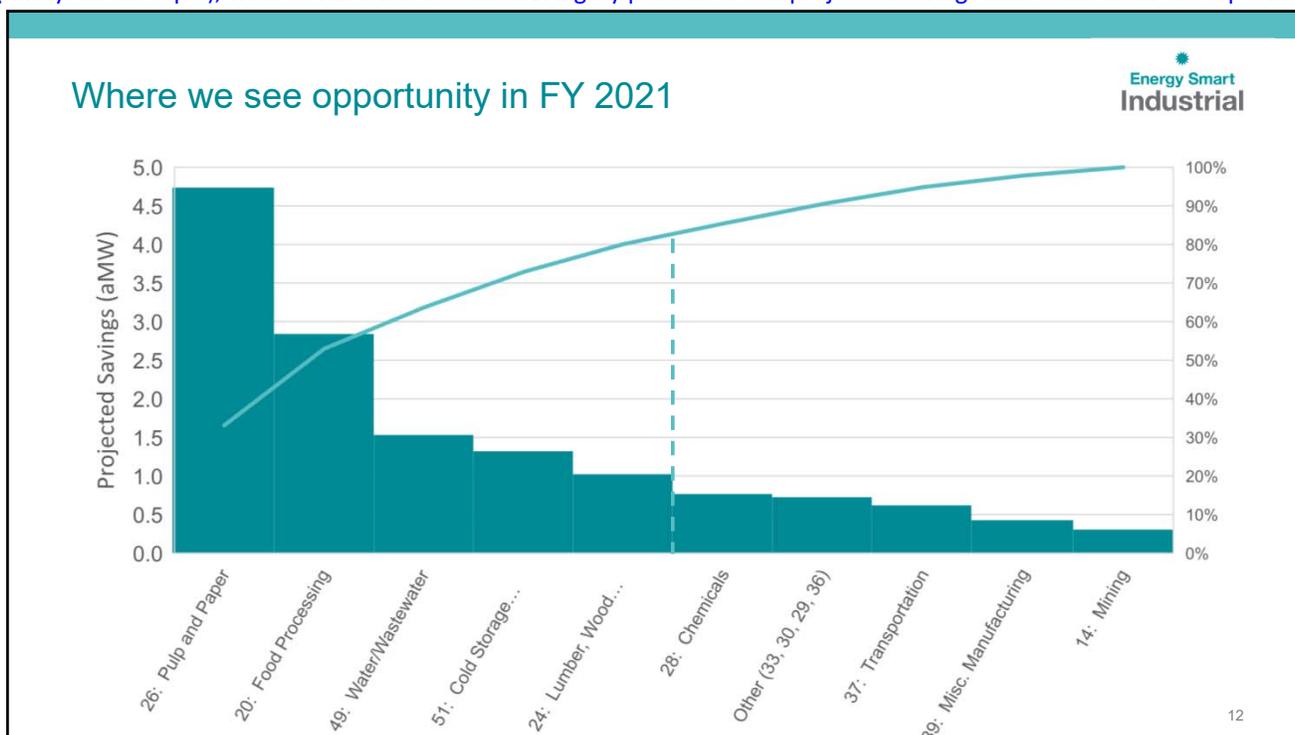
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B. Brennand: FY2020 target was over 15 aMW; and because of the reduced savings acquired, FY2021 is roughly 21 aMW.



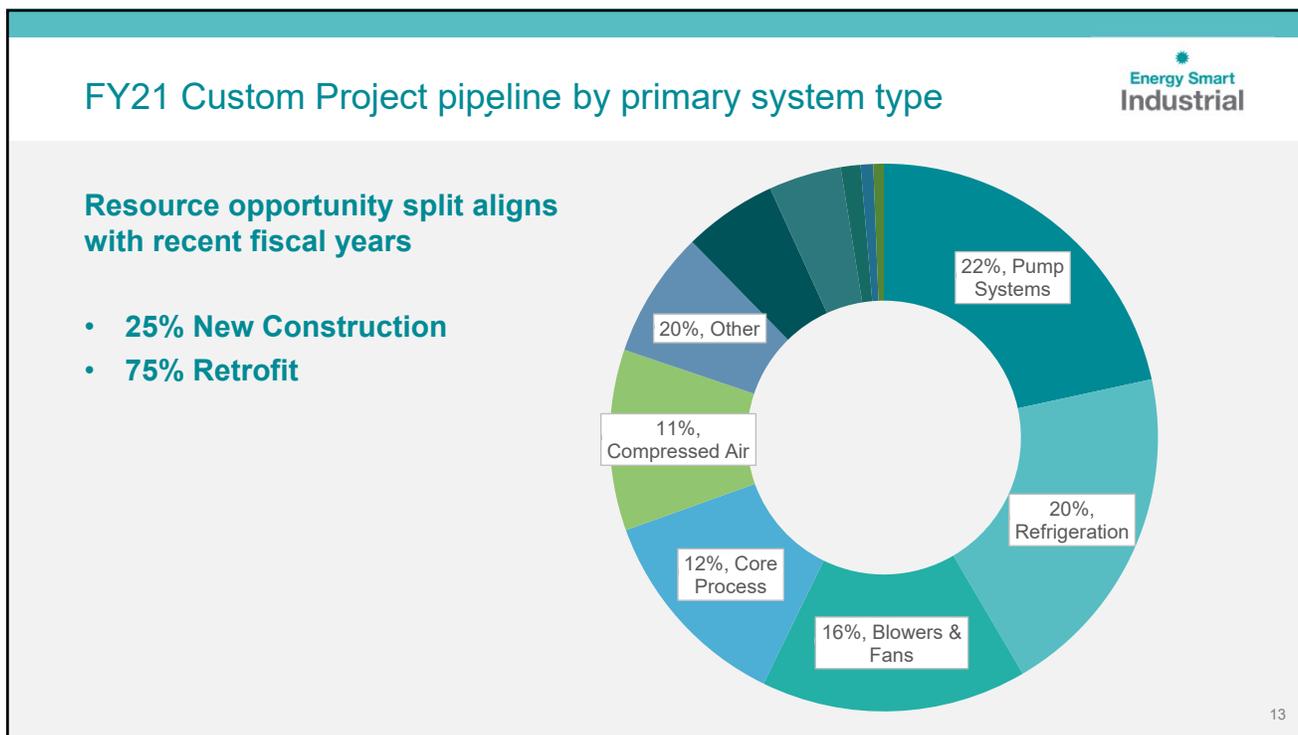
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B. Brennand: Here are the core (industrial) sector markets, some have seen an increase, starting with Pulp and Paper. It has always been strong (always in the top 5), with COVID it has become #1. Eighty percent of our projected savings will come from the top 5 markets.



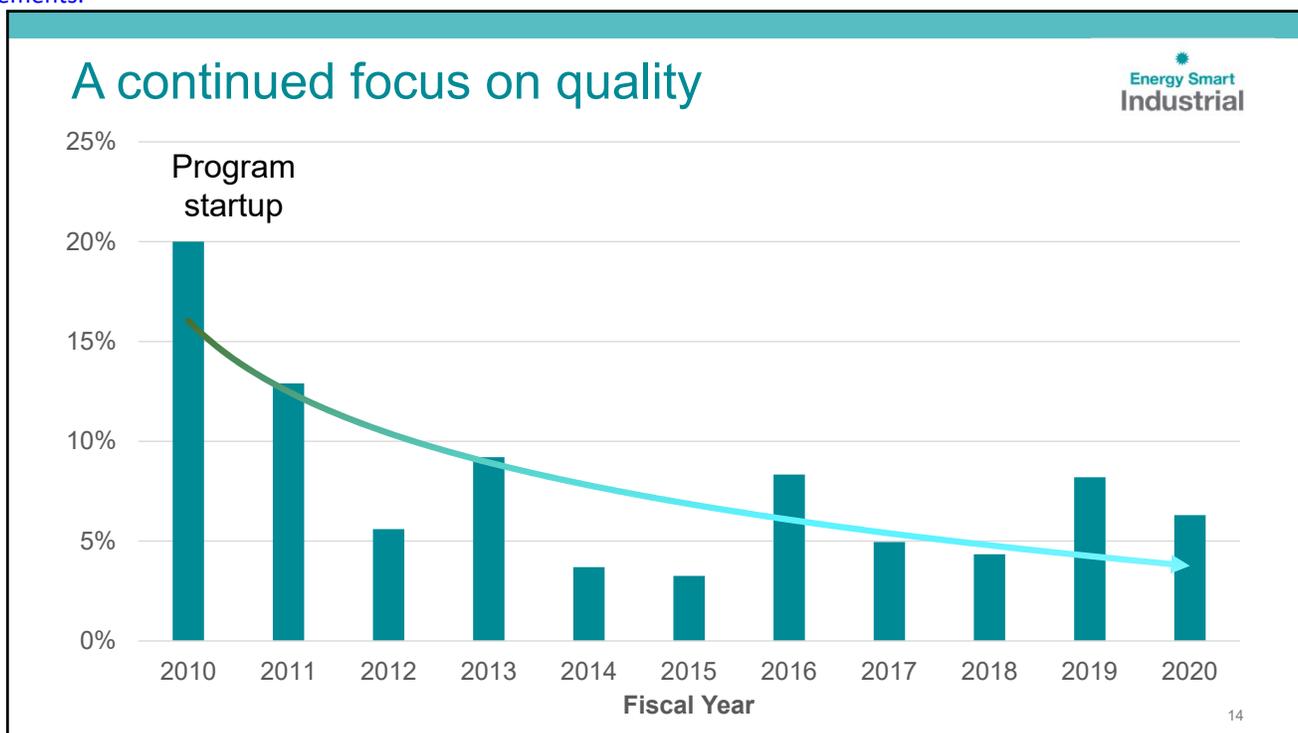
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B. Brennand: Here is a breakdown of the types of projects we see for FY2021 pipeline. Several industries are retooling their pumping systems and processes and refrigeration projects are increasing (Note: Here in the NW, the average cold storage facility is 35 years old).



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B. Brennand: One way the ESI program measures *quality* is based on the project "return rate" - i.e., custom project documentation (C1 files). In FY2020 there were seven returns in the first three months - many were due to cost documentation. We are always looking for improvements.



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B. Brennand: Facilities are experiencing unique set of challenges with COVID, these three principles are critical to continue to provide quality services. Some facilities are business as usual, others have changed the way they do business, because of changing requirements. Simplify the M&V process, to make it more simple to work with us. Frozen budgets, possible shut-downs., the ESIPs have worked with the utility and end users to look to win-wins.

## Key principles



- Commit to regular **communication** with utilities and industries
- Seek to minimize the **burden** to the end user
- Offer creative **solutions** to address problems and uncertainty

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B. Brennand: Internal changes within ESI, John Whitchurch has left the ESI program and I've stepped up to try and fill those big shoes. We've brought on Max on board, worked with Air Clean and has worked with Steam.

## Transitions on ESI team





Bob Brennand has taken over for John Whitchurch as ESIP Manager, while retaining responsibility for several W. Washington utilities.

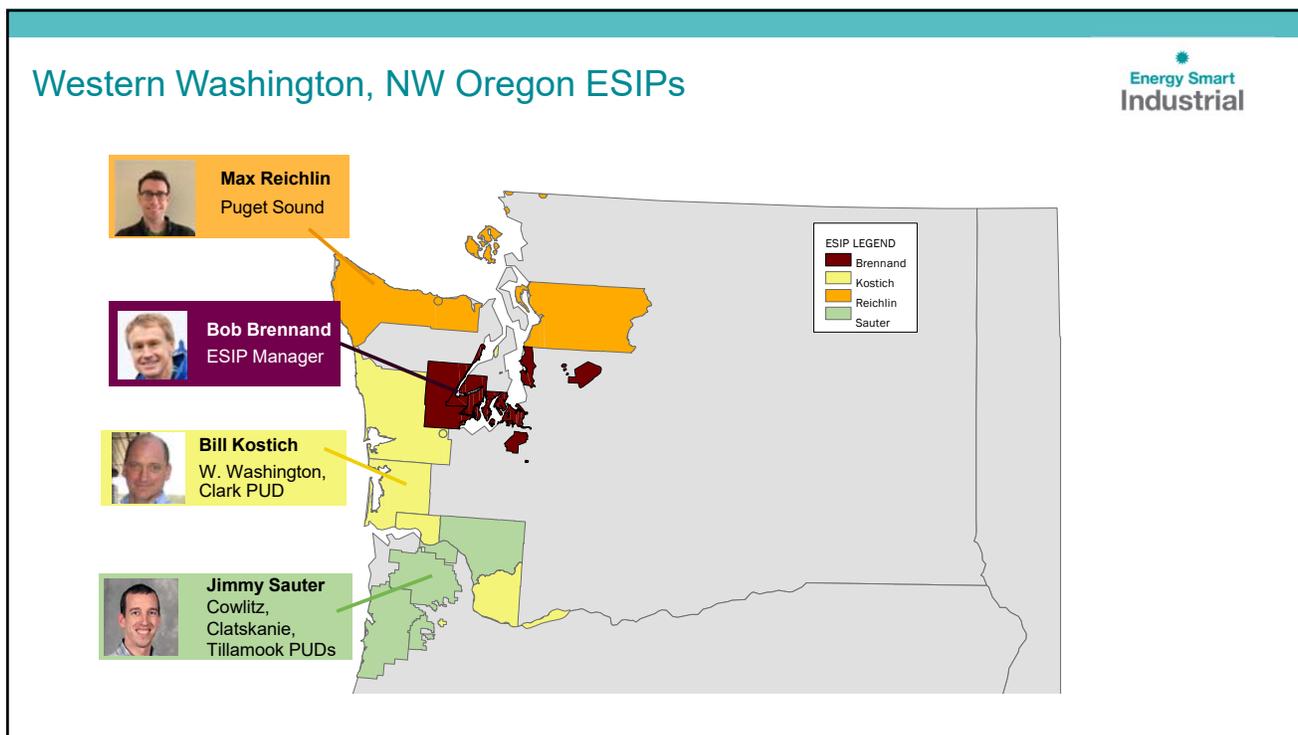


Max Reichlin will gradually assume responsibility for utilities north of Tacoma. Max lives in Burien and holds a P.E. in the State of Washington.

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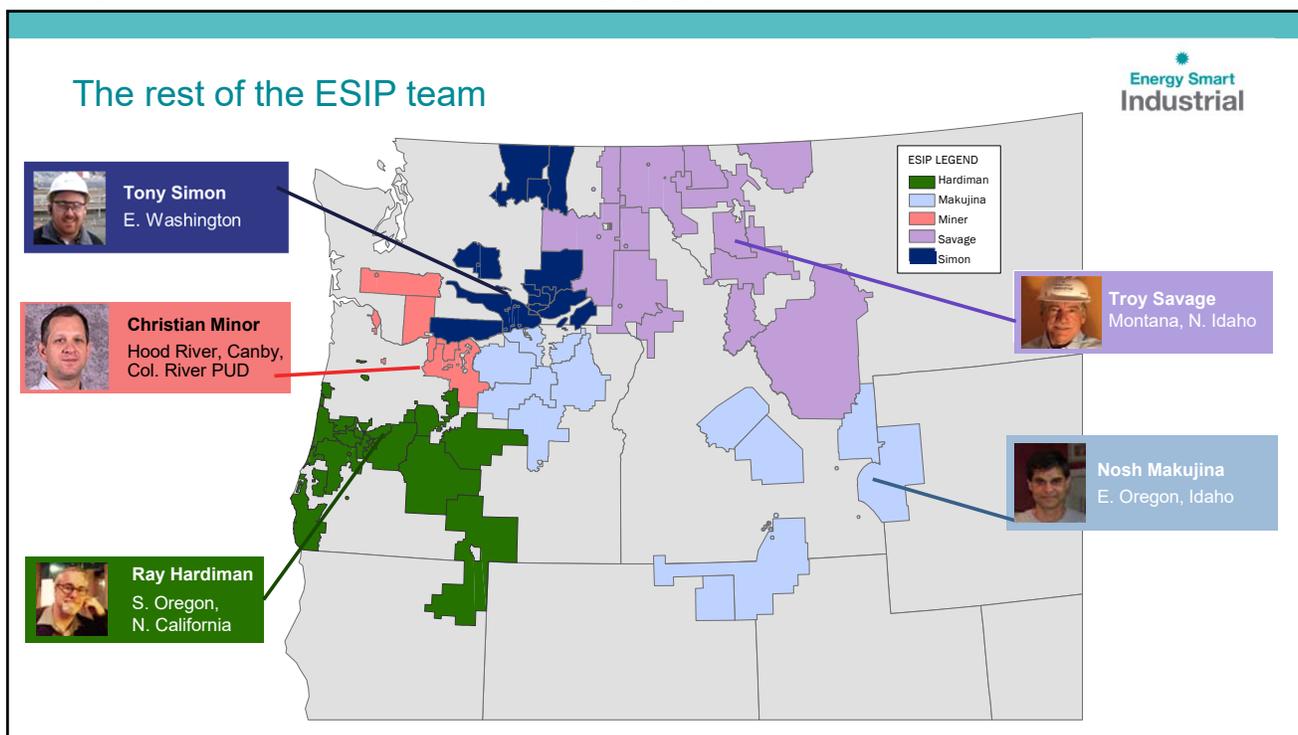
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B. Brennard: Geographically shows where Max is working along with the other ESIPs.



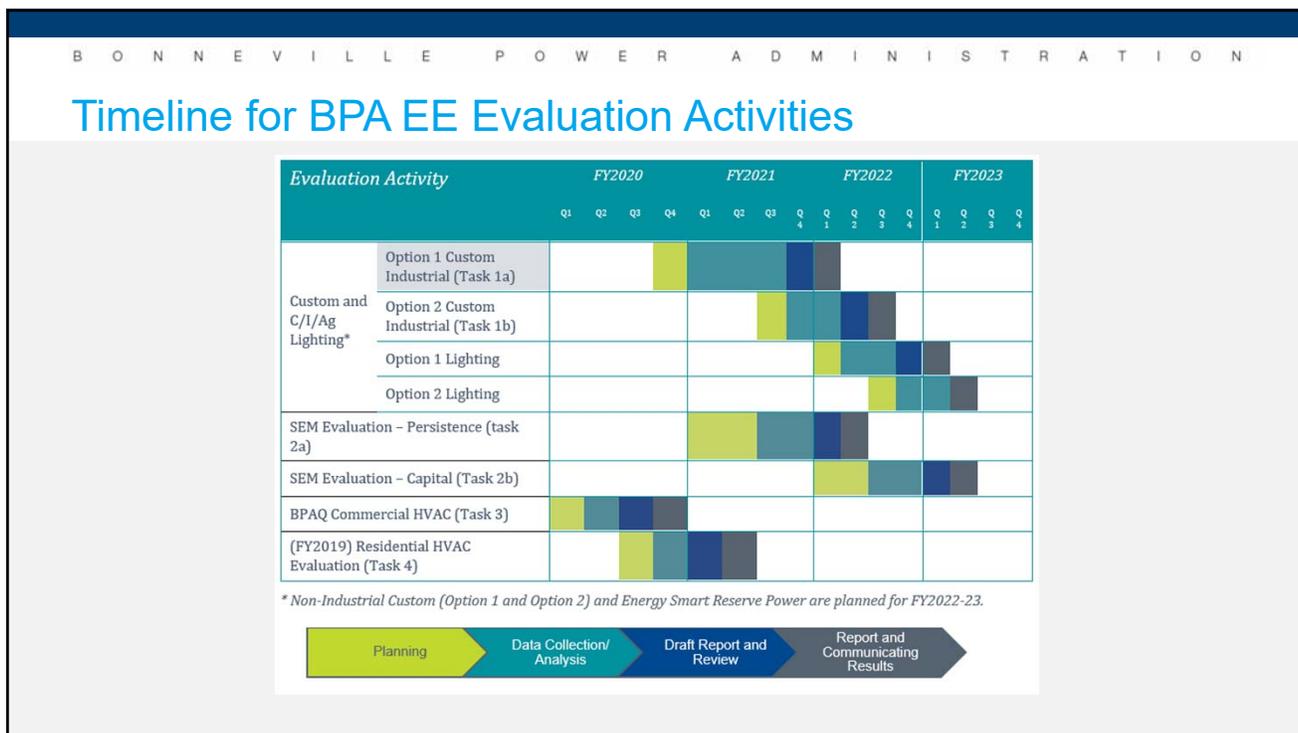
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B. Brennard: Expanding to show the ESIP assignments to the Eastern service territory of BPA. You can see that Nosh Makujina is ESI's "road warrior" as he supports several utilities and end users over a large geographic area.



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E. Mullendore: BPA's Evaluation timeline which includes Industrial Custom Projects for Opt 1, Opt 2 followed by SEM persistence and capital projects. There is a BPA webinar that will kick-off the Option 1 Custom Industrial efforts - this Thursday, November 19. Please contact your EER if you would like to attend.



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# Strategic Energy Management Updates

Sara York

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S. York: SEM benefits both end users and utilities - helps facilities save energy and utilities are able to stretch their budgets (with incentives \$0.025/kWh) and with SEM efforts you won't see savings reporting for 12 months.

## What is Strategic Energy Management?

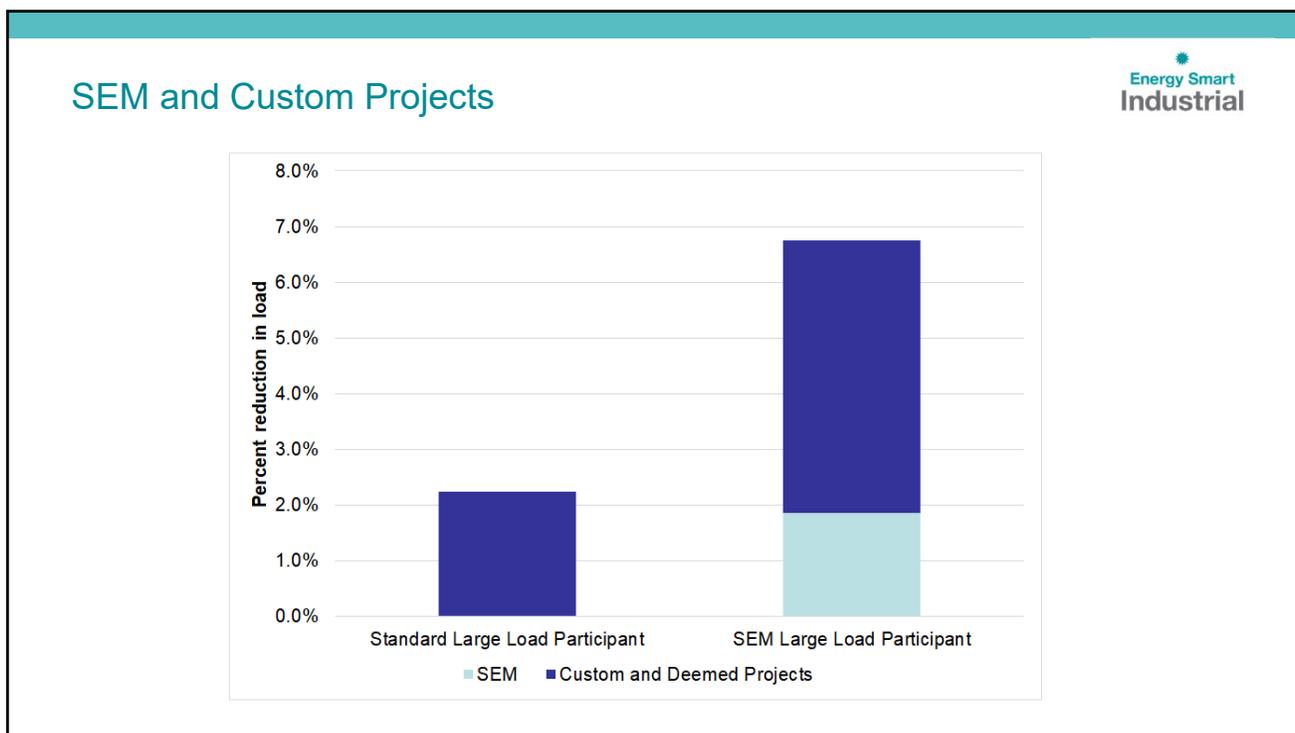
**Through SEM, we work together to...**

- Activate energy teams to find and complete energy saving projects
- Track energy performance at your site
- Engage employees to save energy every day

SEM Participant Prioritizing Energy-saving Opportunities

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S. York: We've seen an increase in custom project savings (chart covers savings through FY2018).



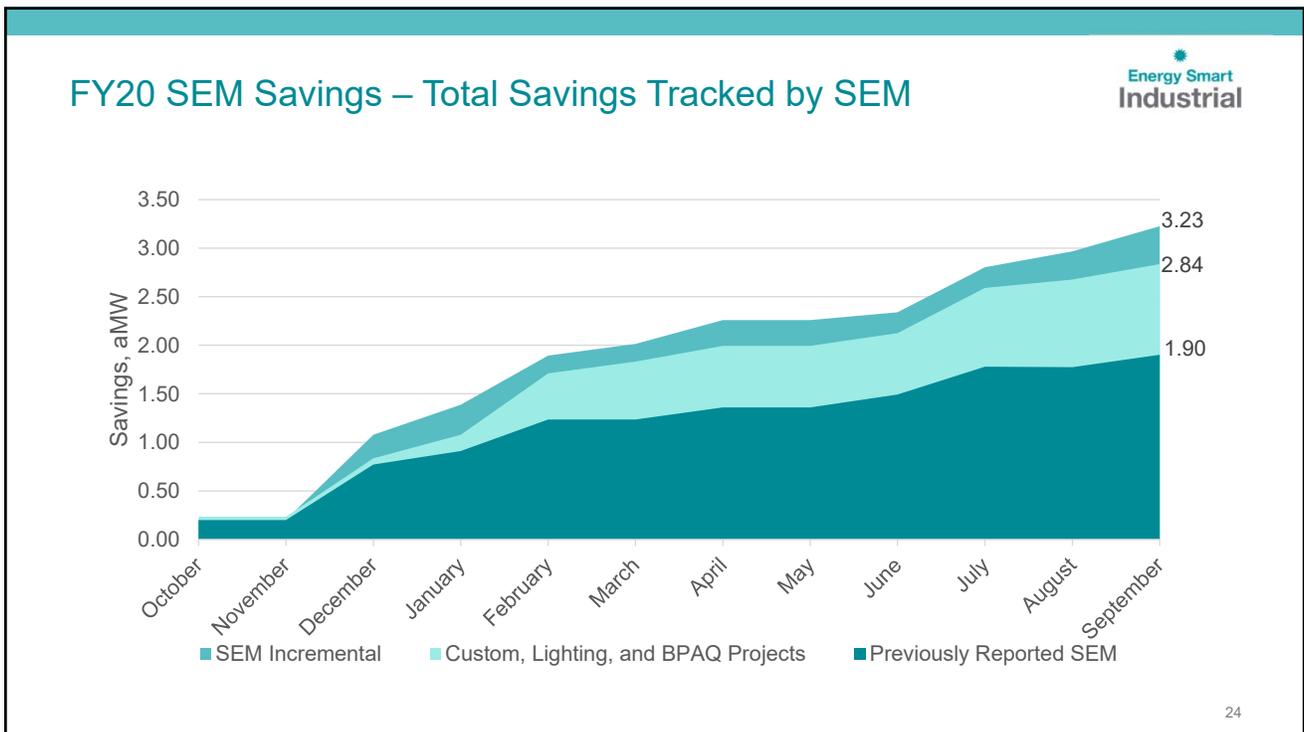
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S. York: FY2020 has been "fun" for everyone! The ESI program changed cohorts from "in-person" workshops to virtual webinars, as well as "remote" engagements and energy scans. We will be continuing to leverage this in FY2021.



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S. York: The total savings are being tracked by SEM.



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S. York: ESI program is looking to maximize savings and continue with COVID safety procedures. We're also focused on building the FY2022-23 pipeline.

## FY2021 Priorities





### Maximize FY21 Savings

- Focus on key projects



### Build FY22/23 Pipeline

- Continue remote recruitment and delivery
- Strategically target large energy consumers

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S. York: FY2021 pipeline - three Water/Wastewater cohorts...

## FY21 Pipeline



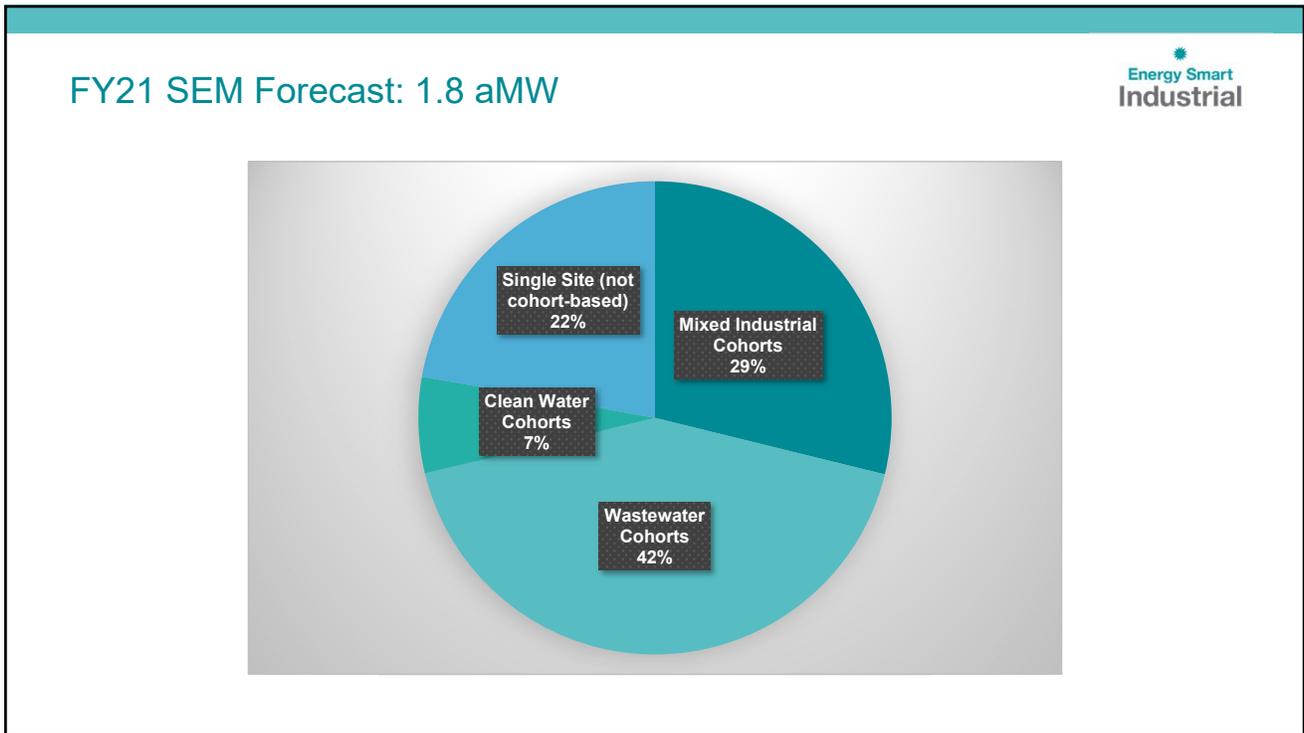
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Utilities
<b>Ongoing Cohorts</b>														
WEC Mid-Columbia	Yr 1-2	█	█	█	█	█	█	█	█	█	█	█	█	Benton PUD, Richland Energy, Northern Wasco PUD, Flathead Electric
WSOC Columbia Basin 2018	Yr 2	█	█	█	█	█	█	█	█	█	█	█	█	Benton PUD, Richland, Ellensburg, OTEC, Franklin, and Pacific Power
WEC Lower Columbia 2019	Yr 2	█	█	█	█	█	█	█	█	█	█	█	█	Clark County and Columbia River
MEC Puget Sound 2017	Yr3 - 4	█	█	█	█	█	█	█	█	█	█	█	█	Snohomish PUD and SCL
WEC Puget Sound 2017	Yr 4	█	█	█	█	█	█	█	█	█	█	█	█	Snohomish PUD
SEM Puget Sound North and South	SEM Yrs 4 and 5	█	█	█	█	█	█	█	█	█	█	█	█	SCL and TPU

**Legend:**

1st Year
  2nd Year
  Workshop

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S. York: This breaks out where the 1.8 aMW is forecasted to come from.



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S. York: FY2022 cohort kick-off with 10 facilities participating, remote Water cohort launching in spring. we've seen an increase in sole-delivery participation.

### FY22 Pipeline Development

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Utilities
Columbia Basin Refrigeration Energy Coaching Cohort		■	■	■	■	■	■	■	■	■	■	■	Benton PUD, Benton REA, Ellensburg, Franklin PUD, City of Richland, Umatilla Electric Cooperative
Remote Water Cohort	■	■	■	■	■	■	■	■	■	■	■	■	Clark, multiple TBD
Puget Sound Clean Water Cohort	■	■	■									■	Snohomish (and potentially SCL)
New Tune-ups (non-Cohort)			○	○	○	○	○	○					Multiple, TBD

**Legend:**

1st Year: ■ (light blue), 2nd Year: ■ (medium blue), Workshop: ■ (dark blue), Potential: ■ (grey), ○ (orange circle)

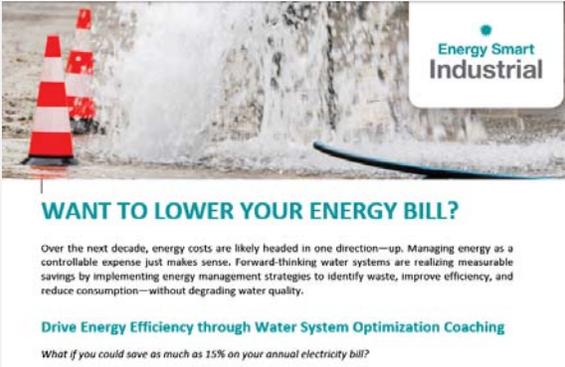
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S. York: When working with water there are a lot of metering points and figuring out where it falls within their energy load - and there is a wide-range of end users. ESIPs are reaching out to utilities - based on the initial screening; if you've not heard from your ESIP but think you have a potential participant - please give them a call or send them an email.

## Remote Water Cohort - Recruitment





**Initial Screening is based on**

- >30,000 population served
- Targeting 8 – 10 participants
- Average annual consumption >4 million kWh

**Recruitment Status/Next Steps**

- Two confirmed anchor sites (Clark PUD)
- ESIPs reaching out to Utilities
- December 9<sup>th</sup>, 9:00 – 10:00am Potential Participant Informational Meeting

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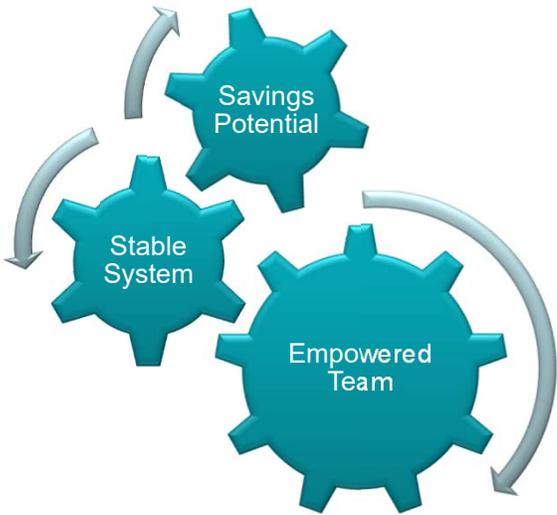
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S. York: SEM candidate characteristics to consider when performing an initial screening of end users (three key areas).

SY2



## What are the characteristics of a good SEM candidate?



**Savings Potential**  
 >4 million kWh annual consumption  
 >250,000 kWh of low/no-cost potential

**Stable:** Operations are stable enough that we can detect low/no-cost changes

**Empowered:** Customer has exhibited the ability and willingness to pursue continuous improvement

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E. Mullendore: Open Forum - any discussion or feedback from attendees. Any problems or challenges that you are facing at this time?

Allen F (Tacoma Power): Early in COVID, I appreciate the creative solutions by the ESI program - mailing out metering equipment to end users. I was able to work with facility staff to get them installed so that work may continue.

Zeecha (Clark): Many of our industries are continuing and adjusting and being flexible to meet these challenges, I appreciate that.

## Utility Focus Group Open Forum



### Discussion & feedback from Utility Focus Group

- What challenges are you facing advancing project during COVID?
- How can ESI help during this time?

Eric M (Benton REA): spoke about a new construction project that was affected by COVID and the great work done by his ESIP to keep the project alive by dividing it up into phases. Eric asked the ESIP, Tony Simon, to expound on what was done for to help both the utility and facility.  
[see very last slides, pg 17]

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E. Mullendore: Oregon and Washington Governor's have tightened things over the next couple of weeks. - but we are still willing to work with utilities and their industries to help them save energy. Wanted to introduce Melike Kayim has joined the EE group (on loan from BPA Finance) as interim Commercial & Industrial Sector Lead.

## Looking forward



- Option 1 Impact Evaluation Research Plan Webinar  
12:00 – 1:00 pm PST, November 19, 2020
- Q2 Utility Focus Group meeting  
11:00 – 12:00 pm PST, January 13, 2021

Please share any topics you'd like to consider, or anything that you've seen that you would like to talk about. We will send out a reminder a three weeks before.

We're also considering a deeper dive into the SEM approaches that can help you and industries maximize savings over this next FY and into the next rate period.

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Alan F (Tacoma): When will Option 2 Impact Evaluation kick-off? (see Slide 19 - Q3 Planning/Q4 of FY21 and Q1 of FY22 implementation) Thank you - I will wait to attend that kick-off session.



# Thank you!

For more information, contact:

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503-230-5546

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Tony Simon (E. Wash ESIP): Couple of dedicated refrigeration for the rooms they were able to run; broke it up into two phases.

## Benton REA: Advancing Custom Projects During COVID Era

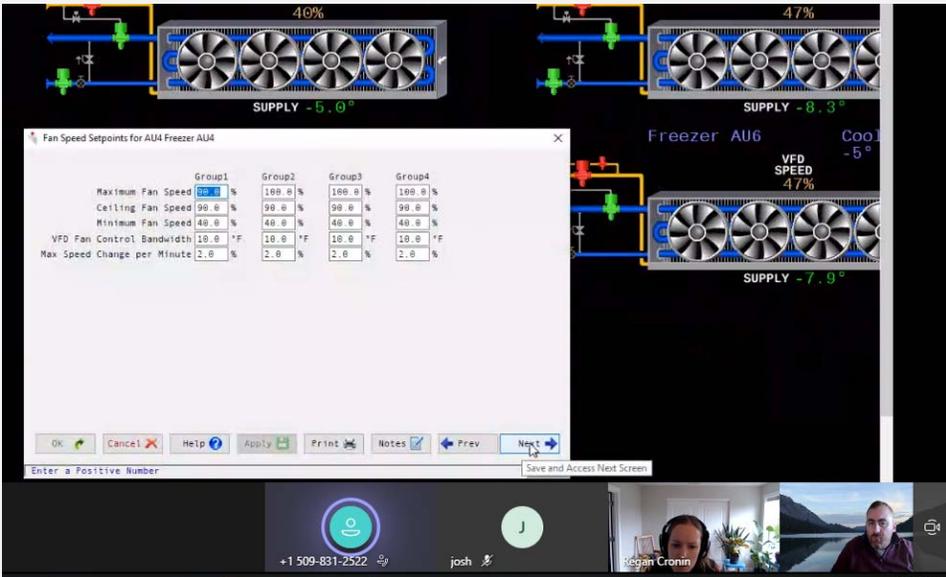



- Only 75% of rooms running
- ESI team determined that the project could be broken up into two phases.

T. Simon: KenyonZero - Because of user remote capability we've been able to get custom projects done faster.

## Franklin PUD: Advancing Custom Projects During COVID Era




- Remote Commissioning Assistance Before M&V
- Ensures M&V can occur as soon as possible with lower risk of extending closeout timeframe.