

DATE: Wednesday & Thursday, November 6th & 7th

TIME: 12:30 – 3:45 pm | 9:15 – 12:00 pm Pacific Standard Time

LOCATION: Hybrid: Location – 17801 International Blvd, Seattle, WA, 98158 I Conference Room: Seoul

TEAMS LINK Day 1: Click here to join the meeting (Meeting ID: 216 532 042 024 I Passcode: vLGtbj) (if

needed) Call-in audio only: 971-323-0535 Phone Conference ID: 286 564 549#

<u>ISCC OBJECTIVE + DESIRED OUTCOME</u>: Collaboration on coordination and optimization of NEEA programs and related activities by (1) identifying and managing through potential implementation challenges between NEEA and local utility activities, and (2) identifying and seizing leveraging opportunities that can drive amplified market influence.

Day 1 - Wednesday, November 6th

(<u>All Times Pacific</u>			pg#
12:30 -12:45 (15 mins)	Welcome, Agenda & Packet Review	Anouksha Gardner	1-3
12:45-2:05 (80 mins)	Introductions & Regional Roundtable Committee members and NEEA program staff share program and organization updates, highlight areas of possible interest and coordination with others. Desired Outcome: All are updated on each other's activities and better understand what's happening across the region.	All	
2:05 - 2:15	BREAK	All	
2:15 – 2:45 (30 mins)	Regional Priority Topic • Efficient Fans Program Updates Desired Outcome: Committee members gain insight on the basics about the Efficient Fans program and the work NEEA is currently engaged in.	Alexis Muench	5-6
2:45 – 3:00 (15 mins)	Announcements & Upcoming Meetings/Events	Anouksha Gardner	
3:00 – 3:10	BREAK		
3:10 – 3:40 (30 mins)	"Managing fluorescent baselines and related LLLC incentives" Desired Outcome: Committee members glean insights from their peers about opportunities and challenges in navigating the fluorescent baseline.	All	
3:40 – 3:45 (5 mins)	Recap, Next Steps, Adjourn	Anouksha Gardner	



DATE: Wednesday & Thursday, November 6th & 7th

TIME: 12:30 – 3:45 pm | **9:15 – 12:00 pm** Pacific Standard Time

LOCATION: Hybrid: Location – 17801 International Blvd, Seattle, WA, 98158 I Conference Room: Seoul

TEAMS LINK day 2: Click here to join the meeting (Meeting ID: 245 735 025 417 I Passcode: grE9jx) (if needed) Call-in

audio only: 971-323-0535 Phone Conference ID: 165 015 149#

Day 2 - Thursday, November 7th Annual Planning for 2025

(All Times Pacific)			pg#
9:15 – 9:25 am	Welcome & Agenda	Anouksha Gardner	
9:25 – 11:40	 Annual Planning Luminaire Level Lighting Control (9:25 to 10 am) HVAC VHE DOAS (10 to 10:30 am) Break (10:30 to 10:40 am) Extended Motor Products, Pumps & Circulators (10:40 to 11:10 am) Efficient Fans (11:10 to 11:40 am) 	All	7
11:40 – 11:45	Recap, Next Steps, Adjourn	Anouksha Gardner	



Memorandum-Agenda Items

October 24, 2024

TO: Integrated Systems Coordinating Committee (ISCC)

FROM: NEEA Staff

SUBJECT: Meeting Packet Agenda Items, Informational Updates and Additional Information

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MEETING PACKET APPROACH

This packet continues the "tiered" approach:

- Tier-1 memos for active agenda items
- Tier-2 memos for informational updates on items not currently requiring agenda time.
- Tier-3 materials provided as additional detail for those interested, accessible via links in the Tier 1 and Tier-2 memos. All other Tier 3 materials are listed below.

AGENDA ITEMS (Tier 1)

Page 1-2: Meeting Agenda

Page 3: Meeting Packet Informational Updates

• Page 4: Meeting Preparation Highlights

Page 5-6: Memo: Regional Priority Topic – Efficient Fans Program Update

Page 7: Memo: Annual Planning Process

INFORMATIONAL UPDATES (Tier 2)

Page 8: Electric PortfolioPage 9: 2024 ISCC Workplan

PROGRAM ACTIVITY REPORTS

Page 10-12: High- Performance HVAC

• Page 13-16: Luminaire Level Lighting Control

Page 17-20: Extended Motor Products Pumps & Circulators

Page 21-23: Efficient FansPage 24-26: Better Bricks

ADDITIONAL LINKS (Tier 3)

- Committee Materials (meeting notes include links to recordings, packet, and slides)
 - O Q2 2024 ISCC Meeting Notes, Agenda Packet, and Slides
 - O Q3 2024 PCC Meeting Notes, Agenda Packet, and Slides
 - o 2024 Workplan: Integrated Systems (ISCC) I Products (PCC)
 - O Charters: RPAC, ISCC, PCC
- Q3 2024 Market Research and Evaluation Newsletter
- Q3 2024 Emerging Technology Newsletter
- Q2 2024 Codes, Standards and New Construction Newsletter

ISCC Q4 2024 – Meeting Topic Preparation Highlights



Preparation for All Committee Items:

• Review packet, including agenda, informational updates and all memos. See additional preparation for specific agenda items below.

DAY 1

ROUNDTABLE

Committee Members & NEEA Program Managers will share highlights from their work, programs and/or organization since the Q2 meeting.

Specific topics for Committee Members to consider highlighting include:

- Questions/thoughts on NEEA program activity reports
- o Program and organizational updates
- o Any questions of your peers?

REGIONAL PRIORITY TOPIC – Efficient Fans

Topic format is expected to be a share out by Program Manager Alexis Muench regarding program updates.

Review Tier 1 memo on p.5 and come prepared to receive an overview of:

- (1) Program progress through 2024
- (2) Updates on what's to come, and
- (3) An opportunity to hear from committee members about their programs, if any.

> COMMITTEE AD-HOC DISCUSSION

Managing Fluorescent Baselines and related LLLC incentives. This topic was requested by committee members and will follow an open/unstructured discussion format.

Come prepared to gain insights and discuss:

(1) Opportunities and challenges in navigating regional challenges as it relates to fluorescent baseline and related LLLC incentives

DAY 2

ANNUAL PLANNING SESSION

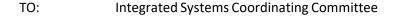
The annual planning session will take place on the 2^{nd} day (November 7) of the Coordinating Committee Q4 meeting.

Review the survey results emailed with this packet, and the Tier 1 memo on p.7, and come prepared to:

- Engage in brainstorming discussions using Mural board. (No preengagement needed on Mural board, just follow along during the meeting)
- (2) Discuss annual planning survey answers
 - ✓ Assist with finalizing which topics to slate for 2025
 - ✓ Discuss and align on additional topics suggested in the survey (will use ad-hoc topic time throughout 2025).

Memorandum – Agenda Item (Tier 1)

10/24/2024



FROM: Alexis Muench, Program Manager

SUBJECT: Efficient Fans Program Update



Our Ask of You:

Come prepared to learn more about the Efficient Fans program, progress through 2024, and what is planned for the remainder of this year. If you are running a commercial or industrial efficient fans program, either custom or prescriptive, we welcome the opportunity to hear about your program and the successes you have had in incentivizing efficient fan adoption.

Brief Overview:

2023 was the Efficient Fans' first full year as a program in NEEA's portfolio. Initial successes included:

- Continued partnership with the <u>Air Movement and Controls, Association, Inc</u>. (AMCA), who rates fan products via its certified ratings program, including <u>fans rated with Fan Energy Index (FEI)</u>.
- Completed <u>Fan Manufacturer Regional Market Share Study</u> to inform strategic manufacturer partners for the program. Partnered with two major manufacturers, including data acquisition.
- Influenced the first <u>federal test procedure</u> for fans which included the Fan Energy Index metric.
- Conducted two FEI-focused training sessions December 2023 in partnership with Twin City Fan.
- Launched Efficient Fans on BetterBricks.com.

2024 activities include:

- Completed the <u>Fan Systems Market Characterization Study</u>, which described the path-to-purchase for efficient fans, including the roles, motivations, and perspectives of relevant market actor groups.
- Alongside partnering with two manufacturers, the program pivoted to include engagement of two
 manufacturer representatives to generate interest in the Efficient Fans program and secure
 additional sales data. This engagement effort will continue through 2024 and into 2025.
- Further optimize and refine manufacturer selection software to highlight FEI and prioritize efficient fan selection.
- Submitted comments on the first ever <u>Notice of Proposed Rulemaking for Fans and Blowers</u>.
- Conduct technical research to understand more about what drives fan system efficiency in specific applications and to understand more about the performance of fan systems.
- Develop value proposition for efficient fan systems and disseminate via manufacturers and manufacturers' reps.
- Through NEEA's BetterBricks platform, collaborate with one manufacturer on two trainings on FEI and efficient fans in Boise and Spokane in December 2024.
- Engage with Northwest trade associations and member groups to explore as a vehicle for educating specifiers on FEI and efficient fan systems.

 In collaboration with AMCA, set the stage for exploring and building an Efficient Fans coalition in 2025, which will help promote more participation from AMCA members in the existing voluntary program and explore the creation of Fan Energy Index (FEI) levels beyond current federal minimums.

Please contact Alexis Muench if you have questions about this memo.

PROGRAM LIFECYCLE STATUS





Memorandum – Agenda Item (Tier 1)

October 24, 2024

TO: Products & Integrated Systems Coordinating Committee Members

FROM: Anouksha Gardner, Stakeholder Relations Team SUBJECT: Nov 7 (ISCC) & Dec 4 (PCC) Annual Planning Sessions

The annual planning sessions to develop 2025 regional priority topics will take place on the second day of the Q4 2024 Coordinating Committee meetings.

What to Expect:

We will use the Mural board platform again to discuss and finalize topics; Committee Members will not need to familiarize themselves with Mural in advance, nor will they need to do any activities on the Mural board during the session. NEEA staff will capture the necessary details on the board. Our ask is that you follow along, engage in brainstorming discussions, and help align on final topics for the 2025 workplan. You are welcome to include any program/product subject matter experts from your organization in the sessions.

Process:

NEEA staff will pre-populate the mural board with the topic rankings and any additional topic ideas from the survey results. Each program will have allotted time for discussion, schedule below. We will start with NEEA suggested topics based on the survey rankings and create space to discuss any additional suggested topics offered in the survey. We may follow up with committee members about additional suggested topics before the planning sessions.

Schedule:

ISCC - Thursday, Nov 7 (9:15am - 12pm Pacific)

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TIME	TOPIC/PROGRAM
9:15 - 9:25	Welcome
9:25 - 10:00	Luminaire Level Lighting Controls
10:00 - 10:30	High-Performance HVAC (VHE DOAS)
10:30 - 10:40	Break
10:40 - 11:10	Extended Motor Products - Pumps & Circulators
11:10 - 11:40	Efficient Fans

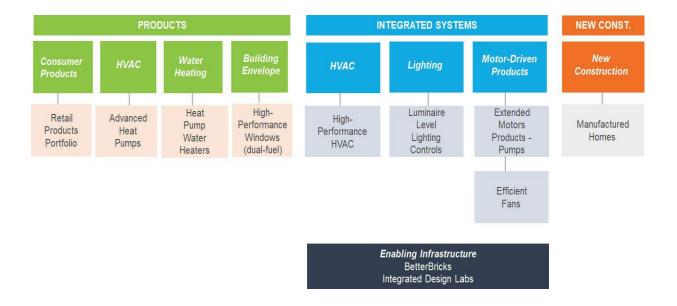
PCC - Wednesday, Dec 4 (9:15am - 12pm Pacific)

TIME	TOPIC/PROGRAM
9:15 - 9:25	Welcome
9:25 - 10:25	Advanced Heat Pumps
10:25 - 10:45	Consumer Products: Retail Products Portfolio
10:45 - 10:55	Break
10:55 – 11:55	Heat Pump Water Heaters

Please contact Anouksha Gardner if you have questions about the annual planning sessions.



Electric Portfolio, 2024





2024 Annual Workplan

Snapshot of Regional Priority Topics

Q1 <u>Meeting 29th</u> February, Thursday	Q2 Day 1 Meeting 22 nd May, Wednesday	Q2 Day 2 <u>Meeting</u> <u>23rd May,</u> Thursday	Q3 Meeting 15 th August, Thursday	Q4 Day 1 Meeting 6 th November, Wednesday	Q4 Day 2 Meeting 7 th November, Wednesday
COMM LIGHTING: Luminaire Level Lighting Controls Topic 1: Recent LLLC Market Research and Topic 2: Regional Utility Toolkit (NEEA Update category) 30-45 mins each placeholder	MOTOR-DRIVEN PRODUCTS: Pumps & Circulators (XMP) Topic: Pumps 101 45 to 60 mins	COMM LIGHTING: Luminaire Level Lighting Controls Topic: Takeaways from LLLC Projects and how to leverage these insights to bolster demand. At least 90 mins	MOTOR-DRIVEN PRODUCTS: Efficient Fans Topic: Introduction to Efficient Fans and Fans Energy Index 35 mins	COMM HVAC: High Performance HVAC, Very High Efficiency DOAS (VHE DOAS) Topic: High-Performance HVAC – TBD PM to check in with Stakeholders and have conversation about coordination and discuss successes or failures	Annual Planning Session



ISCC Q4 2024 HIGH-PERFORMANCE HVAC ACTIVITY REPORT

NEEA IDENTIFIED COORDINATION & LEVERAGING OPPORTUNITIES SUMMARY (SEE PP. 2-4 FOR DETAILS):

- NEEA technical support still available to encourage VHE DOAS on potential HVAC upgrades
- Leverage growing number of reports, case studies blog posts available on <u>BetterBrick's VHE DOAS Page</u>

KEY UPDATES:

- PROGRAM:
 - New! <u>Video case study</u> featuring very high efficiency DOAS demonstration project at New Day Preschool.
 - New! <u>Educational video</u> discussing the similarities and differences between Washington State Energy Code and very high efficiency DOAS.

ADDT'L RESOURCES FOR UTILITIES:

- Very High Efficiency DOAS Comprehensive Design Guide revised to integrate last two years of market and technical learnings.
- <u>Case Studies</u> for all demonstration projects in the Northwest
- ACEEE 2022 Summer Study Paper which provides performance summary of all 12 demonstration projects completed within NEEA's target market(s)
- Report on COVID-19 Risk Reduction Strategies and HVAC System Energy Impact
- VHE DOAS Introduction and 2-page fact sheet
- Short animated video about very high efficiency DOAS How it works and why it matters

Program Overview		
Program Manager	Dave Hammond	
Product Group	HVAC	
MT Goal	The majority of eligible buildings will use very high efficiency DOAS system approach in both new construction and renovation projects.	
Program Status	Market Development (August 2022) – see p. 4	
Product Description	Very high efficiency DOAS is an approach that pairs a very high efficiency heat/energy recovery ventilator (HRV/ERV) type of DOAS with a high efficiency heating and cooling system, while following set design principles that optimize efficiency.	
Sector(s)	Commercial	
Target Market(s)	Existing Buildings and New Construction; specifically, Schools, Offices and Retail	
Key Market Actors	 HVAC manufacturers HVAC vendors (Manufacturer's Representatives/Distributors) HVAC designers (architects, engineers, design build firms, etc.) Building owners and managers 	
Implementation Contractors	 Cadeo Group, HRV/ERV Manufacturer outreach Energy 350, Lead contractor on technical support UW IDL, WSU IDL & MSU IDL, Outreach and education support 	

KEY 2024 OPERATIONS PLAN ACTIVITIES – click <u>here</u> for current Operations Plan (p 57-62)

The High-Performance HVAC program is focusing on informing design of market intervention activities associated with its first area of focus- an HVAC systems approach called very high efficiency DOAS. Key areas of focus for 2024 include (1) Continued market engagement through NEEA's midstream incentive strategy with NEEA Integrated Systems Coordinating Committee (ISCC) High Performance HVAC Activity Report

Page 1 | 3



manufacturer's reps/distributors and HVAC design team participants more generally (2) Continuing to grow the E/HRV Complaint Products List (CPL) and (3) continue generating market and performance data to inform codes.

GOAL 1) Educate and motivate early adopter manufacturer's reps/distributors to promote the system approach and support tracking of market progress

Target: Generate at least seven joint promotional efforts for NEEA's target supply chain audiences by end of 2024

Recent Progress

- The program supported manufacturers' rep partners in promoting the VHE DOAS approach by sharing:
 - educational content and promotional toolkits for an article on right-sizing HVAC equipment
 - a video discussing the key differences between very high efficiency DOAS and Washington State Energy Code
 - a program-developed article on the science behind and benefits of decoupling

What's Ahead

- Continue preparing joint paper and presentation with manufacturer for ASHRAE winter conference / AHR
- Partnering with an HRV manufacturer on new video that will promote various industry perspectives on the value and benefits of high-performance ventilation.

Coordination & Leveraging Opportunities

❖ NEEA supports mid-stream incentives and proposals from manufacturer's reps/distributors, sometimes in concert with their manufacturer partners, to integrate support for the system approach into their educational and promotional materials and activities. Where the NEEA team sees an opportunity to include local utility partners, the NEEA PM will reach out.

GOAL 2) Raise supply chain and end-user awareness of the system approach, and its significant cost savings and non-energy benefits Target: 15 featured events in collaboration with alliance partners, key industry and/or professional/ trade organizations

Recent Progress

- In Q2 & Q3, the program reached approximately 150 designers and facility managers at five regional events, for a total of fifteen events so far in 2024:
 - The NW Facilities Expo based in Portland and an International Facility Management Association Seattle lunch-and-learn.
 - Presented on very high efficiency DOAS at three allday HVAC workshops hosted by Johnson Barrow in Portland, Seattle and Spokane.
 - Program staff also presented at an AEE Inland Chapter's monthly member meeting.
- ❖ The program additionally filmed an educational video with Washington State University's Integrated Design Lab discussing the similarities and differences between Washington State Energy Code (WSEC) and VHE DOAS. The video, which will be finalized soon, will be used to educate designers on how they can use the VHE DOAS approach to cost-effectively meet WSEC.

What's Ahead

University of Washington IDL Energy Code, Standards & Technologies webinar– 10/29

Coordination & Leveraging Opportunities

The Program team will coordinate with utility partners through NEEA's BetterBricks relationships where applicable. For programspecific partnership opportunities, NEEA PM will coordinate with local utility partners.

Page 2|3



GOAL 3) Increase availability of qualifying E/HRVs

Target: At least 2 new capacities, 2 new price points or 2 new manufacturers with eligible equipment

Recent Progress

- The program welcomed a new manufacturer's products on the VHE DOAS list of compliant E/HRVs as well as current manufacturers added 24 new compliant E/HRVs to the list.
- The total YTD expansion of the Compliant Products List (CPL) includes two new manufacturers and 33 new models.

What's Ahead

Team will continue engaging with manufacturers to build the compliant products list

Coordination & Leveraging Opportunities

❖ N/A

GOAL 4) Provide market data and evidence to influence the advancement of local, state and federal codes development Target: 1 revised code change proposal for ASHRAE 90.1-2025 and/or 2027 IECC development process.

Recent Progress

NEEA assembled incremental cost data identified as high priority gaps in Q1 following the market data/analysis scanning work completed in late 2023. This data will support NEEA's development of a 2027 IECC code change proposal in Q4 to require DOAS.

What's Ahead

- Continue development of NEEA's code change proposal for submittal in Q4.
- Present on VHE DOAS at upcoming ASHRAE Winter Conference

Coordination & Leveraging Opportunities

❖ N/A

Program Lifecycle





ISCC Q4 2024 LUMINAIRE LEVEL LIGHTING CONTROL (LLLC) ACTIVITY REPORT

NEEA IDENTIFIED COORDINATION & LEVERAGING OPPORTUNITIES SUMMARY (SEE PP. 2-4 FOR DETAILS):

- Identify opportunities for case study success stories
- Host and promote training sessions
- Distribute educational resources and leverage marketing materials
- Share market insights from utility incentive program experience
- Collaborate on event and speaking opportunities

KEY UPDATES:

- PROGRAM: Collaboration with manufacturers' local sales channels to educate specifiers. Leverage of professional and trade organizations to increase LLLC acceptance. (see pp. 2-4)
- MARKET RESEARCH: Two market research projects are currently underway:
 - LLLC's third Market Progress Evaluation Report (MPER #3)
 - final report is expected in mid-2025.
 - Exterior LLLC Parking Lot Market Research Study final report is expected by the end of 2024.
- **EMERGING TECH:** Two key emerging tech projects are in progress:
 - Integrated LLLC-HVAC controls study installations are complete, with final results expected in Q3 2025.
 - Exploration into how LLLC parking lot applications might reduce peak demand – final results are expected in late 2025.

RESOURCES FOR UTILITIES:

- LLLC Toolkit for Alliance members
 - o LLLC technical handout series with 10 topics
 - o Customizable marketing collateral

Program Overview			
Program Manager	Anne Curran		
Product Group	Lighting		
MT Goal	Adoption of LLLC becomes standard practice for commercial buildings, as the majority of lighting products come with embedded sensors and controls as the default option.		
Program Status	 Market Development (March 2019) – see p.5 Market Progress Evaluation Report #2 Q4 2023 		
Product Description	A type of wireless networked lighting control (NLC) that integrates controls and sensors into the luminaire, enabling communication with each other and transmission of data.		
Sector(s)	Commercial, Industrial		
Target Market(s)	Office, Schools, Healthcare, Warehouse		
Key Market Actors	 Lighting manufacturers Sales agencies (manufacturer representatives) Distributors Installation contractors Lighting designers and engineers Building owners and managers 		
Implementation Contractors	Evergreen Energy Partners with Cadeo GroupC+C (marketing)		
Program Partners	 Lighting Design Lab Integrated Design Labs Design Lights Consortium DOE's Integrated Lighting Campaign 		



- Case Studies: Enumclaw High School, South Lander Business Park, Associated General Contractors of Washington, Vision Profile Extrusions, Novanta
- ❖ BetterBricks LLLC public facing hub, including Industry Voices interview series
- BetterBricks Industry Voices: Chris Gilmore video and Q&A, Neil Schilling Q&A
- LLLC Video Playlist including Ask the Expert series

KEY 2024 OPERATIONS PLAN ACTIVITIES – click <u>here</u> for link to current Operations Plan (p 65-69)

The LLLC program uses a multi-faceted approach incorporating specification development, market awareness building, training, utility program support, supply chain interventions, and integration with energy codes to transform the market so that LLLC systems become standard practice for commercial buildings.

GOAL 1) Increase decision-maker acceptance of the LLLC value proposition

Target: Feature four new success stories in earned media or at professional associations

Recent Progress

Facility Executive Article <u>Lighting the Way to Cost Savings</u>: This article focused on the benefits of LLLC for our key audience, decision makers, including control, flexibility, rebates, and LLLC as a cost-effective option for retrofits. The article mentioned <u>Neil Schilling</u>, the <u>Vision Profile Extrusions case study</u>, and a quote from NEEA Staff.

- ❖ International Facility Managers Association (IFMA) Facility Managers Journal (FMJ) article: <u>Brighter Futures: Simplifying Efficiency</u> Goals with Lighting Controls
- * Smart Building Exchange event: The LLLC Team joined Seattle City Light (SCL) at this event, demonstrating the Avi-On demo board alongside SCL's RAB case. The event featured a keynote from the SCL CEO, emphasizing the critical role of energy conservation as power demands from EVs and AI grow. The team discussed ways to utilize SCL's new Demo Boards, including a flyer offering support for future materials development.

What's Ahead

- Seattle 2030 LLLC Webinar the LLLC team will present on how LLLC technology can help their members meet Washington's Clean Building Act. A new case study video will be highlighted.
- Oregon Association of Professional Energy Managers (APEM) Fall Emerging Building Tech Forum – The LLLC team will be presenting, highlighting Industry Voices case studies and regional LLLC utility incentives.

Coordination & Leveraging Opportunities

- Identify opportunities for additional case studies and Industry Voices spotlights
- ❖ Distribute educational resources included in <u>LLLC</u> <u>Toolkit</u> and in the <u>LLLC Video Playlist</u>
- Collaborate on event opportunities as they arise

GOAL 2) Strengthen promotion of LLLC by key manufacturer sales channels.

Target: Increase local manufacturer representatives that have featured LLLC in strategic meetings or events targeting specifiers by 25%



Recent Progress

- Finalized action plans with two new manufacturer partners to engage their local sales channels
- ERW Trunk Show: This annual event hosted by ERW Lighting is a highly attended and very visible event. The LLLC team attended and supported this multi-partner agency who showcased both Signify & Lutron LLLC Demo Boards.
 - Ten events have taken place so far in 2024, involving 28 manufactuer representatives
- Solus Fall Folly: The LLLC team supported manufacturer partner, Cooper Lighting, at their Fall Folly event held in Portland.

What's Ahead

- Continued engagement of manufacturers and their priority local representative agencies and distributors to ensure they are well positioned to champion LLLC
- Continued collaboration with manufacturer representative agencies to motivate specifiers to consider LLLC for their projects

Coordination & Leveraging Opportunities

- Identify manufacturer reps and distributors that you would like to see prioritized
- LLLC program will reach out as local opportunities arise

GOAL 3) Influence leading specifiers to include LLLC in their ongoing business practices

Target: Increase specifiers collaborating with the program on media content, events or educational activities by 30%

Recent Progress

- LinkedIn Ad Campaign: Developed and launched a campaign featuring lighting specifier Chris Gilmore to promote the new Industry Voices video & Q&A. This campaign included four ads in rural and urban areas in the NW with a focus on decision maker and lighting specifier audiences.
- NorthWestern Energy LLLC Workshops (four throughout NorthWestern territory): The LLLC Team coordinated with Fernhill Shopworks, to provide LLLC Demo Boards and BetterBricks material in order to deliver hands-on LLLC workshops. These sessions featured Lutron & Acuity Demo Boards.
- NXT Level LLLC Webinar: The LLLC team presented the first of two LLLC webinars focused on removing technology barriers, held exclusively for NXT Level attendees. It was highlighted by the inclusion of local specifiers and the team utilized the new content from Chris Gilmore in the presentation.
- American Institute of Architects (AIA) Montana Annual Conference: The LLLC

What's Ahead

- AIA Oregon LLLC Webinar The LLLC team will be presenting and will feature a new LLLC case study
- ❖ Second NXT Level LLLC Webinar
- Joint Engineers Conference in Montana will feature demo boards and highlight a local specifier
- Energy Trust of Oregon LLLC training for Existing Building trade allies (in planning stages)

Coordination & Leveraging Opportunities

- Identify opportunities for additional case studies and Industry Voices spotlights
- Host an educational webinar for your trade allies and customers
- Borrow LLLC demonstration boards for events and training
- Promote <u>NXT Level</u> and host a jump start session for your trade allies
- Distribute educational resources included in <u>LLLC</u> <u>Toolkit</u> and in the <u>LLLC Video Playlist</u>
- Collaborate on event opportunities as they arise



Team presented, featuring new and previous content from the Industry Voices series as well as highlighting a local specifier from CDS Engineering. The LLLC team also hosted a table that showcased Signify & RAB Demo Boards, the event was well attended with very strong activity at the booth and in the session.

GOAL 4) Increase visibility and demand for LLLC through strategic engagements Target: Strengthen strategic alignment with four national or extra regional partner organizations

Recent Progress

- ACEEE Summer Study: The LLLC team presented their LLLC & Workforce Development Poster Session at ACEEE's Summer Study. The event was highly attended and the table featured the RAB Demo Board for hands-on use during the session.
- IES National Convention: The LLLC team attended the IES National convention to meet with committee groups and attend sessions to promote LLLC.

What's Ahead

- DLC Controls Summit The LLLC team attended this in Q4 the Membership Meeting & Summit , featuring session on HVAC/Lighting Integration through LLLC/NLC
- NY Controlled (IES event) The LLLC team will attend and meet with manufacturer partners
- Digital Illumination Interface Alliance (DALI) North America Summit – The LLLC team will attend and meet with manufacturer partners
- Plans to feature Integrated Lighting Campaign 2024 award winners in upcoming presentations as well as working on case studies

Coordination & Leveraging Opportunities

- Participate in <u>Design Light Consortium</u> (DLC) member meetings and committees. Contact <u>Anne Curran</u> if interested in getting more involved.
- Join an <u>IES committee</u> to help influence recommemded practices. Contact <u>Chris</u> <u>Wolgamott</u> if interested in getting more involved.
- Work with your LLLC customers to get recognition for their projects from DOE's <u>Integrated Lighting</u> <u>Campaign</u>.

Program Lifecycle





ISCC Q4 2024 EXTENDED MOTOR PRODUCTS (XMP) ACTIVITY REPORT

NEEA IDENTIFIED COORDINATION OPPORTUNITIES SUMMARY (SEE 'ASKS' ON PAGES 2-3 FOR DETAIL):

- Identify and co-develop case studies on Smart Pumps with NEEA
- Collaborate with NEEA and manufacturers' representatives on presentations to relevant industry assns in your service territory
- Share smart pumps video and leverage marketing tools
- Offer local insights from the supply chain and pump end users

KEY UPDATES:

- PROGRAM: Eight regional pump distributors sharing full category sales data with NEEA and promoting energy efficient products.
 Extensive pump sales database managed internally by NEEA.
 Currently in contract negotiations with a ninth potential participant.
- MARKET RESEARCH: Market Progress Evaluation Report (MPER #1) project now underway and due to be published at year-end 2024.
- EMERGING TECH: Working with manufacturers and trade association on ER label improvements; Investigating new savings opportunities in electric double-diaphragm pumps, ANSI pumps, and vertical line shaft pumps.
- CODES AND STANDARDS: Final Rule for first-ever circulator pump standard issued by US DOE in 2024; takes effect in 2028.

RESOURCES FOR UTILITIES:

- "All About Smart Pumps" two-minute <u>video</u>, hosted on Hydraulic Institute (HI) website, YouTube, and BetterBricks
- o Case study on smart pumps at Tower 333 in Bellevue, WA
- <u>BetterBricks</u> page with blogs, articles, resources, even a <u>Podcast</u> now too
- Pump industry marketing <u>tools</u> and collateral specifically designed for utility program efforts: Lifecycle Cost Calculators for pumps and for circulators, Energy Rating label marketing materials and FAQ, HI pumps infographic, Example TRM workbook, CEE Pumps Program Specification guidebook

Program Overview			
Program Manager	Warren Fish		
Product Group	Motor Driven Systems		
MT Goal	The marketplace specifies, stocks and sells efficient motor driven products, focusing on pumps and circulators 50hp and below, which will influence future federal standards		
Program Status	Market Development		
Initial Product Description	Motor-driven systems with an active-end that converts electric power into mechanical power; initial focus on high efficiency Energy Rating (ER) labeled pumps and circulators, including Smart Pumps with integrated drives and controls		
Sector(s)	All		
Target Market(s)	Office, municipal, healthcare, schools, hospitality, multifamily, municipal water conveyance, industrial, irrigated agriculture		
Key Market Actors	 Manufacturers' representatives & manufacturers Distributors Installation contractors Mechanical engineers and equipment specifiers Building owners and managers 		
Implementation Contractors	 Cadeo Group: Lead; supply chain; engineering Evergreen Energy Partners: Field education Summit Conservation Strategies: Incentive design; midstream engagement 		
Program Partners	Hydraulic InstituteWSU Integrated Design Lab		



 Extended Motor Products Variable Load Baseline and Constant-Load to Variable Load Savings Key Assumptions <u>Review</u>, Q1-23; Commercial Sector Adjustable-Speed Drive Market Research Study, Q3-23.

KEY 2024 OPERATIONS PLAN ACTIVITIES – click here for link to current Operations Plan (p 76-80)

The XMP program uses a multi-faceted approach incorporating midstream partnerships with manufacturer's representatives, market awareness building, training, utility program support, and integration with energy codes and standards to transform the market so that selecting energy efficient pumps with Energy Rating (ER) labels and integrated controls becomes common practice.

GOAL 1) Raise awareness of energy-efficient pumps, the Energy Rating (ER) label, and the specific benefits of smart pumps related to installation and maintenance costs

Recent Progress

- In Q3-24, participating manufacturer's rep firms completed numerous events educating pump buyers about energy efficient pumps.
- BetterBricks pumps and motors blog posts
- Executed several awareness building events using Evergreen Energy Partners as the program's new subcontractor
- Updated and developed new marketing collateral and presentation content to support field outreach

What's Ahead

- Continuing to support ER label awareness
 - Promoting lifecycle cost calculator tool with sales teams at rep firms
 - Developing Smart Pump case studies in partnership with utility programs
 - Program Support Plan activity implementation by participating distributors (using NEEA funding)
- Participation with Hydraulic Institute and pump manufacturers on Smart Pump registry concept, improvements to Energy Rating label program, and commercial pump and fan opportunity fact sheet project.

Coordination & Leveraging Opportunities

- Partner with NEEA and manufacturers' representatives on smart pump presentations in your service territory
- Support case studies about smart pumps, by sharing completed case studies with customers and identifying additional case study opportunities
- Promote the ER label, smart pumps and smart circulators, and lifecycle cost calculators to your customers and trade allies using marketing and technical tools from BetterBricks and Hydraulic Institute



GOAL 2) Motivate participating manufacturers' representative firms to preferentially stock and sell highly efficient pumps and circulators.

Recent Progress

- Eight Northwest pump distributors participating, enabling data collection on pump and circulator sales, and refinement of program design
- Database housed in NEEA cloud and managed by internal NEEA staff; data visualization dashboards to analyze progress
- Customized Program Support Plans in place with six participating distributors, enabling coinvestment on energy efficiency focused marketing, sales, inventory, and training
- Monthly meetings with each participant where we review detailed analysis of recent sales progress

What's Ahead

- Continued collaboration with participating companies to increase fleetwide average ER, increase sales of the highest efficiency pumps and circulators (Smart Pumps)
- Smart Pump demonstration units now in use by participants for hands-on learning at lunch and learns and conferences, supported through XMP Program Support Plan coinvestments
- Encouraging rep firms to use ER in all quotes and leverage other efficiency sales tools
- Working to gain participation by a ninth regional pump manufacturer's representative firm with strong geographic reach in the Northwest

Coordination & Leveraging Opportunities

- Bring pump training content to your utility SEM cohorts – PSE recent example
- Leverage data from XMP to enhance utility DSM portfolios
- Promote new streamlined pump and drive measures from BPA to increase sales of pumps with high ER's (and low Pump Energy Index (PEI) ratings which equate with high ER)

GOAL 3) Leverage relationships with pump manufacturers, distributors and industry associations to benefit long-term MT and accelerate the pace of smart pump and variable load pump market adoption



Recent Progress

- Improvements to the ER Label Program are now finalized and implemented
- Partnered with Washington State University's Integrated Design and Construction Lab (ID+CL) to add pump technical content from Hydraulic Institute into their Building Science curriculum, including into a Canvas learning module which other Universities are likely to start using in their own curricula. Over 100 students at WSU engaged with that content in 2024.
- Supporting Product Group strategy development for variable speed drives and electronically commutated motors (ECM) in ways that complement our discreet pump and fan programs

What's Ahead

- Expand regional coverage to include more of the regional pump market
- Gather data to support future federal standard updates to a higher minimum ER requirement
- Publication by Hydraulic Institute of a commercial building energy opportunities fact sheet to support national efficiency awareness efforts
- Continue to expand presence on <u>BetterBricks</u> with additional original content

Coordination & Leveraging Opportunities

- SEM Coaches and Energy Efficiency Account Managers can identify and help develop smart pump case studies
- Extensive educational content on pump efficiency is available – work with NEEA to leverage it to support technical topic engagement with implementation contractors, Account Managers, and trade ally networks
- Promote smart pump value proposition to end users, engineers and installation contractors

Position in NEEA's (Program) Initiative Lifecycle





ISCC Q4 2024 EFFICIENT FANS ACTIVITY REPORT

NEEA IDENTIFIED COORDINATION & LEVERAGING OPPORTUNITIES SUMMARY:

- NEEA, through its BetterBricks platform, is collaborating on trainings with Twin City Fan & Blower in Spokane (December 4th) and Boise (December 5th). Utilities are invited to attend and share information with mechanical contractors on their program offerings for fans and fan system components including variable speed drives, motors, and/or custom projects. Please reach out to Alexis Muench amuench@neea.org for more information.
- Utilities are encouraged to continue promoting efficient fan options through their current programs.

KEY UPDATES:

- The program has pivoted to include partnering with manufacturer representatives as a primary strategic intervention and have engaged two organizations to build interest in the Efficient Fans program. In addition, the program has continued gathering data from the two existing manufacturer relationships and have been working to gather additional multi-year historic sales data to assist in building out the program's baseline.
- Total cost of ownership calculator with one manufacturer will not be pursued with them at this time due to delays and other manufacturer priorities, but the program will

Program Overview		
Program Manager	Alexis Muench	
Product Group	Motor-Driven Systems	
MT Goal	Manufacturers will produce and their reps will promote efficient fan systems, resulting in an overall increase in fan efficiency of 20 – 25% above baseline.	
Program Status	Program Development	
Product Description	Fans that are AMCA certified with a Fan Energy Index (FEI) > 1 Fans with a Horsepower (HP) ≥ 1 Fans sold and installed as a standalone fan that are not included in another piece of equipment, or Fans sold and installed in another piece of packaged equipment where that packaged equipment is not rated by any efficiency metrics (such as AFUE, HSPF, SEER, etc.)	
Sector(s) Target Market(s)	Commercial: Office, lodging, multifamily, education, healthcare, assembly, food service, grocery, retail, and schools Industrial: Manufacturing, general, warehouse	
Key Market Actors	Fan manufacturers and manufacturers' representativesSpecifiersEngineers	
Industry Association	Air Movement and Control Association (AMCA)	

explore other total cost of ownership calculator development opportunities in 2025, including reviewing a proposal from the same manufacturer should that become available.

KEY 2024 OPERATIONS PLAN ACTIVITIES – click <u>here</u> for link to current Operations Plan (p 72-75)



GOAL 1) Partner with two manufacturers or manufacturers' representatives to acquire and assess data, and to test interventions to promote FEI via their fan selection software.

Recent Progress

- We have acquired data from two major fan manufacturers and are working towards gathering multi-year historical data from one of them.
- Two manufacturer representatives have been engaged to build interest in the Fans program and collect additional sales data.

What's Ahead

- Formalize partner agreement with one manufacturer by end of 2024 to lock in future sales data sharing and education opportunities.
- Continue engagement of two manufacturer representatives to formalize partnership, secure necessary data sharing, and test market intervention strategies.

Coordination & Leveraging Opportunities

None at this time

GOAL 2) Develop baseline and savings forecast along with a third-party review of the baseline and savings forecast.

Recent Progress

 The team wants a complete data set from existing manufacturer partners and additional partners in 2024 to have the most comprehensive information possible before beginning baseline work. This will avoid risks associated with potential re-work and/or incomplete information leading to potential reevaluation of key assumptions.

What's Ahead

The team anticipates the third-party review of the baseline and savings forecast to be complete by Q4 of 2025 or Q1 2026.

Coordination & Leveraging Opportunities

None at this time.

GOAL 3) Conduct field or lab verification of fan systems in order to understand more about the performance of fan systems compared to the FEI design point and to inform program strategies and interventions

Recent Progress

 This study is just getting underway with a kickoff meeting to review in the planning and scoping phase including conversations with manufacturer partners to identify which information would be the most beneficial to the product vision and program design.

What's Ahead

Study is just getting underway with reporting expected in Q1 of 2025.

Coordination & Leveraging Opportunities

None at this time.



Program Lifecycle





ISCC Q4 2024 BETTERBRICKS ACTIVITY REPORT

NEEA IDENTIFIED COORDINATION & LEVERAGING OPPORTUNITIES SUMMARY:

- Share and amplify content; provide relevant topic suggestions
- Identify opportunities for case study success stories
- Provide content and/or participate in case studies
- Highlight key events and cross-promote when applicable
- Collaborate on event and speaking opportunities

KEY UPDATES:

- Partnerships: 2025 Partnership outreach and agreements inprocess
- Resources: BetterBricks published several new resources in Q3, including 1) a video breaking down key differences between Washington State Energy Code and very high efficiency DOAS, and 2) a fact sheet on smart circulators.

RESOURCES FOR UTILITIES:

BetterBricks.com

- Lighting Solutions <u>YouTube playlist</u>
- LLLC utility toolkit page
- XMP Smart Pump video
- CRTU Field Study <u>final report</u>
- Building Renewal article series:
 - What is Building Renewal?, Funding Your Building Renewal, Importance of Measurement and Verification Recognizing and Mitigating Pitfalls, Operations and Maintenance, Marketing a High-Performance Building

Program Overview			
Infrastructure Lead	Josh Pelham, Strategic Accounts Manager		
Product Group	Enabling Infrastructure		
Description	BetterBricks supports the alliance's commercial and industrial programs by fostering market relationships and providing tools and resources to help raise market awareness and capability for energy-efficient products, services, and practices.		
Sector(s)	Commercial, Industrial		
Target Market Actors	 Architects and building designers Engineers Building owners and managers Specifiers/system designers 		
Implementation Contractors	Cyclops (BetterBricks marketing)Us Creative (Website Redesign)		
Program Partners	 U.S. Department of Energy: Better Buildings Initiative Integrated Design Labs BOMA OR BOMA Greater Seattle AIA OR AIA Seattle Building Potential (Formerly NEEC) Seattle 2030 New Buildings Institute IFMA OR & SW WA IFMA Greater Seattle 		



KEY 2024 OPERATIONS PLAN ACTIVITIES - click here for link to current Operations Plan (pp. 93-96)

GOAL 1: Leverage BetterBricks relationships to secure and execute engagement opportunities for current and future programs.

Target: Secure and execute 12 market engagements with key market partners

Recent Progress

In partnership with NEEA program teams,
BetterBricks took part in 5 market engagements
in Q3, including a smart pumps-focused booth at
the Boise Facilities Maintenance Expo, 3
presentations on high-performance HVAC in
partnership with distributor Johson Borrow, and
an HVAC lunch-and-learn through the AEE Inland
Chapter.

What's Ahead

- BetterBricks will be present at the Joint Engineers Conference in Montana.
- BetterBricks will have a booth at the BOMA Oregon Product and Services Expo, featuring LLLC.
- BetterBricks is partnering with Seattle 2030 to host a December webinar on LLLC.
- The University of Washington IDL is hosting a BetterBricks-sponsored webinar on Codes, Standards and Technologies targeting architects. Exploring new partnerships with ULI NW and Idaho chapter.

Coordination & Leveraging Opportunities

- Share tradeshow booth space and/or attend industry events together.
- Identify, flag and/or participate in success stories for potential case studies.
- Make us aware of your content and tools to which BetterBricks.com can help drive traffic.
- Link to and leverage BetterBricks.com as appropriate in your work.
- Partner with BetterBricks and/or program teams on trainings (identifying training opportunities, delivering trainings, promoting trainings, etc.).
- Provide info on your trainings and events for BetterBricks to amplify through its owned channels.



GOAL 2: Maximize the impact, relevance, and awareness of BetterBricks content to ensure positioning as a trusted, go-to source of information and increase engagement amongst target audiences.

Target: Develop and distribute 20 pieces of original content supporting whole building efficiency or integrated design

Recent Progress

 BetterBricks published several new resources in Q3, including 1) a video breaking down key differences between Washington State Energy Code and very high efficiency DOAS, and 2) a fact sheet on smart circulators.

What's Ahead

- In Q3, the BetterBricks team began planning for Q4 BetterBricks webinars, including on financing building upgrades and state energy codes.
- BetterBricks will attend several upcoming partner events, including the AIA Seattle Honor Awards, the AIA Oregon Architecture Awards, and the Joint Engineering Conference in Montana.
- BetterBricks continues to develop content related to whole building efficiency and integrated design to publish throughout 2024.
- The BetterBricks team continues to work on planned updates to betterbricks.com, including a greater focus on whole-building upgrade guidance and resources. The new website and upgrade guide will launch in early 2025.

Coordination & Leveraging Opportunities

- We would welcome and appreciate suggestions about possible market partners and collaborations, as well as introductions via utility relationships
- Share BetterBricks communications to help boost attendance at speaking sessions/trainings
- Consider collaborating and sharing time at individual speaking engagements
- Consider collaborating on upcoming BetterBricks webinar series by participating and sharing information on available programs and incentives
- We are still interested in increasing collaborations in ID and MT. Please reach out with any ideas or contacts.
- Providing information/plans around utility partner E&T efforts can inform our best practice and inventorying work, adding more opportunities for collaboration