

# The 2025 Summer Study on Energy Efficiency in Industry

"Industrial Competitiveness and the Evolving Energy Landscape"

# (DRAFT) PROGRAM

Updated 7.2.25

UNC Charlotte Marriott Hotel and Conference Center Charlotte, NC July 16-18, 2025 Welcome to ACEEE's 16<sup>th</sup> biennial Summer Study on Energy Efficiency in Industry, "Industrial Competitiveness and the Evolving Energy Landscape." The theme could not be timelier given this year's macroeconomic changes. Experts from around the globe will gather to discuss the policies, funding, operations, and technologies essential to sustaining industrial competitiveness, for individual firms and the sector at large. We will explore how partnerships are key to success, and we will compare national and state policy to identify immediate and long-term opportunities.

Immerse yourself over three days in workshops, track and informal sessions, Plenaries, and networking time. The conference will kick off with side events such as the SEM Summit and Industrial Heat Pumps Buyers Bootcamp on Wednesday, July 16. Continue Thursday and Friday with Plenaries featuring key leaders in the industrial space and four Track session options: Track 1: Grids, Pipes, and Funding; Track 2: Technology and Operations; Track 3: Bringing New Energy to Leadership; and Track 4: Collaborating through Complexity: Navigating Industrial Value Chains. You will leave the Summer Study with an expanded network and an action plan to meet your goals.

# **PLANNING COMMITTEE**

## **CO-CHAIRS**:

Ammi Amarnath, Electric Power Research Institute (EPRI) Evelyn Lundhild, Independent Electricity System Operator (IESO)

## TRACK LEADERS:

## Track 1: Grids, Pipes, and Funding

Steven Coley, TVA Baskar Vairamohan, EPRI

## <u>Track 2: Technology and Operations</u> William Peter, Oak Ridge National Laboratory John Seryak, Go Sustainable Energy

## Track 3: Bringing New Energy to Leadership

Wendy Gibson, Stillwater Energy Andrew Knox, Goldfin Consulting

## <u>Track 4: Collaborating through Complexity: Navigating Industrial Value</u> <u>Chains</u> Fiona Glasford, IESO

Andrea Marr, Cadmus Group

## ACEEE STAFF:

Conferences: Amelia Armstrong, Rebecca Lunetta

Program: Richard Hart, Steve Nadel, Maggie Kelley Riggins

<u>Communications:</u> Camron Assadi, Mary Robert Carter, Kate Doughty, Rob Kerns, Nick Roper, Ben Somberg

Development: Alan Raymond

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## Wednesday, July 16

11:00 am – 5:00 pm	Add on: SEM Summit (\$150)	49er Green
	Kick off your 2025 Summer Study with the North American Strategic Energy Management (SEM) Collaborative at the ninth annual SEM Summit and second annual in-person SEM Awards! At this year's Summit, attendees will get to spend time catching up with one another, digging deeper than ever before as we move to introducing different tracks based on level of experience and collaborating on making each other better. We will also reflect on what we have accomplished, with highlights from our working groups and announce the SEM Award winners. So, whether you are new to the work or a seasoned professional, there is something for you at the Summit.	e,
9:00 am – 5:00 pm	Add on: Industrial Heat Pump (IHP) Alliance Buyers Bootcamp (\$50) <i>by invitation only</i>	Mallard Creek
	The IHP Buyers Bootcamp is designed for industrial end-users (i.e., facility managers and sustainability engineers) looking to deepen their understanding of industrial heat pumps. This full-day interactive program will equip participants with the technical knowledge, financial tools, and strategic insights necessary to evaluate, plan, and execute successful IHP projects. From technical integration to securing financing and navigating utility considerations, attendees will leave the Bootcamp with actionable strategies to advance their IHP projects. Please reach out to hchen@aceee.org if you have any questions.	
3:00 – 7:00 pm	Registration opens	Sorensen Lobby
5:00 – 7:00 pm	Welcome Reception Welcome: Lon Huber, Senior VP, Pricing and Customer Solutions, Duke Energy	Dubois Plaza
	Join us to officially kick-off the Industry Summer Study. Enjoy networking time and re-connecting with friends.	

Thursday, July 17		
7:00 am – 5:00 pm	Registration	Sorensen Lobby
7:30 – 8:30 am	Breakfast	Crown IV and V
8:30 – 10:00 am		
	Panelists: Carley Goff, Southern Company Jess Alcorn, Guidehouse Kevin Martin, CUCA TBD, Trane Technologies	Soronson Lobby
10:00 – 10:30 am	Networking Break sponsored by EASTMAN Eastman Chemical Company	Sorensen Lobby
10:30 am – 12:00 pm	CONCURRENT TRACK SESSIONS 1	
	<ul> <li>Track 1, Session 1</li> <li>Virtual Power Plants</li> <li>Moderator: Steven Coley, TVA</li> <li>Enhancing Grid Reliability, Resilience, and Affordability: Industry Collaboration with Utilities and Governments through Virtual Power Plants</li> <li>Sun Joo Hwang, University of North Carolina at Chapel Hill</li> <li>Predictive Modeling of Power Demand at Industrial Sites for Enhanced Energy Management</li> <li>Justin Ramsay, Energy 350</li> <li>(presenting on behalf of Scott Jasinski, Energy 350)</li> <li>Incentivizing Permanent Load Shifting Peter Sharp, Cascade Energy</li> </ul>	Crown I, II, III

## Thursday, July 17

10:30 am - 12:00 pm

## **CONCURRENT TRACK SESSIONS** 1 (continued)

### Track 2, Session 1 Emerging Strategies for Global Energy Competitiveness

Moderator: Bill Peter, Oak Ridge National Laboratory

Impacting Energy and Operational Performance through Smart Manufacturing Haresh Malkani, CESMII

Decarbonizing Industrial Operations through Load Flexibility Felipe Godinez, Olivine Inc.

Industrial Waste Reduction: Unlocking Hidden Energy Efficiency Potential in Product Supply Chains Subodh Chaudhari, Oak Ridge National Laboratory

## Track 3, Session 1

## **Training the Workforce that Leaders Need**

Moderators: Wendy Gibson, Stillwater Energy and Andrew Knox, Goldfin Consulting

Creating Energy Efficient Cultures at Colleges and Universities Using a Strategic Energy Management Program Dana Mowry, Eversource Energy

Empowering the Energy Transition: Strategies for Developing a Skilled and Resilient Workforce Barbara Stapleton, The JPI Group

Integrated Energy Management Training for Creating the Next Generation of Strategic Energy Managers Vi Rapp, Lawrence Berkeley National Laboratory

#### Track 4, Session 1

Measuring and Quantifying Change Moderator: Ammi Amarnath, EPRI

An Allocation-based Tool for Quantifying Facility-level Product Emissions Intensity Nick Karki, Lawrence Berkeley National Laboratory

ISO 50100: Ensuring Fairness and a Level Playing Field for Manufacturers in Global Emissions Reporting and International Trade Peter Therkelsen, Lawrence Berkeley National Laboratory

What We Learned from Evaluating Low Carbon Electrification Projects Peter Therkelsen, Lawrence Berkeley National Laboratory (presenting on behalf of Markus Zeller, BC Hydro)

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Thursday, July 17	1	
12:00 – 1:30 pm	Lunch: Scholar & Awards Recognition with Guest Speaker	Crown IV and V
	Scholar Program Introduction and Appeal:	
	ACEEE Board Members Mark Johnson, Clemson University and Sharyn Barata, Opinion Dynamics	
	Scholar recipients recognized.	
	Champion Awards Introduction: Steve Nadel, ACEEE	
	Award recipients recognized.	
	Moderator: Ammi Amarnath, EPRI	
	<i>Clean Power for Industrial Customers</i> Guest Speaker: Neva Espinoza, EPRI	
1:30 – 3:00 pm	CONCURRENT TRACK SESSIONS 2	
	Track 1, Session 2 Industrial Heat Pumps	Crown I, II, III
	Moderator: Baskar Vairamohan, EPRI	
	A Market in Transition: Industrial Heat Pumps in the United States Ruth Checknoff, Renewable Thermal Collaborative	
	The Thermal Balancing Act: Evaluating Heat Pump	
	Opportunities for Industries in Minnesota John Flanagan, Center for Energy and Environment	
	RD&D Priorities for Industrial Heat Pumps Kashif Nawaz, Oak Ridge National Laboratory	
	Track 2, Session 2 Collaborative Industrial Energy Programs and Thought Leadership	49er Green
	Moderator: Bill Peter, Oak Ridge National Laboratory	
	Accelerating Industrial Competitiveness through the DOE's Industrial Technology Validation (ITV) Program Amy Pevzner, Lawrence Berkeley National Laboratory	
	Successful Organizational Strategies from Better Climate Challenge Partners Blake Billings, Oak Ridge National Laboratory	
	(presenting on behalf of John O'Neill, US DOE)	

Thursday,	Julv	17
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1:30 – 3:00 pm	CONCURRE	NT TRACK SESSIONS 2 (continued)	
	Moderators: N	sion 2 ership a Boost Nendy Gibson, Stillwater Energy and Goldfin Consulting	49er Gold
	The Role of Le	adership in Implementing 50001 Ready awrence Berkeley National Laboratory	
	Novel Metrics	ective Energy Audit Candidate Facilities via Oak Ridge National Laboratory	
		<mark>sion 2</mark> E <b>ry Collaborations and Learnings</b> ndrea Marr, Cadmus Group	Mallard Creek
	Navigating De Evan Talan, Ad	carbonization in the Consumer Product Industry didas	,
	to Net Zero	re Technologies and Strategies That Can Get Us n, Fresh Coast Climate Solutions	
	Enhanced Indu	A Dialogue on Industrial Symbiosis for ustrial Efficiency nter for Sustainable Infrastructure	
3:00 – 3:30 pm	Networking	Break	Sorensen Lobby
3:30 – 5:00 pm	ACTION SES	SIONS	
	Learning from Leaders in Industrial GHG Emissions Reduction Crown I, II, I Through the Better Climate Challenge, the U.S. Department of Energy continues to work with domestic manufacturers to set and achieve their ambitious greenhouse gas emission reduction targets. To date, twelve industrial companies have achieved their first portfolio-level emission reduction goal with the program. All have made impressive progress, though each has taken a different pathway to reach this accomplishment. In this session, partner companies will join program staff to discuss their pathways, exploring the barriers they faced along the way, the solutions employed to overcome those barriers, and where they go from here.		t on s his cheir e
	Moderator:	Alexandra Botts, Oak Ridge National Laborato	bry
	Panelists:	Kevin Durocher, ABB, Inc. Scott Tew, Trane Technologies Rishabh Bahel, Nestlé Purina Scott Anliker, HNI Corporation	

3:30 – 5:00 pm

## **ACTION SESSIONS** (continued)

## Bridging Silos: Industrial Symbiosis for Enhanced Industrial Efficiency

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Industrial symbiosis is the idea of cross-industry collaboration to use waste streams and resources more efficiently. This panel brings together experts and practitioners with valuable experience with industrial symbiosis in diverse contexts. The session will explore experiences and lessons learned from industrial parks established in Denmark, and highlight relevance in the US context, including value creation, technical implementation, regulatory frameworks, and cross-sector collaboration. The discussion will dive into strategies for overcoming traditional silos and building trust among stakeholders. The panel is moderated by the Center for Sustainable Infrastructure (CSI).

Moderator: Sarah Diemar, Danish Ministry of Foreign Affairs

Panelists: Rhys Roth, Center for Sustainable Infrastructure Christopher Sorensen, GreenLab

# Friday, July 18

7:00 am – 3:30 pm	Registration	Sorensen Lobby
7:30 – 8:30 am	Breakfast - and -	Crown Room IV
	Women in Energy Efficiency Breakfast sponsored by CLEAResult <sup>®</sup>	Crown Room V
	(Breakfasts set up as shared buffet in Crown Foyer)	
	Moderator: Maggie Kelley Riggins, ACEEE <b>Powering Progress: Women Leading the Charge in</b> <b>Energy Efficiency &amp; Demand-Side Management</b> Sarah Spencer Workman, Vice President of Energy Efficiency, CLEAResult	
8:30 – 10:00 am	CONCURRENT TRACK SESSIONS 3	
	Track 1, Session 3 Large Loads	Crown Ballroom I, II, III
	Moderator: Baskar Vairamohan, EPRI	
	Data Center Energy Efficiency Kennedy Bennett, SC Coastal Conservation League	
	Electricity Rate Designs for Large Loads: Evolving Practic and Opportunities Natalie Mims Frick, Lawrence Berkeley National Laborat	
	Track 2, Session 3 Industrial Process Heating	49er Green
	Moderator: John Seryak, Go Sustainable Energy	
	Energy Efficient and Fuel Flexible Technologies for the Metals Industry Sandeep Alavandi, GTI Energy	
	Decarbonizing California's Industry with Hydrogen: Industrial Testing Results Paul Glanville, GTI Energy	
	Decarbonizing Low Temperature Industrial Heat: Measuring Economic Potential and Policy Mechanisms Rawley Loken, E3	

Friday, July 18		
8:30 – 10:00 am	CONCURRENT TRACK SESSIONS 3 (continued)	
	Track 3, Session 3 Leadership to Meet Today's Challenges Moderators: Wendy Gibson, Stillwater Energy and Andrew Knox, Goldfin Consulting	49er Gold
	Redefining Leadership: Driving Industrial Energy Efficier Kenny Porter, Michaels Energy	псу
	Energizing Change: The Synergy of Efficiency and Decarbonization for a Sustainable Tomorrow Sharon Nolen	
	Leveraging Resilience Planning as an Industrial Strategic Advantage Julia Rotondo, Pacific Northwest National Laboratory	с
	Track 4, Session 3 Communicating Supply Chain Value Moderator: Richard Hart, ACEEE	Mallard Creek
	Thriving in the Carbon-aware Market: How to Account for Emissions in the Era of Carbon-centered Trade Policies Liz Wachs, National Renewable Energy Laboratory	
	Counting the Carbon: Assessing the Societal Costs and Benefits of Embodied Carbon as a Net Zero Policy Derek Okada, Energy Solutions	
	Bridging the Gap: Collaborative Finance for Energy Transition in Value Chains Hemang Nerlekar, Guidehouse	
10:00 – 10:30 am	Networking Break	Sorensen Lobby
10:30 am – 12:00 pm	CONCURRENT TRACK SESSIONS 4	
	Track 1, Session 4 Industrial Energy Efficiency Moderator: Steven Coley, TVA	Crown Ballroom I, II, III
	Fan Efficiency Programs and the Industrial Sector; a Coordinated Effort to Effectively Transform the Market Kristen Aramthanapon, Northwest Energy Efficiency All	iance
	Scaling Efficiency Projects at Industrial Sites via a Study-Based Utility Offering Mark Hamann, ComEd	
	Overcoming Barriers to Energy Efficiency for More Competitive and Resilient Energy-Intensive Industries Senthil Kumar Sundaramoorthy, Oak Ridge National Lab	boratory
		Friday, July 18

## Friday, July 18

10:30 am – 12:00 pm	CONCURRENT TRACK SESSIONS 4 (continued)			
	Track 2, Session 4 Energy Potential and Trends in US Industry	49er Green		
	Moderator: John Seryak, Go Sustainable Energy			
	US Industrial Sector Combined Heat and Power: Decarbonization Help or Hindrance? Eric Masanet, UCSB			
	Shrinking Giants: How Utility Programs Can Help Data Centers Lead the Way in Energy Efficiency Steely Cortes, Energy Trust of Oregon			
	Technical Potential for Electricity Generating Onsite Energy Technologies at U.S. Manufacturing Facilities Blake Billings, Oak Ridge National Laboratory			
	Track 3, Session 4	49er Gold		
	Tools for Leadership in a Time of Uncertainty			
	Moderators: Wendy Gibson, Stillwater Energy and Andrew Knox, Goldfin Consulting			
	Level Up Your Delivery: Free Resources to Support SEM Programs Dave Hall, Energy 350			
	JUSTIFI: Software for Improving Performance Objectives via Energy Efficiency Sarah Cooney, National Renewable Energy Laboratory			
	Track 4, Session 4	Mallard Creek		
	One Size Does Not Fit All: Examples from Across Industry			
	Moderator: Andrea Marr, Cadmus Group			
	Advancing Energy Efficiency Adoption in U.S. Energy-Intensive Industries: Insights from the ITAC Database Asma Khasawneh, University of Wisconsin			
	Unlocking Industrial Decarbonization: One Size Does Not Fit All Koushik Mandlem, DNV			
	The US DOE's Industrial Demonstrations Program: What's the Latest? Archie Fraser, ACEEE			

Friday, July 18		
12:00 – 1:30 pm	Lunch Plenary Moderator: Richard Hart, ACEEE	Crown IV and V
	Energy Efficiency as the Foundation for America's Global Competitiveness and National Security Speaker: Gene Rodrigues, Assistant Secretary of Energy, US DOE (retired)	
1:30 – 3:00 pm	Shared Interest Topic Tables	
	As you finalize your takeaways from Summer Study, you'll want to compare notes with your colleagues. These afternoon sessions provide optional "birds-of-a-feather" tables to discuss takeaways from sessions, the opportunities for collaboration, and plans for the next 12 months. These 90-minute sessions will be led by a volunteer, noted by ACEEE, and focused on action. Topics include: AI for DSM, technology deployment, financing, industrial workforce, industrial load flexibility, state policy and regulations, and future of DSM programs. New topic suggestion are welcome!	
3:00 – 3:30 pm	Networking Break	Sorensen Lobby
3:30 pm	Conference Ends	

Thanks for joining us!