

The 2025 Summer Study on Energy Efficiency in Industry

"Industrial Competitiveness and the Evolving Energy Landscape"



Updated 7.14.25

UNC Charlotte Marriott Hotel and Conference Center Charlotte, NC July 16-18, 2025 Welcome to ACEEE's 16th 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

PROGRAM

Wednesday, July 16

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.	
11:00 am – 5:30 pm	Add on: SEM Summit (\$150)	The 49er
	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 experien and collaborating on making each other better. We will also reflect on what we have accomplished, with highlights from ou 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.	! 3 ce,
3:00 – 7:00 pm	Registration opens	Sorensen Lobby
5:00 – 7:00 pm	Welcome Reception	Dubois Plaza
	Welcome: Tim Duff, Duke Energy	
	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	Plenary Session Welcome: Steve Nadel, Executive Director, ACEEE Introduction: Dan Brown, CEO, Cascade Energy Moderator: Maggie Kelley Riggins, Director of Community Solutions, ACEEE Forging Ahead: Industrial Growth in a Changing Energy	The 49er
	 and Market Landscape Session Topic: North Carolina is witnessing a transformative wave of industrial and manufacturing investments, reshaping the state's economic landscape while emphasizing the need for robust infrastructure and strategic foresight. This high-level panel brings together leading voices from across the industrial sector to explore the forces driving growth and the challenges that come with it. These leaders will provide insights into what it takes to build a globally competitive industrial base in a rapidly evolving environment. The discussion will include: Electricity adequacy in the face of rising demand and the energy transition, The complexities of market transformation, Strategies for resilient supply chains, The pursuit of internal efficiency, and Their companies' needs for supportive policies Panelists: Carley Goff, Southern Company Jess Alcorn, Guidehouse Kevin Martin, CUCA Oakley Roberts, Trane Technologies 	
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	
	 Track 1, Session 1 Virtual Power Plants Moderator: Steven Coley, TVA Enhancing Grid Reliability, Resilience, and Affordability: Industry Collaboration with Utilities and Governments through Virtual Power Plants Sun Joo Hwang, University of North Carolina at Chapel Hill Predictive Modeling of Power Demand at Industrial Sites for Enhanced Energy Management Justin Ramsay, Energy 350 (presenting on behalf of Scott Jasinski, Energy 350) Incentivizing Permanent Load Shifting Peter Sharp, Cascade Energy 	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 Intensities 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)

Mallard Creek

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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, July 17

1:30 – 3:00 pm	CONCURRE	NT TRACK SESSIONS 2 (continued)	
	Moderators: V	sion 2 ership a Boost Vendy 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	
		sion 2 Try Collaborations and Learnings ndrea Marr, Cadmus Group	Mallard Creek
	<i>Navigating De</i> Evan Talan, Ac	carbonization in the Consumer Product Industry lidas	
	to Net Zero	e Technologies and Strategies That Can Get Us n, Fresh Coast Climate Solutions	
	Enhanced Indu	A Dialogue on Industrial Symbiosis for Istrial Efficiency Inter 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 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.		n s neir
	Moderator:	Alexandra Botts, Oak Ridge National Laborator	Ŷ
	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

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

Community Solutions in Action: Building Meaningful Partnerships between Industry and Communities

Mallard Creek

Crown V

How can industrial stakeholders and communities work together to create lasting, tangible benefits for all? Whether you're just beginning to explore community engagement or are already implementing community benefits strategies in your work, this action session is for you. Join us for a dynamic, hands-on conversation that brings together diverse voices across industry, government, and community sectors. Together we will examine the real-world challenges and opportunities of aligning industrial development and operations with community priorities. Through interactive dialogue, we will explore what may be needed from the industry to ensure meaningful partnerships, tangible trust, and how to deliver shared value that is equitable and measurable. This session is designed to move beyond discussion—toward action. Come ready to share, learn, and contribute to shaping the future of community benefits in industrial development.

Facilitator: Maggie Kelley Riggins, ACEEE

Friday, July 18

Registration	Sorensen Lobby
Breakfast	Crown IV
Women in Energy Efficiency Breakfast sponsored by CLEAResult [®]	Crown V
(Breakfasts set up as shared buffet in Crown Foyer)	
Moderator: Maggie Kelley Riggins, ACEEE Powering Progress: Women Leading the Charge in Energy Efficiency & Demand-Side Management Sarah Spencer Workman, Vice President of Energy Efficiency, CLEAResult	
CONCURRENT TRACK SESSIONS 3	
Track 1, Session 3 Large Loads Moderator: Baskar Vairamohan, EPRI	Crown I, II, III
Data Center Energy Efficiency Kennedy Bennett, SC Coastal Conservation League	
Electricity Rate Designs for Large Loads: Evolving Practices and Opportunities Natalie Mims Frick, Lawrence Berkeley National Laboratory	
Energy Efficiency and Demand Flexibility for Data Centers Rishabh Juneja, U.S. Department of Energy	
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	
	 Breakfast - and - Women in Energy Efficiency Breakfast sponsored by CLEAResult (Breakfasts set up as shared buffet in Crown Foyer) Moderator: Maggie Kelley Riggins, ACEEE Powering Progress: Women Leading the Charge in Energy Efficiency & Demand-Side Management Sarah Spencer Workman, Vice President of Energy Efficiency, CLEAResult CONCURRENT TRACK SESSIONS 3 Track 1, Session 3 Large Loads Moderator: Baskar Vairamohan, EPRI Data Center Energy Efficiency Kennedy Bennett, SC Coastal Conservation League Electricity Rate Designs for Large Loads: Evolving Practices and Opportunities Natalie Mims Frick, Lawrence Berkeley National Laboratory Energy Efficiency and Demand Flexibility for Data Centers Rishabh Juneja, U.S. Department of Energy Moderator: John Seryak, Go Sustainable 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: Moesauring Economic Potential and Policy Mechanisms

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 Efficiency Kenny Porter, Michaels Energy	
	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	
	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	Crown I, II, III
	Moderator: Steven Coley, TVA	
	Fan Efficiency Programs and the Industrial Sector; a Coordinated Effort to Effectively Transform the Market Kristen Aramthanapon, Northwest Energy Efficiency Alliance	
	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 Laborator	у
		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!	II
3:00 pm	Conference Ends	

Thanks for joining us!