

The 2025 Summer Study on Energy Efficiency in Industry

"Industrial Competitiveness and the Evolving Energy Landscape"

(DRAFT) PROGRAM

Updated 6.6.25

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 more timely 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

Track 2: Technology and Operations

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

Track 4: Collaborating through Complexity: Navigating Industrial Value

Chains

Fiona Glasford, IESO

Andrea Marr, Cadmus Group

ACEEE STAFF:

Conferences: Amelia Armstrong, Rebecca Lunetta

<u>Program:</u> Richard Hart, Steve Nadel, Maggie Kelley Riggins

Communications: Camron Assadi, Mary Robert Carter, Kate Doughty, Rob Kerns, Nick

Roper, Ben Somberg

Development: Alan Raymond

(DRAFT) PROGRAM

Wednesday, July 16

11:00 am - 5:00 pm

Add on: SEM Summit (\$150)

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.

9:00 am - 5:00 pm

Add on: Industrial Heat Pump (IHP) Alliance Buyers Bootcamp (\$50) by invitation only

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

5:00 - 7:00 pm

Welcome Reception

Welcome: Lon Huber, Senior VP, Pricing and Customer Solutions, 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

7:30 – 8:30 am **Breakfast**

8:30 – 10:00 am Plenary Session

Welcome: Steve Nadel, Executive Director, ACEEE Introduction: Dan Brown, CEO, Cascade Energy Moderator: Richard Hart, Industry Director, ACEEE

Forging Ahead: Industrial Growth in a Changing Energy 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: TBD

10:00 – 10:30 am **Networking Break** sponsored by

EASTMAN
Eastman Chemical Company

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

Scott Jasinski, Energy 350

Incentivizing Permanent Load Shifting Peter Sharp, Cascade Energy

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)

Thursday, July 17

12:00 - 1:30 pm

Scholar & Awards Recognition Lunch with Guest Speaker

Scholar Program Introduction and Appeal: TBD

Scholar recipients recognized.

Champion Awards Introduction: Steve Nadel, ACEEE

Award recipients recognized.

Speaker Moderator: Ammi Amarnath, EPRI Clean Power for Industrial Customers Guest Speaker: Neva Espinoza, EPRI

1:30 - 3:00 pm

Concurrent Track Sessions 2

Track 1, Session 2

Industrial Heat Pumps

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
Zachary Pritchard, US Department of Energy

Track 2, Session 2

Collaborative Industrial Energy Programs and Thought Leadership

Moderator: Bill Peter, Oak Ridge National Laboratory

Industrial Research and Development Priorities

Joe Cresko, US Department of Energy or Joe Powell, University of Houston

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 John O'Neill, US Department of Energy

Track 3, Session 2

Giving Leadership a Boost

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

The Role of Leadership in Implementing 50001 Ready Heidi Fuchs, Lawrence Berkeley National Laboratory

*Identifying Effective Energy Audit Candidate Facilities via Novel Metrics*Miles Nevills, Oak Ridge National Laboratory

Thursday, July 17

Track 4, Session 2

Cross Country Collaborations and Learnings

Moderator: Andrea Marr, Cadmus Group

Navigating Decarbonization in the Consumer Product Industry Evan Talan, Adidas

Transformative Technologies and Strategies That Can Get Us to Net Zero Josh Brugeman, Fresh Coast Climate Solutions

Bridging Silos: A Dialogue on Industrial Symbiosis for Enhanced Industrial Efficiency Rhys Roth, Center for Sustainable Infrastructure

3:00 - 3:30 pm

Networking Break

3:30 - 5:00 pm

AFTERNOON PANEL SESSION

Learning from Leaders in Industrial GHG Emissions Reduction

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.

Moderator: TBD Panelists: TBD

Friday, July 18

7:00 am - 3:30 pm

Registration

7:30 - 8:30 am

Breakfast and

Women in Energy Efficiency Breakfast sponsored by CLEAResult®

(Breakfasts set up as buffet in 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

8:30 - 10:00 am

Track 1, Session 3

Large Loads

Moderator: Baskar Vairamohan, EPRI

Data Center Energy Efficiency

Kennedy Bennett, SC Coastal Conservation League

Energy Efficiency & Demand Flexibility for Data Centers

Rishabh Juneja, US Department of Energy

Electricity Rate Designs for Large Loads: Evolving Practices and Opportunities

Natalie Mims Frick, Lawrence Berkeley National Laboratory

Track 2, Session 3

Industrial Process Heating

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

Track 3, Session 3

Leadership to Meet Today's Challenges

Moderators: Wendy Gibson, Stillwater Energy and

Andrew Knox, Goldfin Consulting

Redefining Leadership: Driving Industrial Energy Efficiency for a

Sustainable Future

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

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

10:30 am - 12:00 pm

Concurrent Panel Sessions 2

Track 1, Session 4

Industrial Energy Efficiency

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 Laboratory

Track 2, Session 4

Energy Potential and Trends in US Industry

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, CLEAResult

Technical Potential for Onsite PV and Wind Power at U.S. Manufacturing Facilities
Blake Billings, Oak Ridge National Laboratory

Friday, July 18

Track 3, Session 4

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

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

Amit Kanungo, DNV

The US DOE's Industrial Demonstrations Program:

What's the Latest?
Archie Fraser, ACEEE

12:00 – 1:30 pm **Lunch Plenary**

Moderator: Richard Hart, ACEEE

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 **"Office Hours"**

Continue the discussion around Action Plans

3:00 – 3:30 pm Networking Break

3:30 pm Conference Ends

Thanks for joining us!