

2019 National Conference on Energy Efficiency as a Resource

PROGRAM

Radisson Blu Minneapolis Downtown • Minneapolis, MN • October 15-17, 2019

Tuesday, October 15

4:00–7:00 pm **Registration** *Denmark Commons*

5:00–7:00 pm **Opening Reception** *Denmark Commons*

Wednesday, October 16

7:00 am–6:00 pm **Registration** *Denmark Commons*

7:00–8:00 am **Continental Breakfast** *Fjords Ballroom*

8:00–9:45 am **Welcome, Introductions, and Keynote Address** *Scandinavian Ballroom*

Welcome and Keynote Address

Welcomes: **Martin Kushler** and **Steve Nadel**, American Council for an Energy-Efficient Economy

The Importance of Energy Efficiency in Building a Sustainable Energy Future

Keynote Presenter: **Patti Poppe**, president & CEO, Consumers Energy

9:45–10:00 am **Morning Break** *Denmark Commons*

10:00–11:45 am **Plenary Panel** *Scandinavian Ballroom*

Regional Round-Up: Utility Energy Efficiency Highlights from around the United States

Moderator: **Rachel Gold**, American Council for an Energy-Efficient Economy

Presenters:
Nate Kinsey, California Efficiency + Demand Management Council
Midwest: **Stacey Paradis**, Midwest Energy Efficiency Alliance
Northeast: **Susan Coakley**, Northeast Energy Efficiency Partnerships
Northwest: **Susan Stratton**, Northwest Energy Efficiency Alliance
Southwest: **Justin Brant**, Southwest Energy Efficiency Project
South-Central: **Todd McAllister**, South-Central Partnership for Energy Efficiency as a Resource
Southeast: **Cyrus Bhedwar**, Southeast Energy Efficiency Alliance

Lunch with an opportunity to view and discuss the following poster presentations:

Sheri Borrelli, The United Illuminating Company
Heating Up Demand Response in Low-Income Programs

Nathan Conroy, STEMHero
Driving Equitable Adoption of Smart Meter Customer Portals by Making Them the Centerpiece of Local STEM Education

John-Michael Cross, Environmental and Energy Study Institute
Switch It Up: A Rural Electrification Financing Case Study

Roger Ebbage, Lane Community College
Building Automation Systems: The Key to Maximizing

Daygan Fowler, MyHEAT
Knowledge Saves Power: Driving Behavioral Change with Energy Made Visible

Travis Hinck, GDS Associates
Leveraging Conservation Tools to Drive Electric Utility Infrastructure Efficiency

Kara Jonas, Midwest Energy Efficiency Alliance
Air Sealing Techniques and the Impact on Indoor Air Quality

Ben Polly, National Renewable Energy Laboratory
Building-, District-, and Large-Scale Modeling of Building Energy Efficiency and Flexibility

Josh Quinell, Center for Energy and Environment (in conjunction with AeroSeal)
Documenting Real Energy Savings: Computer-controlled Duct Sealing Provides Verified Proof of Results

Barb Ryan, Applied Energy Group
The Camera Doesn't Lie: Improving Efficiency Data with Pictures

Jeffrey Seewald, Trane Commercial North America
Minnesota City Completes Energy and Infrastructure Upgrade with Thermal Storage and Cloud-Based Data Analytics

Katherine Teiken, Minnesota Housing; **Ashly McFarlane**, Center for Energy and Environment
Phase II EnergyScoreCards Minnesota

Keith Tonkinson, Lincus
Small Pump Program

William Xia, ConEdison
Oil-to-Electric Conversion Pilot Program

EE Programs and Measures Track

Norway 1/2

1A: Industrial ProgramsModerator: **Ed Rightor**, American Council for an Energy-Efficient Economy

Next-Level Energy Efficiency: The Future of Large Industrial Opportunities

Presenter: **Alex Hill**, Dunsky Energy Consulting

Strategic Energy Management as a Resource through 50001 Ready

Presenter: **Peter Therkelsen**, Lawrence Berkeley National Laboratory

Midwest Industrial EE Policy

Presenter: **Nick Dreher**, Midwest Energy Efficiency Alliance

The Future of CHP Programs: How Today's Policies Are Driving the Evolution of Tomorrow's CHP Programs

Presenter: **Meegan Kelly**, ICF*Assessing EE as a Resource Track*

Scandinavian 1

1B: Maintaining Aggressive Energy Efficiency GoalsModerator: **Ted Ykimoff**, Consumers Energy

Statewide Programs Find Savings beyond Lighting

Presenter: **Carol Weston**, Efficiency Vermont

When Modeling of Energy Efficiency Gets Real: Connecting the Minnesota Potential Study to Xcel's Long-Term Carbon Reduction Plans

Presenters: **Carl Nelson**, Center for Energy and Environment
Nick Minderman, Xcel Energy

Inside a Government Start-Up: Energy Efficiency Alberta's Quick Start Leads to New Benchmark for Success

Presenter: **Steve Ottoni**, Energy Efficiency Alberta

Policy Implications and Implementation Challenges from Adoption of EE Goals Based on Actual Future Loads vs More Traditional EM&V Methods

Presenter: **Philip Mosenthal**, Optimal Energy*EE Multiple Benefits Track*

Bergen 3

1C: Non-Energy Benefits of Energy EfficiencyModerator: **Jessica Peterson**, Xcel Energy

Impact of Non-Energy Benefits on the Cost-Effectiveness of Energy Efficiency Is Significant: Case Studies and Approaches for Not Undervaluing

Presenter: **Ali Bozorgi**, ICF

Navigating Policy and Systems Change Approaches to Non-Energy Health Valuation

Presenters: **Liz Curry** and **Emily Levin**, VEIC

Bringing It Together: Situating Non-Energy Health and Economic Impacts Research in Context of Policy and Evaluation

Presenter: **Ann Collier**, Opinion Dynamics

Quantifying the Dollar Value of Health Benefits for Building Occupants

Presenter: **Cassandra Kubes**, American Council for an Energy-Efficient Economy

1D: Energy Efficiency as a Distributed Energy Resource

Moderator: **Marisa Uchin**, Oracle

The Future of Distributed Energy Resources

Presenters: **Brian Doyle**, Xcel Energy
Jenny Roehm, Schneider Electric

Breaking Down Silos: Emerging Opportunities for Integrated EE and DER Programs

Presenters: **Grace Relf**, American Council for an Energy-Efficient Economy
Rohini Srivastava, American Council for an Energy-Efficient Economy

Re-Envisioning the Role of Evaluation to Support the Grid of the Future

Presenter: **Hilary Polis**, Opinion Dynamics

Los Angeles Department of Water and Power’s Efforts on Integrating DSM and DER as a Reliable Resource Alternatives

Presenter: **Armen Saiyan**, Los Angeles Department of Water and Power

1E: Natural Gas Energy Efficiency as a Resource

Moderator: **Ian Maddock**, MyHEAT

Now More than Ever: The Case for Natural Gas EE in a Time of Low Prices and Electrification

Presenter: **Nick Mark**, CenterPoint Energy

Energy Efficiency Gas Resources: Providing Relief of Capacity Constraints on Gas-Fired Electric Generation During Polar Vortex Conditions

Presenter: **David Dobratz**, Eversource

Natural Gas IRP

Presenter: **Jeff Mazzei**, Enbridge Gas Distribution

3:00–3:30 pm

Afternoon Networking Break

Denmark Commons

3:30–5:30 pm

Breakout Sessions

2A: Emerging Technology: Lightning Round

Moderator: **Stefen Samarripas**, American Council for an Energy-Efficient Economy

Finally, a Reason to Get Excited about Pumps – Yes, Pumps!

Presenter: **Mark Chaffee**, Taco Comfort Solutions

How AMI Is Directly Creating EE Results: A NMEC/M&V 2.0 Evaluated SMB Program

Presenter: **Peter Widmer**, Power TakeOff

Applying an Integrated Approach to Engage, Activate, Orchestrate for a Clean, Resilient, and Consumer Centric Grid

Presenter: **Adam Farabaugh**, Uplight

Safely Scaling Networked Lighting Programs through Device-Level Data

Presenter: **Wesley Whited**, DNV GL

Emerging AI Tech for Demand Side Management Program Optimization

Presenter: **Colin Gibbs**, Bidgely

Choice Engines Deliver Visible Efficiency, Empowered Consumers, and Quantifiable Savings

Presenter: **Anne Arquit Niederberger**, Enervee

Telecommunications: Explosive Growth = Investment – Be Part of the Energy Savings Potential

Presenter: **Steve Hiersche**, Franklin Energy

Assessing Energy Efficiency as a Resource Track

Scandinavian 1

2B: Energy Efficiency and Integrated Resource Planning

Moderator: **Julia Gauthier**, Xcel Energy

Opportunities and Example Practices for Use in Efficiency in Resource Planning

Presenter: **Natalie Frick**, Lawrence Berkeley National Laboratory

The Level Playing Field for Future Energy Efficiency Potential is Tilted: How to Fix

Presenter: **Richard Spellman**, GDS Associates

Is It Local? Valuing Energy Efficiency in Distribution Planning

Presenter: **Jennifer Edwards**, Center for Energy and Environment

Leveling the Playing Field: How to Support Energy Efficiency Competing with Traditional ‘Wires’ Solutions to Meet Regional System Needs

Presenter: **Bronwen Smith**, IESO

Energy Efficiency Multiple Benefits Track

Bergen 3

2C: Innovations in Policy Support for Energy Efficiency

Moderator: **Jenah Zweig**, US Department of Energy

Policy Drivers to Decarbonize the Built Environment

Presenter: **Samantha Caputo**, Northeast Energy Efficiency Partnerships

Shaping the Future: Next-Generation Energy Efficiency Targets

Presenter: **Weston Berg**, American Council for an Energy-Efficient Economy

Can Treating Energy Efficiency as a Capital Asset Be a More Effective Cost Recovery Tool?

Presenter: **Mathieu Poirier**, Dunsky Energy Consulting

Supporting Energy Efficiency as a Resource in Connecticut: A New Business Model

Presenter: **Stephen Bruno**, Eversource

2D: Energy Efficiency as a Non-Wires Alternative

Moderator: **Tim Pettit**, Siemens

Turning Up the Heat: A Non-Wires Alternative Assessment of a Winter Peaking Feeder in the South-Central United States

Presenter: **David Pudleiner**, ICF

Low-Income, Multifamily, and Small Business Customers Deliver New York’s Resource Need through EE

Presenters: **Rachel Seraspe**, Willdan
Margaux Nguyen, Willdan

Non-Wires Alternatives to Building a New Substation in Washington, DC: Key Takeaways for Other Jurisdictions

Presenter: **Kenji Takahashi**, Synapse Energy Economics

Efficiency as a Non-Wires Alternative in the Midwest: Lessons from a Michigan Pilot

Presenters: **Chris Neme**, Energy Futures Group
Mark Luoma, Consumers Energy

2E: Energy Efficiency for the Low-Income Sector

Moderator: **Ariel Dreihobl**, American Council for an Energy-Efficient Economy

ComEd’s Call for Ideas: Soliciting the Community for New Low-Income Program Concepts

Presenter: **Jacob Stoll**, ComEd

Low Income Household EE Potential: New Estimates by Income Level, County, and High-Impact Regions

Presenter: **Chioke Harris**, National Renewable Energy Laboratory

Scaling Low-Income Energy Efficiency Program Delivery

Presenters: **Elizabeth Parsons**, Tennessee Valley Authority
Michaela Marincic, Three³

Building Capacity through Resource Efficiency

Presenters: **Haven Bills**, Southface Institute
Gretchen Gigley, Southface Institute

6:00–7:00 pm **Women in Energy Efficiency Reception** *Finland Room*

6:30–8:00 pm **Welcome Reception** *Denmark Commons*

Thursday, October 17

7:00 am–4:30 pm Registration Denmark Commons

7:00–8:00 am Continental Breakfast Fjords Ballroom

8:00–9:45 am Plenary Panel Scandinavian Ballroom

Plenary Panel: Energy Efficiency, Decarbonization, and Electrification

Moderator: **Steve Nadel**, American Council for an Energy-Efficient Economy

Presenters: **Ken Colburn**, Principal and Director, US Programs, Regulatory Assistance Project
Scott Blunk, Strategic Business Planner II, Sacramento Municipal Utility District
Ryan Bracken, Principal Economist, NW Natural
Abigail Anthony, Commissioner, Rhode Island Public Utilities

9:45–10:15 am Networking Break Denmark Commons

10:15 am–12:00 pm Breakout Sessions

Energy Efficiency Programs and Measures Track

Norway 1-2

3A: Natural Gas Energy Efficiency Programs

Moderator: **Carter Deolph**, CenterPoint Energy

Cooking with and Saving Gas!

Presenter: **Jennifer Parsons**, National Grid

Natural Gas Savings in Industry

Presenter: **Jerry Zolkowski**, DNV GL

The Nexus between Data, Real Gas Savings, and Good Building Operation: Why Gas Equipment Rebates Are Not Enough

Presenter: **Marty Davey**, New Ecology

Assessing EE as a Resource Track

Fjords 4

3B: Issues in Avoided Costs

Moderator: **Grace Relf**, American Council for an Energy-Efficient Economy

Rethinking Avoided Costs of EE

Presenters: **Audrey Partridge**, Center for Energy and Environment
Joe Daniel, Union of Concerned Scientists

Is It Finally Peak Energy Efficiency (in a good way)?

Presenter: **David Nemetzow**, US Department of Energy

The Time Value of Energy Efficiency Measures

Presenters: **Chris Baker**, Willdan Group
Shawn White, Xcel Energy

Valuing Deferred Transmission and Distribution for Energy Efficiency

Presenter: **Tina Jayaweera**, Northwest Power & Conservation Council

3C: Energy Efficiency and the Water-Energy Nexus

Moderator: **R. Neal Elliott**, American Council for an Energy-Efficient Economy

Redefining Affordability in a Struggling Community Context: Using Energy Efficiency to Help with Water and Energy Affordability in Flint, MI

Presenter: **Scott Bernstein**, Center for Neighborhood Technology

WISE™ as an Innovative Utility and Public Partnership to Leveraging Energy Efficiency

Presenter: **Abhishek Pal**, Lincus, Inc.

Leading New Hampshire’s Wastewater Treatment Facilities to Energy Efficiency

Presenters: **Mark Toussaint**, Eversource
Sharon Nall, New Hampshire Department of Environmental Service

EE as a Distributed Resource Track

Bergen 2

3D: Grid Interactive Efficient Buildings

Moderator: **Dan York**, American Council for an Energy-Efficient Economy

Technical Report Series: Opportunities for Energy Efficiency and Flexibility

Presenters: **Monica Neukomm**, US Department of Energy
Karma Sawyer, US Department of Energy

Assessing the Potential for Energy Flexibility Alongside Energy Efficiency

Presenter: **Jared Langevin**, Lawrence Berkeley National Laboratory

Grid Interactive Building in the Midwest

Presenter: **Alison Lindburg**, Midwest Energy Efficiency Alliance

Grid Interactive Building Programs in the Southwest

Presenter: **Justin Brant**, Southwest Energy Efficiency Project

EE for Targeted Markets

Bergen 1

3E: Energy Efficiency and Market Transformation

Moderator: **Margie Gardner**, Resource Innovations

The Market Transformation Impact of EPA’s ENERGY STAR® Retail Products Platform

Presenter: **Daniel Lawlor**, Cadmus

A Market Transformation Framework: Recommendations and Approaches

Presenter: **Kevin Thompson**, Southern California Edison

Transforming Markets and Communities through EE Pilot Programs

Presenter: **Kaylan Meinecke**, Consumers Energy

12:00 noon—1:15 pm

Lunch and Keynote

The Energy Efficiency Resource Is Larger and Less Expensive than You Think

Scandinavian Ballroom

Keynote Presenter: **Amory Lovins**, co-founder and chief scientist, Rocky Mountain Institute

EE Programs and Measures Track

Norway 1-2

4A: Commercial ProgramsModerator: **Leslie Baer**, Xcel Energy

Turn-Key Smart Building Solutions SMBs

Presenter: **Maria Fields**, JouleSmart Solutions, Inc.

Scalable Deep Energy Retrofits in Commercial Buildings

Presenter: **Gwelen Paliaga**, TRC

Paving a Path for Community Involvement in Energy Efficiency

Presenter: **Edward Musz**, Pepco Holdings Inc.

Turn-Key Services Program Provides Full Circle Solutions: Engaging Businesses with No Cost Energy Efficiency Implementation Services

Presenter: **Taylor Thelemann**, Xcel Energy*Assessing EE as a Resource Track*

Fjords 4

4B: Issues in Cost-Effectiveness TestingModerator: **Olivia Patterson**, Opinion Dynamics

How States Value Energy Efficiency as a Resource

Presenter: **Erin Malone**, Synapse Energy Economics

Principles, Key Steps and Process: On-the-Ground Experience with the NSPM

Presenter: **Julie Michals**, E4theFuture

EE Cost-Effectiveness

Presenter: **Gregory Ehrendreich**, Midwest Energy Efficiency Alliance

Resource Curves: Time to Value Efficiency

Presenter: **Carmen Best**, Recurve*EE Multiple Benefits Track*

Bergen 3

4C: Energy Efficiency and the EnvironmentModerator: **Asa Hopkins**, Synapse Energy Economics

Alberta Carbon-Centric Energy Efficiency Programming

Presenter: **Karen Maoz**, Navigant Consulting

Quantifying the Health Benefits of Energy Efficiency and Renewable Energy

Presenter: **Beth Conlin**, US Environmental Protection Agency

Energy Efficiency and Carbon Reduction Goals

Presenter: **Nick Hromalik**, Midwest Energy Efficiency Alliance

Reducing Visibility Impairing Pollutants through Energy Efficiency

Presenters: **Tricia Treece**, Arkansas Department of Energy and Environment
Nancy Seidman, Regulatory Assistance Project

4D: Energy Efficiency and Electrification

Moderator: **Maggie Molina**, American Council for an Energy-Efficient Economy

Allies in the Climate Fight: The Interplay between Efficiency and Beneficial Electrification

Presenter: **Erika Niedowski**, Acadia Center

Energy Efficiency and Electrification: Strategic Partners

Presenter: **Emily Levin**, VEIC

Electrification in Minnesota: Perspectives from a Regulator and an Implementer

Presenters: **Anthony Fryer**, Minnesota Department of Commerce
Josh Quinnell, Center for Energy and Environment

Peak Heat and the Capacity Benefits of Energy Efficiency

Presenter: **Daniel Aas**, Energy + Environmental Economics, Inc.

4E: New Construction Programs

Moderator: **Amanda Formica**, National Grid

The Sum Is Greater than the Parts: How Advanced Analytics Find Cost Effective Approaches for Residential New Construction through Volume and Efficiency

Presenters: **Tim McConkie**, Lockheed Martin Energy
Ian Metzger, Lockheed Martin Energy

Enbridge Gas: Building Energy Efficiency into Affordable Housing

Presenter: **Corrie Morton**, Enbridge Gas Inc.

The Midwest is Zero Net Energy Ready

Presenters: **Benjamin Glendening**, Consumers Energy
Annie Koch, DNV GL

Future of Commercial and Industrial New Construction Energy Efficiency Programs: Moving Toward a Holistic Approach and Zero Energy Building Design

Presenters: **Jillian Corley**, Eversource
Jordan Schellens, Eversource

3:15 pm–3:30 pm

Afternoon Break

Denmark Commons

3:30 pm–5:00 pm

Breakout Sessions

5A: Energy Efficiency in Multifamily Buildings

Moderator: **Rebecca Olson**, Center for Energy and Environment

A New Ultra-Flexible, High-Impact Design to Engage Affordable Housing Projects

Presenter: **Stephanie Berkland**, TRC

Energy Efficiency’s Expanding Role in Affordable Multifamily Housing

Presenter: **Stefen Samarripas**, American Council for an Energy-Efficient Economy

Serving Multifamily Customers through a Joint Electric/Gas Utility Program

Presenters: **Yvonne Pfeifer**, Xcel Energy
Emma Ingebretsen, CenterPoint Energy

Assessing EE as a Resource Track

Fjords 4

5B: Partnerships to Leverage Energy Efficiency

Moderator: **Bridget French**, VEIC

Leveraging Rate Payer Funds with Private Buy-down Financing Programs

Presenter: **Josh Patton**, Ascentium Capital

Levering “Investment Grade” Energy Savings Predictions to Enable EE as a Resource

Presenter: **Andy Frank**, Sealed

Time of Sale Energy Disclosure: Minneapolis and the Utility Working together to Achieve Energy Savings through Policy

Presenter: **Isaac Smith**, Center for Energy and Environment

EE Multiple Benefits Track

Bergen 3

5C: Energy Efficiency and Resilience

Moderator: **Emma Schoppe**, CenterPoint Energy

Quantifying EE’s Value for Reducing Resilience Costs in Critical Facilities

Presenter: **John Agan**, US Department of Energy

Strategic Electrification and Winter Cold Snaps: A Resource and a Challenge

Presenter: **Asa Hopkins**, Synapse Energy Economics

CHP: An Energy-Efficient Resiliency Measure that Can be a Local Solution for Meeting Climate Goals

Presenter: **Neeharika Naik-Dhungel**, US Environmental Protection Agency

EE as a Distributed Resource Track

Bergen 2

5D: Energy Efficiency as a Capacity Resource

Moderator: **Chris Duffin**, Center for Energy and Environment

Rapid Deployment of Energy Efficiency as a Peak Demand Reduction Strategy

Presenters: **Quinn Cherf**, Energy Trust of Oregon
Angela Long, Pacific Power

New England Forward Capacity Market (FMC) Developments: Encouraging or Discouraging EE?

Presenters: **Elizabeth Titus**, Northeast Energy Efficiency Partnerships
Mark Laabs, Modern Energy

Hard-to-Reach Customers Tapped to Deliver 18.5 MW of Local Capacity through EE

Presenter: **Gwen Snodgrass**, Willdan Energy Solutions

5E: Energy Efficiency and Rural Programs

Moderator: **Duane Watson**, Consumers Energy

Integrated Energy Efficiency and Disaster Recovery Program Approaches

Presenter: **Monica Thilges**, APTIM

Findings from Michigan's Agriculture and Rural Communities Energy Roadmap

Presenters: **Eric Pardini**, Public Sector Consultants

Mary Shoemaker, American Council for an Energy-Efficient Economy

No Customer Left Behind: Engaging Small Businesses through Turn-Key Services

Presenter: **Rose Shannon**, Franklin Energy