



# 2019 National Conference on Energy Efficiency as a Resource

## PRELIMINARY PROGRAM

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

### Tuesday, October 15

4:00 pm–7:00 pm Registration

5:00 pm–7:00 pm Opening Reception

### Wednesday, October 16

7:00 am–6:00 pm Registration

7:00 am–8:00 am Continental Breakfast

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

#### Welcome and Introductions

Welcome: **Martin Kushler** and **Dan York**, American Council for an Energy-Efficient Economy

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

#### The Importance of Energy Efficiency in Building a Sustainable Energy Future

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

9:45 am–10:00 am Morning Break

10:00 am–11:45 am Plenary Panel

#### 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: **Howard Geller**, 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 and the 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  
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 Picture

**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**, CEE  
Phas II EnergyScoreCards Minnesota

**Keith Tonkinson**, Lincus  
Small Pump Program

**Andrew Whitlock**, American Council for an Energy-Efficient Economy  
Benefits of Electrifying Cross-Cutting Industrial Equipment

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

*EE Programs and Measures Track***1A: Industrial Programs**

Moderator: **Ed Rightor**, American Council for an Energy-Efficient Economy

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

Presenter: **Julie-Ann Vincent**, 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***1B: Maintaining Aggressive Energy Efficiency Goals**

Moderator: **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: **Monica Curtis**, 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***1C: Non-Energy Benefits of Energy Efficiency**

Moderator: **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

*EE as a Distributed Resource Track*

**1D: Energy Efficiency as a Distributed Energy Resource**

Moderator: **Marisa Uchin**, Oracle

The Future of Distributed Energy Resource

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

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

Presenters: **Corri Waters**, American Council for an Energy-Efficient Economy  
**Grace Relf**, 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

*EE for Targeted Markets Track*

**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**

**3:30–5:30 pm**

**Breakout Sessions**

*EE Programs and Measures Track*

**2A: Emerging Technology: Lightning Round**

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

Presenter: **Peter Widmer**, Power TakeOff

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: **Dean Laube**, Franklin Energy

*Assessing Energy Efficiency as a Resource Track*

**2B: Energy Efficiency and Integrated Resource Planning**

Moderator: **Julia Gauthier**, Xcel Energy (*invited*)

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*

**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: **Annie Gilleo**, 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

*EE as a Distributed Resource Track*

**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 Rural Oklahoma

Presenter: **David Pudleiner**, ICF

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

Presenter: **Rachel Seraspe**, 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 Two Michigan Pilots

Presenter: **Chris Neme**, Energy Futures Group

**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**, Three<sup>3</sup>

Building Capacity through Resource Efficiency

Presenter: **Haven Bills**, Southface Institute

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

**6:30–8:30 pm Welcome Reception**

**Thursday, October 17**

**7:00 am–4:30 pm Registration**

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

**8:00 am–9:45 am Plenary Panel**

**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 Blunt**, Strategic Business Planner II, Sacramento Municipal Utility District

**Ryan Bracken**, Principal Economist, NW Natural

**Abigail Anthony**, Commissioner, Rhode Island Public Utilities

**9:45 am–10:15 am Networking Break**

**10:15 am–12 pm Breakout Sessions**

**3A: Natural Gas Energy Efficiency Programs**

Moderator: **Carter Dedolph**, CenterPoint Energy (*invited*)

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*

**3B: Issues in Avoided Costs**

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 Nemtzw**, US Department of Energy, Building Technologies Office

The Time Value of Energy Efficiency Measures

Presenter: **Chris Baker**, Willdan Group

Valuing Deferred Transmission and Distribution for Energy Efficiency

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

*EE Multiple Benefits Track*

**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

Presenter: **Mark Toussaint**, Eversource

*EE as a Distributed Resource Track*

**3D: Grid Interactive Efficient Buildings**

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

Technical Report Series: Opportunities for Energy Efficiency and Flexibility

Presenter: **Monica Neukomm**, 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: **Paulomi Nandy**, Midwest Energy Efficiency Alliance

Grid Interactive Building Programs in the Southwest

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

*EE for Targeted Markets*

### **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 Cheaper than You Think**

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

**1:15 pm–3:15 pm**

**Breakout Sessions**

*EE Programs and Measures Track*

### **4A: Commercial Programs**

Moderator: **TBA**

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*

**4B: Issues in Cost-Effectiveness Testing**

Moderator: **Olivia Patterson**, Opinion Dynamics

How States Value Energy Efficiency as a Resource

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

EE Cost-Effectiveness

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

Resource Curves: Time to Value Efficiency

Presenter: **Carmen Best**, Recurve

*EE Multiple Benefits Track*

**4C: Energy Efficiency and the Environment**

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

Alberta Carbon-Centric Energy Efficiency Programming

Presenter: **Karen Maoz**, Navigant Consulting

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

*EE as a Distributed Resource Track*

**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.

*EE for Targeted Markets*

**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

Presenter: **Benjamin Glendening**, Consumers Energy

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**

**3:30 pm–5:00 pm**

**Breakout Sessions**

*EE Programs and Measures*

**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*

**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*

**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*

**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?

Presenter: **Elizabeth Titus**, Northeast Energy Efficiency Partnerships

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

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

*EE for Targeted Markets Track*

**5E: Energy Efficiency and Rural Programs**

Moderator: **Annie Gilleo**, American Council for an Energy-Efficient Economy

Integrated Energy Efficiency and Disaster Recovery Program Approaches

Presenter: **Monica Thilges**, APTIM

Findings from Michigan's Agriculture and Rural Communities Energy Roadmap

Presenter: **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