

2018 Conference on Health, Environment and Energy

New Orleans, Louisiana • Hyatt Centric French Quarter • December 3-5, 2018

Preliminary Program

	7 0
Monday, December 3	
4:00 pm – 7:00	pm REGISTRATION
5:30 pm – 7:30	pm RECEPTION
Tuesday, December 4	
7:30 am – 7:00	pm REGISTRATION
7:30 am – 8:30	am CONTINENTAL BREAKFAST
8:30 am – 10:00 am WELCOME AND PLENARY PANEL	
Introductions:	Clay Nesler , Johnson Controls and American Council for an Energy-Efficient Economy Board Member
Welcome:	Sara Hayes, American Council for an Energy-Efficient Economy
Assessing the Landscape: Emerging Trends and Opportunities at the Nexus of Health and Energy	
<i>Description</i> : The opening plenary will set the stage for the rest of the conference by providing a variety of expert perspectives on the landscape of emerging trends and opportunities at the nexus of health and energy.	
Moderator:	Sara Hayes, American Council for an Energy-Efficient Economy
Panelists:	 Ian Hamilton, International Energy Agency and University College London Energy Institute Felicia Rabito, School of Public Health and Tropical Medicine, Tulane University Z Smith, Eskew+Dumez+Ripple Architecture Firm Eric Werling, U.S. Department of Energy

10:00 am – 10:30 am

NETWORKING BREAK

10:30 am – 12:00 pm

PRESENTATIONS

Supporting Communities Track

1A. Affordable Housing, Underserved Communities and Health

Description: This panel will explore programs designed to provide healthy, affordable housing as well as techniques for measuring outcomes and maximizing impacts through targeted interventions.

Health at Home: Bringing Comprehensive Health and Wellness Practices to Affordable Housing Presenter: **Michael Freedberg**, U.S. Department of Housing and Urban Development

Quantifying the Health and Non-Energy Impacts of Limited Income Energy Efficiency: A Case Study from the Knoxville Extreme Energy Makeover Initiative

Presenters: **Bruce Tonn**, Three³, Inc. **Elizabeth Parsons**, Tennessee Valley Authority

Metrics and Methods to Address Non-Energy Benefits for Low-Income Communities in Urban Environments Presenter: **Pam Mendelson**, U.S. Department of Energy

Utilizing Energy Studies for Strategic Interventions Presenter: Jon-Paul d'Aversa, Mid-Ohio Regional Planning Commission

Health in Buildings: Programs, Systems, and Technologies that Affect Health Track

1B. The Science of How Buildings Affect Health

Description: This panel will provide an overview of building science and how building systems can affect health.

Moderator: Jonathan Cohen, U.S. Department of Energy

Healthy Efficient Homes Research Findings

Presenter: Brett Singer, Lawrence Berkeley National Laboratory

Our Homes Suck! And, that Is Why Our Kids Have Sinus Problems

Presenter: Larry Zarker, Building Performance Institute

Our Buildings...Our Health

Presenter: Karla Butterfield, Steven Winter Associates

Crossing the Divide: Bringing Health and Energy Efficiency Together for a Better World Track

1C. A Doctor and an Engineer Walk Into a Room

Description: The Seidman sisters—one a pediatric anesthesiologist, the other an engineer who works on environmental and energy policy—will discuss how their two fields intersect and how they can help each other do their jobs more effectively.

Presenters: Nancy Seidman, Regulatory Assistance Project Peggy Seidman, Rainbow Babies and Children's/University Hospitals (RBC) and Case Western Reserve University School of Medicine

12:00 pm – 1:30 pm LUNCH AND AWARDS CEREMONY

Description: ACEEE's first Health and Energy Linked Programs (HELP) Awards will recognize programs from around the country. Winners will each give a short overview of their program and share lessons learned.

Recipients: Ruth Ann Norton, Green & Healthy Homes Initiative Ellen Tohn, Vermont OneTouch Maria Mauceri*, SystemVision™ Steve Luxton, EnergyFIT Philly Karen Glitman, Zero Energy Modular (ZEM) Program Sandra Lobo*, Bronx Healthy Homes Program

*Will not be present for award presentation

1:30 pm – 3:00 pm

PRESENTATIONS

Supporting Communities Track

2A. Health and Energy in Multifamily Buildings

Description: Panelists will discuss emerging practices and programs aimed at enhancing health in multifamily housing through weatherization, improved ventilation and other "green" approaches.

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

Undertaking Energy, Comfort, and Health Transformations in Multi-Residential Buildings Presenter: **Bryan Purcell**, The Atmospheric Fund

Health Impacts of Weatherizing Multifamily Buildings Presenter: **Bruce Tonn**, Three³, Inc.

Massachusetts Low-Income Multifamily Weatherization: Health and Safety Impacts Presenter: **Nicole Rosenberg**, NMR Group, Inc.

Emerging Trends in Multifamily Ventilation and IAQ Presenter: **Marian Goebes**, TRC

From Pilot to Process: Using Green Building Approaches to Integrate Health in Multifamily Housing Presenter: **Rebecca Schaaf**, Stewards of Affordable Housing for the Future

Health in Buildings: Programs, Systems and Technologies that Affect Health Track

2B. Good News Stories: Programs and Case Studies

Description: Panelists will share successes and stories from programs across the country that are improving health and reducing energy costs.

Harnessing the Energy-efficiency Infrastructure to Advance Health and Safety: Potential for Innovation in Connecticut

Presenter: Catherine Klinger, Green & Healthy Homes Initiative

How a Foreclosure Prevention Program Became an Energy Efficiency and Health Program Presenter: **Emily Robinson**, Elevate Energy

(presentation continued on next page)

Improving Population Health Outcomes through Weatherization plus Health: Lessons Learned to Date through Innovative Pilots

Presenter: Laura Capps, Efficiency Vermont

Weatherization plus Health - Making Salad Dressing from Oil and Vinegar Presenter: Vince Schueler, Washington State University Energy Program

Cross the Divide: Bringing Health and Energy Efficiency Together for a Better World Track

2C. Air Regulations, Health and Energy Efficiency

Description: Panelists will provide an overview of U.S. air regulations related to energy and identify opportunities where changes in energy use could reduce pollution.

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

Making Sense of Air Quality Alphabet Soup: How Regulation Improves Public Health Presenter: **Nancy Seidman**, Regulatory Assistance Project

Quantifying the Potential Benefits of Energy Efficiency on U.S. Electric Power-sector Emissions, Air Quality and Public Health

Presenter: David Abel, University of Wisconsin – Madison

Regional Air Quality Impacts from Light-duty Vehicle ElectrificationPresenter:Eric Junga, American Council for an Energy-Efficient Economy

Triple Threat: How Law, Policy, and Epidemiology can Improve Indoor Air Environments and Energy Efficiency Presenter: **Petra Vallila-Buchman**, Ross Strategic

Energy Efficiency's Role in Voluntary Air Quality Plans Presenter: **Angie Shatas**, U.S. Environmental Protection Agency

3:00 pm – 3:30 pm

NETWORKING BREAK

3:30 pm – 5:00 pm

PRESENTATIONS

Supporting Communities Track

3A. Energy, Health and Social Equity

Description: Panelists will provide examples of efforts to achieve more equitable and healthful outcomes through energy-saving programs and policies.

Moderator: Diana Hernandez, Mailman School of Public Health, Columbia University

Achieving Health and Social Equity: Understanding Non-energy Benefits in the United States Presenters: **Brendan Brown**, Green & Healthy Homes Initiative **Ruth Ann Norton**, Green & Healthy Homes Initiative

BIT Building Program: Implementing Energy Initiatives to Advance Equity Presenter: **Lavannya Pulluveetil Barrera**, Environmental Defense Fund

Energy Justice

Presenters: Lori Byron, St. Vincent's Hospital (previously with the Crow Indian Reservation) Robert Byron, Big Horn Valley Health Center

Telling the Story of Equity, Health and Energy in Chicago Presenter: **Anna C. McCreery**, Elevate Energy

Health in Buildings: Programs, Systems and Technologies that Affect Health Track

3B. Demonstrating the Health Outcomes of Energy Efficiency Programs and Policies

Description: Methods for measuring and quantifying health benefits from energy efficiency programs and policies will be discussed.

Moderator: Kapil Upadhyaya, Kirksey Architecture

Embedding Health Benefits into Evaluation of Energy Projects Presenter: **Ed Rubinstein**, University Health Network

Uncovering the Multi-benefits of Home Upgrades Using Real-time Continuous Evaluation Presenter: **Athena Bertolino**, Ross Strategic

How Do You Measure Up? New Ways to Evaluate Project Success Presenter: **Katie Herber**, Perkins Eastman Architects

The Stars are Aligned: Quantifying Non-Energy Impacts in ComEd's Income Eligible Programs Presenter: **Patricia Plympton**, Navigant

Envisioning Health Benefits from Electricity and Gas Savings in the Nation's Capital Presenter: Shannon Gallagher, DC Sustainable Energy Utility

Crossing the Divide: Bringing Health and Energy Efficiency Together for a Better World Track

3C. Technical Tools for Energy and Health Professionals

Description: This session will provide an overview of technical tools that can be used to maximize health and environmental benefits from energy policies and programs. Tools discussed can help users design healthier communities, quantify avoided pollution and the associated health impacts and more.

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

The Net Emissions Analysis Tool: A Holistic Residential Energy and Emission Model for the Development of Regulations and the Allocation of Incentive Funds in the South Coast Air Basin Presenter: **Marc Carreras Sospedra**, South Coast Air Quality Management District

Tools to Design Healthier Communities

Presenter: Maureen Mahle, Steven Winter Associates

EPA Tools and Resources for Quantifying the Emissions and Health Benefits of Energy Efficiency Presenter: **Denise Mulholland**, U.S. Department of Energy

6:00 pm – 8:00 pm NETWORKING RECEPTION (location TBA)

Wednesday, December 5

7:30 am - 4:00 pm

REGISTRATION

7:30 am – 9:00 am CONTINENTAL BREAKFAST AND PLENARY ON HEALTH AND CLIMATE CHANGE

Description: Climate change is a major threat to public health globally. Experts will present some of the latest research exploring this relationship. Panel will begin at 8:00 am. Please arrive early!

Welcome: Steven Nadel, American Council for an Energy-Efficient Economy

Moderator: Mona Sarfaty, Medical Society Consortium on Climate and Health

Hot and Old at Home: Implications of our Current Housing Stock for Health Impacts on Seniors in an Age of Climate Change

Presenter: Sherry Ahrentzen, University of Florida, College of Design Construction and Planning

Can Women Survive Climate Change?

Presenter: Nathaniel DeNicola, George Washington University School of Medicine and Health Sciences

Climate and Health Call to Action: An Evaluation of a Program to Engage Health Professionals Presenter: **Whitney Fung**, University of South Florida College of Public Health

9:15 am – 10:45 am

PRESENTATIONS

Supporting Communities Track

4A. The Big Easy: Transportation Policy and Planning to Maximize Health Gains in New Orleans

Description: This session will outline policy and planning priorities and successes at the intersections of health, transportation and energy in New Orleans. Perspectives will include local government, public/private partnerships, social advocacy and public health. Participants will learn about innovative initiatives that aim to enhance the health and wellness of all New Orleanians.

Moderator: Sarah Gillen, Louisiana Public Health Institute

Presenters: Laura Bryan, Mayor's Office of Transportation Dan Favre, Bike Easy Candice Marti, Transdev

Health in Buildings: Program, Systems and Technologies that Affect Health Track

4B. Insulation and Air Sealing

Description: This panel will address the chemical exposures that can affect health in buildings as well as building materials and practices related to the building envelope that can be used to maintain a healthy indoor environment.

Air Leakage is a Contaminate Pathway! Presenter: **Joe Medosch,** Hayward Score

How a Legacy of Vibrant Product Stewardship Delivers Improved Health and Safety Presenter: **Angus Crane**, North American Insulation Manufacturers Association

Avoiding Toxic Chemicals in Insulation and Air Sealing Materials Presenter: **William Weber**, Healthy Building Network

Crossing the Divide: Bringing Health and Energy Efficiency Together for a Better World

4C. In Me, On Me, Around Me: Messages that Motivate Efficient Energy Choices

Description: Americans prioritize the urgency of greener purchases based on what they ingest, what comes into contact with their skin and then, ultimately, what's around them. Presenters will share research, insights and recommendations about how to connect the dots from health to greener energy choices and will share how to use an understanding of consumer types to deliver the most effective health and energy message.

Presenters: Patrick Hunt, Lirio

Suzanne Shelton, Shelton Group, Inc.

9:15 am – 10:45 am Energy Efficiency Emissions and Health Benefits Quantification Training – Part I

EPA Training

Hands-On Training with EPA's Avoided Emissions and geneRation Tool (AVERT)

Description: Bring your laptop and learn how to use EPA's AVERT - a free tool that helps energy and public health professionals understand the air pollution impacts of energy efficiency and renewable energy.

Workshop Facilitators:Denise Mulholland, U.S. Environmental Protection AgencyEmma Zinsmeister, U.S. Environmental Protection Agency

10:45 am – 11:00 am

NETWORKING BREAK

11:00 am - 12:30 pm

PRESENTATIONS

Supporting Communities Track

5A. Increasing Funding for Programs

Description: This panel will provide an overview of some of the financial resources available for increasing funding for programs that save energy and protect health. Panelists will also discuss methods for successfully acquiring additional funding.

Blending, Braiding and Layering Funding Streams for Health and Energy Savings Presenter: **Sara Hayes,** American Council for an Energy-Efficient Economy

Measuring and Documenting the Multiple Benefits of Energy Efficiency: Latest Estimates, Gaps, and Applications Presenter: Lisa Skumatz, Skumatz Economic Research Associates

How to Quantify the Health and Environmental Benefits of Energy Saving Programs Presenters: **Emma Zinsmeister**, U.S. Environmental Protection Agency **JR Denson**, American Council for an Energy-Efficient Economy

Health in Buildings: Programs, Systems and Technologies that Affect Health Track

5B. A Fresh Breath: Ventilation and Health and Buildings

Description: Many studies have documented the impacts of ventilation on indoor air quality, human health and performance. This panel will discuss recent studies and opportunities to improve indoor air quality with ventilation.

Challenges to Provide Adequate Ventilation in Buildings – Learnings from Two Ongoing Research Studies in California Homes and Classrooms

Presenter: Wanyu Chan, Lawrence Berkeley National Laboratory

Compliant and Unhealthy: When an Older Code Meets Contemporary Construction Methods Presenter: **Chris Burgess**, Midwest Energy Efficiency Alliance

Reducing Household Particles w/ Filtration: Measured Results, Opportunities & Challenges Presenter: Linda Wigington, Reducing Outdoor Contaminants in Indoor Spaces, ROCIS

Balancing Energy, Ventilation, and IAQ: Case Study of a LEED Home Rehab Presenter: **Maureen Mahle**, Steven Winter Associates, Inc. Crossing the Divide: Bringing Health and Energy Efficiency Together for a Better World Track

5C. Protecting Health in a Changing Climate

Description: This panel will continue the discussion initiated in this morning's plenary by digging into the methods and strategies for protecting health in the face of climate change. Panelists will provide an overview of the health harms caused by climate change and discuss how those harms might be minimized through energy policies.

Health Impacts of Climate Change Presenter: **Rebecca Rehr**, ecoAmerica

Assessing the Role of Heat-driven Electricity Demand in Buildings on Power Plant Emissions, Air Quality and Health in a Warming Climate

Presenter: Doug Ahl, Seventhwave

A Carbon Free Energy Future: The Health Safety and Environmental Benefits of Electrification Presenter: **Nic Dunfee**, TRC Energy Services

Adjusting for New Normals: Adapting Buildings to Extreme Heat and Power Outages Presenter: **Emily Higbee**, Healthy Building Research

11:00 am – 12:30 pm Energy Efficiency Emissions and Health Benefits Quantification Training – Part II

EPA Training

Hands-On Training with EPA's CO-Benefits Risk Assessment (COBRA) Health Impact Screening and Mapping Tool

Description: Bring your laptop and learn how to use EPA's COBRA - a free tool that helps energy and public health professionals understand the air pollution impacts and value the public health benefits of energy efficiency and renewable energy.

Workshop Facilitators: Denise Mulholland, U.S. Environmental Protection Agency Niko Dietsch, U.S. Environmental Protection Agency David Cooley, Abt Associates

12:30 pm – 1:30 pm

NETWORKING LUNCH

1:30 pm – 3:00 pm

PRESENTATIONS

Supporting Communities Track

6A. Playing the Game of L.I.F.E.: Limited-income Framework Establishment

Description: Though a simulated exercise facilitated by the Tennessee Valley Authority (TVA) and Milepost Consulting, this highly interactive session will inspire attendees to use innovative, outside-the-box thinking to develop sustainable delivery models for energy efficiency, health and wellness programming that serves limited-income households.

Workshop Facilitator: Frank Rapley, Tennessee Valley Authority

Health in Buildings: Programs, Systems and Technologies that Affect Health Track

6B. Holistic Approaches for Optimizing Health and Energy Effectiveness in Buildings

Description: A roundtable discussion to introduce a holistic framework for optimizing health and energy effectiveness by managing primary and secondary outcomes, environmental exposures and building systems performance. The session will discuss occupant health and wellness, management of environmental exposures and the implications for building design, operations, maintenance and renovation.

Moderators: James E. Woods, Indoor Environments Consultant Clay Nesler, Johnson Controls

Crossing the Divide: Bringing Health and Energy Efficiency Together for a Better World

6C. Hospitals and Healthcare Partnerships

Description: This panel features cutting edge programs and approaches that engage health professionals and hospitals to save energy and improve health outcomes.

Saving Energy and Money While Improving Community Health Presenter: Iqbal Mian, Practice Green Health and Health Care without Harm

Demonstrated Approach to Energy Efficiency in Healthcare Facilities Presenter: Kara Brooks, American Society for Healthcare Engineering

Utility-sponsored Energy Efficiency Program for Hospitals and Health Care Facilities Presenter: Jennifer McWilliams, DNV GL

A Home-based Approach to Treat Asthma Patients Presenter: **Amanda Gramigna**, Elevate Energy

Prescribed Home Energy Retrofits for Patients with Biotoxin Sensitivity Presenter: **Brett Bishop**, Build It Green

3:00 pm – 4:00 pm

CLOSING PLENARY

Thank you to our conference sponsors and ACEEE Ally members!

