

# Programs that Save Energy & Improve Health

**New York State Energy Research & Development Authority (NYSERDA)**

**Low-Income Forum on Energy (LIFE)**

**May 22-23, 2018**

**Ronald Denson Jr.**

**Public Health Analyst, Health & Environment Program**

**American Council for an Energy-Efficient Economy**



The American Council for an Energy-Efficient Economy is a nonprofit 501(c)(3) founded in 1980. We act as a catalyst to advance energy efficiency policies, programs, technologies, investments, & behaviors.

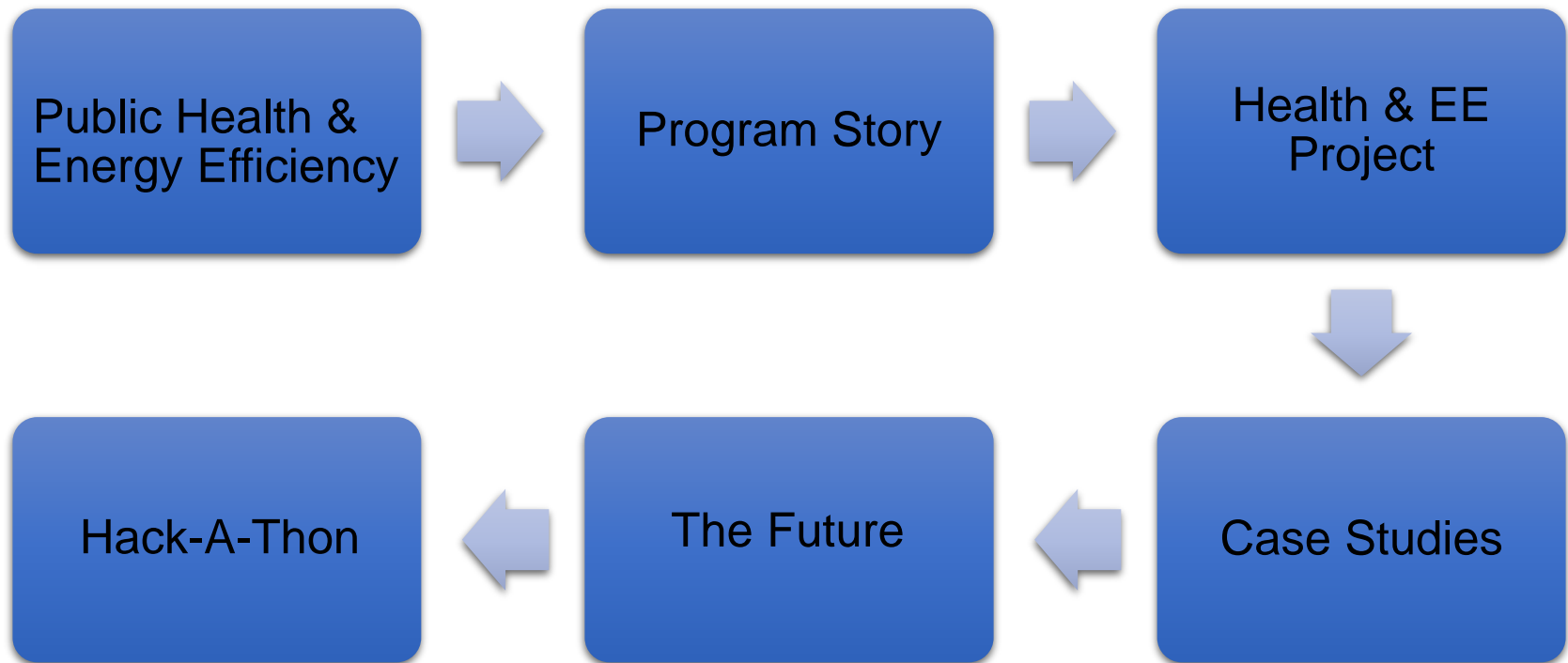
Our research explores economic impacts, financing options, behavior changes, program design, and utility planning, as well as US national, state, & local policy.

Our work is made possible by foundation funding, contracts, government grants, and conference revenue.

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# Introduction/Agenda

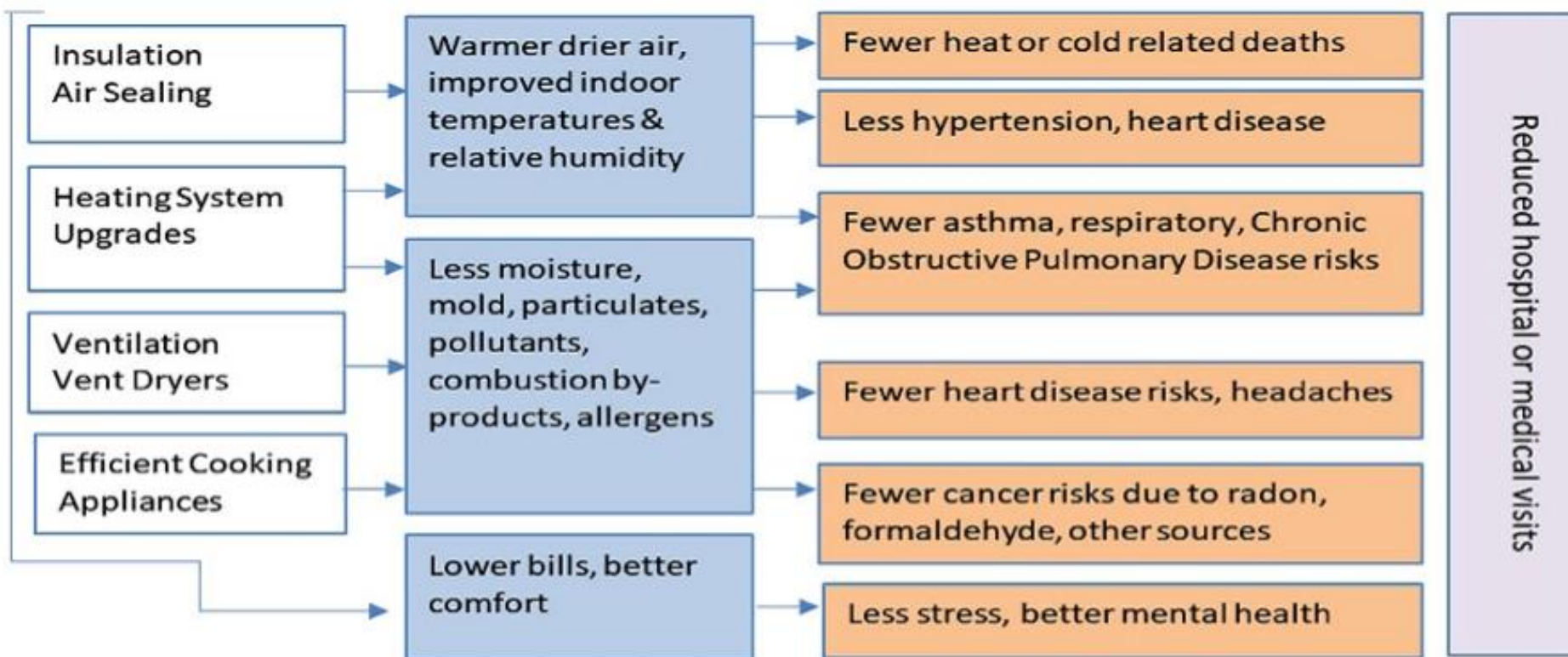


# Public Health & Energy Efficiency?

“Money can’t buy happiness, but it *can* buy life expectancy.” --Vanessa Mason



# Public Health & Energy Efficiency



# Public Health & Energy Efficiency

**Table 1. Health Benefits of Residential Energy Efficiency**  
Summary: 25 recent studies

Reduced Respiratory Symptoms	Reduced Other Health Risks (examples)	Reduced Emergency Dept. Visits or Hospitalizations	Improved Indoor Air Quality
Asthma COPD Bronchitis Throat irritation <i>Nasal allergies</i>	Colds, Rhinitis Headaches Heart disease Hypertension Sinusitis Fatigue Mental health Lung cancer*	Asthma Other respiratory	Moisture Condensation VOCs Moisture/Mold Dust allergens Particulates <i>Formaldehyde</i> <i>Radon</i>

\*estimated based on exposure reductions

*Italics: negative outcomes*

COPD: Chronic Obstructive Pulmonary Disease; VOCs: Volatile Organic Compounds

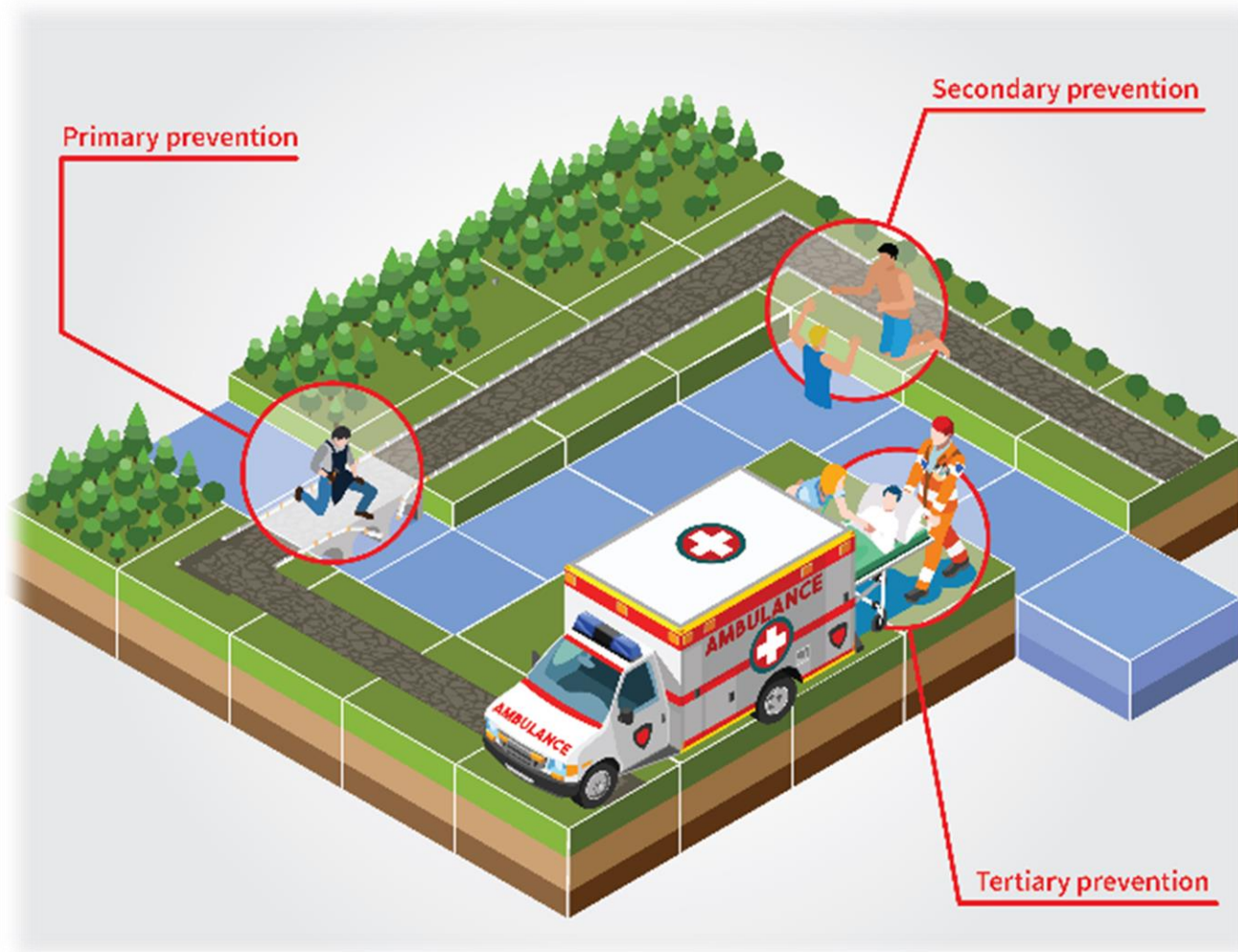








# Upstream vs Downstream



# Energy Efficiency as Preventive Health Care



Average Emergency Room Visit Cost:  $\approx$  \$2,000



Average Hospital Admission Cost:  $\approx$  \$20,000



Average Cost of Your Well-Being: *Priceless*

# Story



0:03 / 3:55

## Baltimore Breathes Easier with Energy Retrofits

506 views



ACEEEDC

Published on Jan 8, 2018

Energy efficiency's about more than just saving money on your energy bills. We went to Baltimore to learn about the impact efficiency upgrades can have on residents' health and comfort.

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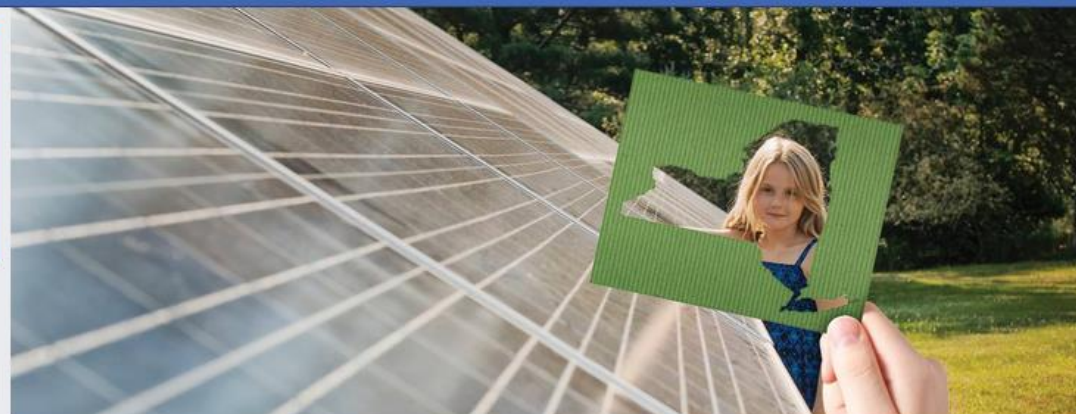
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# Exemplary Programs Project



# Exemplary Programs Project



## Zero Energy Modular (ZEM) Program

### Program Highlights

- Unique clientele and market
- Financial incentives
- Innovation

Efficiency  
Vermont



Zero Energy  
Modular (ZEM)  
for mobile home  
replacement

# Exemplary Programs Project



## Bronx Healthy Buildings Programs

### Program Highlights

- Extensive collaborative partnerships
- Relationship management
- Education programming

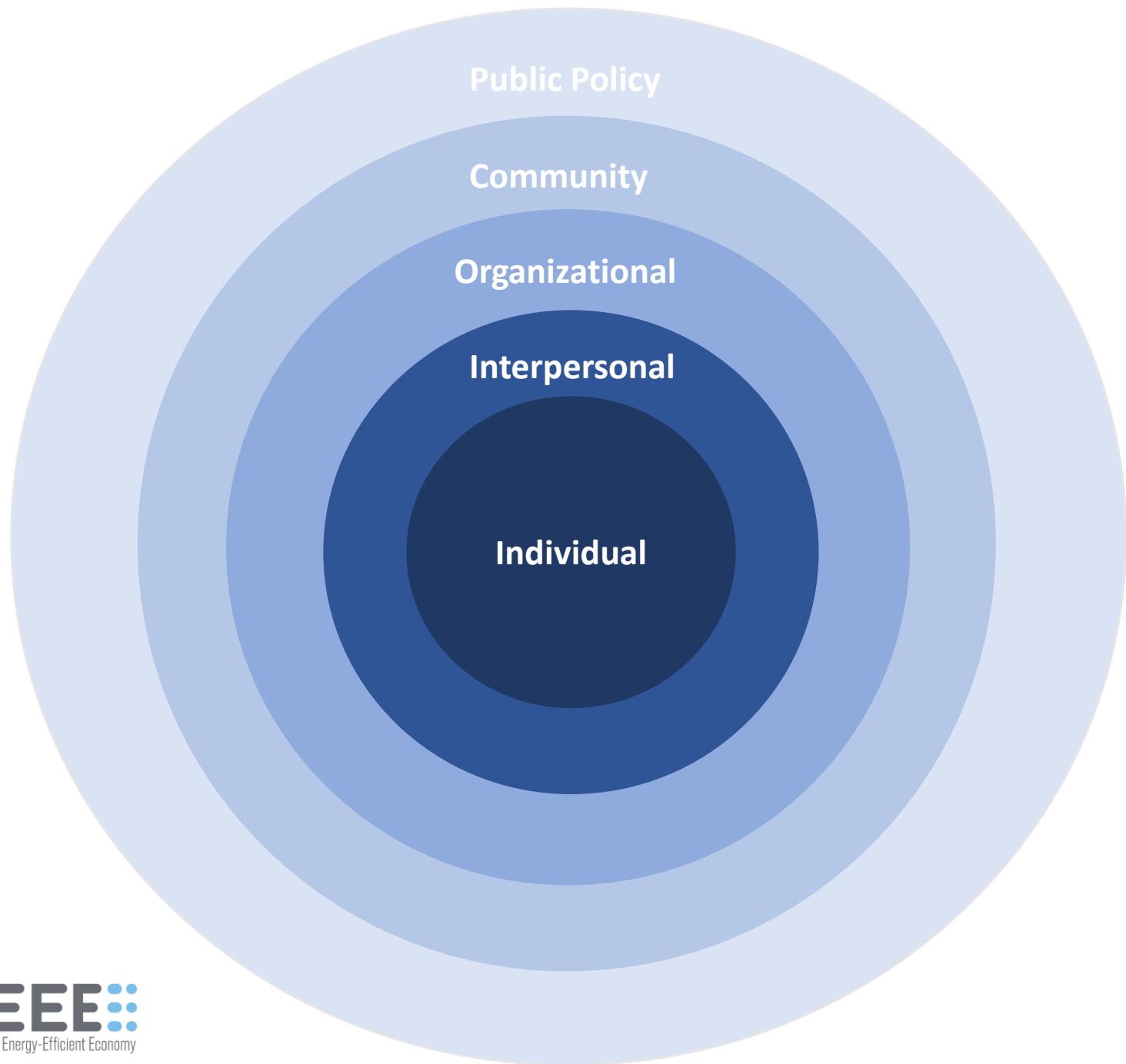
# Program Challenges





# Hack-A-Thon





# Hack-A-Thon

## Instructions:

1. Break into groups
2. Choose an engagement level(s)  
*(Individual, Interpersonal,  
Organizational, Community,  
Public Policy)*
3. Problem solve!



# Hack-A-Thon

How can energy efficiency programs effectively evaluate, measure, and verify health outcomes?

Which level(s) of engagement are realistic/appropriate for me and my organization? (*Individual, Interpersonal, Organizational, Community, Public Policy*)

What health impacts can/should we track?





# Hack-A-Thon

**Group 1**

# Hack-A-Thon

**Group 2**

# Hack-A-Thon

**Group 3**

# Possible Future Exploration...



Optimism Buffering...





## Resources & Upcoming Research

Exemplary programs report

<http://aceee.org/research-report/h1802>

Program directory

<http://aceee.org/topics/health-environment/program-directory>

Saving Energy, Saving Lives

<https://aceee.org/research-report/h1801>

Health & environment video-blog series

<https://aceee.org/topics/health-environment>

Measuring and Verifying the Health Benefits of Energy Efficiency Programs

August 2018

## Upcoming ACEEE Conferences

International Symposium on Energy Efficiency	June 26, 2018	Washington, DC
Summer Study on Energy Efficiency in Buildings	August 12-17, 2018	Pacific Grove, CA
Behavior Energy and Climate Change Conference	October 7-10, 2018	Washington, DC
2018 Rural Energy Conference	October 22, 2018	Atlanta, GA

*The top convener in energy efficiency.*  
[aceee.org/conferences](http://aceee.org/conferences)







# 2018 Conference on Health, Environment, & Energy

Hyatt Centric French Quarter, New Orleans, LA

December 3-5, 2018

<http://aceee.org/conferences/2018/chee>

Registration opens in July. Book your hotel room now!



# Questions?





# Thank You!

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