

Building Our New Energy Future

State of the Society Update



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ASHRAE President 2018-2019



HOW WILL WE BUILD OUR NEW ENERGY FUTURE?

Step 1: Become Aware

Step 2: Get Engaged

Step 3: Start Now

Talmadge Memorial Bridge in Savannah, Ga.



Step 1: Become Aware

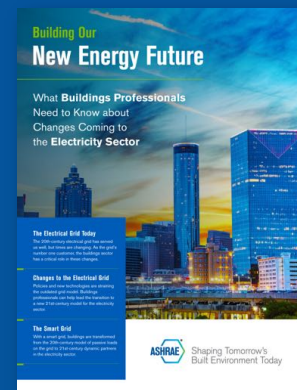


- ASHRAE Primer
- Distinguished Lecturer Program
- Application Guide on Smart Grid

BUILDING OUR NEW ENERGY FUTURE



Building Our New Energy Future



- A 23-page publication on the challenges and opportunities of designing efficient and grid-responsive buildings within the changing energy sector
- Practical advice for owners, designers and construction professionals on smart-grid integration
- 1,971 downloads to date
- More than 1,500 print copies distributed
- Translated into Portuguese

Available for download at:
ashrae.org



Distinguished Lecturer (DL) Program

- Important for connecting chapters and members with ASHRAE expertise
- About 15% of DLs are knowledgeable on how to build our new energy future
- ASHRAE will continue developing content on the topic to increase member awareness



BECOME AWARE

DL Presentations Related to 2018-19 Society Theme

- **BIG, SMART, AND EVERYTHING: DATA, TECHNOLOGY, BUILDINGS, CITIES, AND THE IOTA**
- **CLEAN COOLING OF BUILDINGS**
- **ADVANCED ENERGY DESIGN GUIDE FOR K-12 SCHOOL BUILDINGS: ACHIEVING ZERO ENERGY**
- **LEVERAGING INNOVATIVE TECHNOLOGIES FOR LIFE CYCLE OPERATIONAL EFFICIENCY AND IMPROVED INDOOR ENVIRONMENT QUALITY**
- **FACING THE REALITIES AND CHALLENGES OF URBANIZATION, SMART CITIES, SMART INFRASTRUCTURE & SMART BUILDINGS FOR GREATER SUSTAINABILITY & RESILIENCE**
- **IMPROVED OPERATIONS & MAINTENANCE MEASURES FOR BETTER ENERGY PERFORMANCE AND ENVIRONMENTAL IMPACT OF HVAC & CHILLER PLANTS**
- **AN APPROACH TO IMPROVED INDOOR AIR QUALITY AND OPERATIONS OF BUILDINGS: ADOPT SMART BUILDINGS TECHNOLOGIES AND TRAIN OPERATIONS AND MAINTENANCE STAFF FOR REQUIRED COMPETENCIES**
- **SUSTAINABILITY & ENERGY EFFICIENCY - BRIDGING THE GAP IN PERFORMANCE FROM CONCEPT THROUGH OPERATIONS**
- **THE SMART GRID AND ASHRAE STANDARD 201**

Buildings: The #1 user of the electrical grid

85%

World Bank: 85% of the world population has electricity

60%

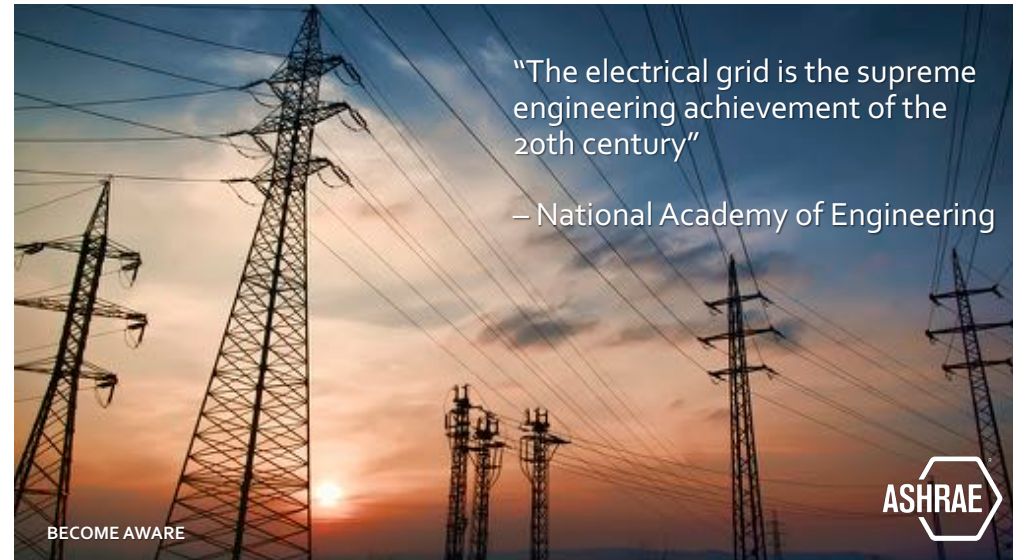
UN: Buildings use 60% of the electricity generated across the globe and 40% of all energy

74%

NREL: Buildings in U.S. comprise 74% of electricity loads



BECOME AWARE



“The electrical grid is the supreme engineering achievement of the 20th century”

– National Academy of Engineering

BECOME AWARE



BECOME AWARE



Presidential Webinar and Q&A Videos

Presidential Webinar

- *Efficient Buildings; the Future and a More Intelligent Grid*

Q&A Videos

- *The Potential For Zero Energy Districts*
- *Smart Homes – Saving Energy and Money*
- *Grid-Interactive Buildings*

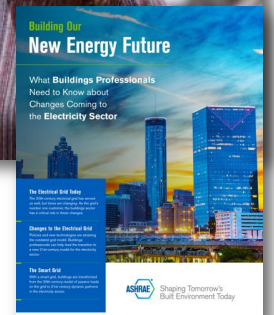


BECOME AWARE



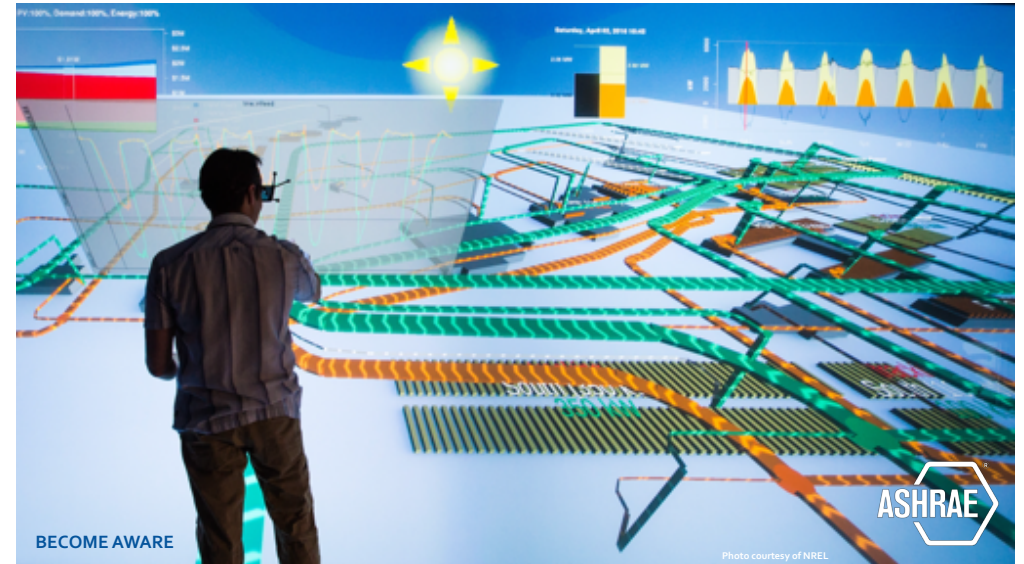
Application Guide on Smart Grid

COMING SOON



BUILDING OUR NEW ENERGY FUTURE

BECOME AWARE



Step 2: Get Engaged

- Society Updates
- Smart Grid Community
- Cyber Security Community
- Wellness Community



BUILDING OUR NEW ENERGY FUTURE



Engaging Our Industry: Collaborating with Others

- ASPE (American Society of Plumbing Engineers)
- IOR (Institute of Refrigeration)
- World Refrigeration Day Endorsements
- Global Cooling Prize Endorsement



GET ENGAGED



Engaging Our Industry:

Collaborating with Others

Application Guide on Smart Grids

- OpenADR Alliance
- Smart Electric Power Alliance (SEPA)

International Facility Management Association (IFMA)

- Memorandum of Understanding (MoU)
- European Commission Study of Building Ventilation Systems for renovations
- New Facility Management (FM) Training and Development Framework



GET ENGAGED

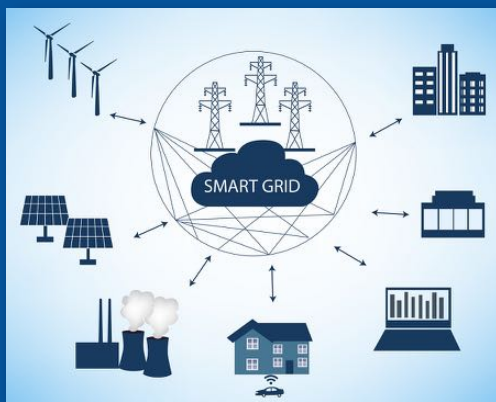
Engaging our Student Members:



GET ENGAGED



Engaging with the Smart Grid Community



GET ENGAGED

Engaging with the Cyber Security Community

- Cyber attacks in the first 6 months of 2017
 - 2,200 publicly disclosed breaches of major organizations
 - 6 billion records exposed
- Estimated that by 2021 hackers will have stolen \$6 trillion (US)
- Roughly 60% of all small to mid-sized corporations are unable to survive a massive cyber attack



GET ENGAGED



Engaging with the Wellness Community



GET ENGAGED



How You Can Engage in Our New Energy Future



GET ENGAGED



How You Can Engage in Our New Energy Future



Facebook

- Facebook.com/ASHRAEupdates
- Facebook.com/ASHRAEpresident
- 32% increase since June 2018
- 38 posts
- 4 videos

Twitter

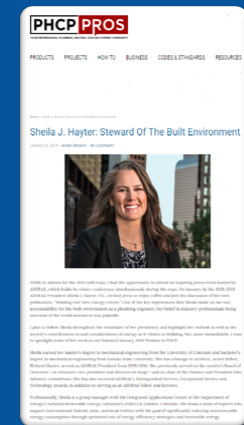
- @ASHRAEnews

GET ENGAGED



Engaging Media

- 31 feature articles
- 9,410 media placements
- More than 20 million media impressions
- 20 to Watch: Women in HVAC



GET ENGAGED



ASHRAE 365 App

- Approximately 10,000 users.
- One-tap access to standards and guidelines, continuing education, industry jobs and more.
- Fully integrated events section with information on ASHRAE Conferences, CRCs, Topical Conferences, Event Calendars and Virtual Conferences.
- Quick access to all of ASHRAE's social media platforms.
- Information on how to support the Society through donations.



A new way to get engaged!

Provides year-round updates on all things ASHRAE

Free to download



GET ENGAGED

Step 3: Start Now



- Living Lab Environment
- HQ Update
- IgCC Powered by ASHRAE 189.1

BUILDING OUR NEW ENERGY FUTURE



START NOW

Photo courtesy of Carleton University

ASHRAE HQ Update

ASHRAE has purchased a building at **180 Technology Pkwy**, approximately 10 miles north of our current location. The building will be renovated to serve as ASHRAE's new headquarters. We are excited to demonstrate leadership in our industry by transforming an existing building into a state-of-the-art built environment.



- ASHRAE is now in the beginning stages of a major capital campaign to fund these renovations.
- Move by October 2020

ashrae.org/newhq

START NOW



2018 International Green Construction Code® Powered by Standard 189.1-2017

- Provides comprehensive green building strategies
- Is compatible with local energy codes and LEED®
- Is under continuous maintenance
- Offers tools and resources to help with implementation and adoption
- www.ashrae.org/greenstandard



START NOW

How You Can Start Now



BUILD THE BRIDGE TO OUR NEW ENERGY FUTURE



Shaping Tomorrow's
Built Environment Today

Talmadge Memorial Bridge in Savannah, Ga.