

CALL FOR PAPERS

Papers are being sought for the annual International Conference “ENERGY in BUILDINGS”, covering Europe, the Middle East & Africa, to be held in Athens, Hellas on November 22-23, 2024.

The Conference is organized by the Hellenic Chapter of ASHRAE in collaboration with the Technical Chamber of Greece (TEE).

WHY “ENERGY IN BUILDINGS”?

“What are the current and emerging technological trends in the Building sector? Why is the EU putting “Energy Efficiency First”? Are we ready for a more sustainable change in materials, methods, processes and equipment? How easy is the real scale implementation and adaptation in our everyday life? How can we share knowledge and experiences to address our common challenges?

Jurisdictions globally are confronting climate change and recognizing that progress needs a combined effort from all stakeholders.

One of ASHRAE priorities is the navigation towards the new energy era and the Hellenic Chapter intends to identify the opportunities and provide answers to these challenges by presenting the state-of-the-art developments in the Built Environment.

ASHRAE recognizes that its long-standing initiatives in energy efficiency should be expanded to building decarbonization that is essential to combat climate change, one of the most formidable environmental challenges ever faced by society.

ASHRAE is advancing strategies toward direct reduction of carbon emissions in the built environment. The targeted carbon emissions include not only those directly resulting from the operation of buildings, but also those embodied in the building construction materials and systems incorporated into buildings.

We are evolving our focus to better address building decarbonization, both to improve building performance and to inform public policy. In pursuit of these goals, ASHRAE will continue to develop tools and resources to advance innovation in the decarbonization of buildings through research, technology transfer, standards writing, publishing, certification, and continuing education.

AN INTERNATIONAL EVENT

“ENERGY in BUILDINGS” is an International Conference that takes place annually since 2012. It brings together Engineers, Architects, Academics, Professionals of different disciplines and other stakeholders who contribute and advance the state of art of the built environment. Information and videos from the previous conferences can be found at the Hellenic Chapter’s website (www.ashrae.gr/events.php). The Conference will host peer reviewed papers and posters, as well as specialized sessions and workshops with invited speakers. The official language of the Conference is English.

CALL FOR PAPERS & POSTERS

Interested authors are invited to submit papers and posters, that will be peer reviewed, to be considered for presentation in the International Conference “ENERGY in BUILDINGS”. Submitted contributions should be original research papers, not submitted or considered for publication elsewhere.

Authors should submit their paper, of no more than **8** pages, by **September 30, 2024**.

If accepted, full papers will be due **October 21, 2024**.

ASHRAE's Commercialism Policy and Guidelines must be adhered to, on all Papers, Posters, Presentations and Discussions. For detailed info follow this [link](#).

Submitted papers will undergo a double peer-review by the Conference Scientific Committee.

Submittal information and templates for full papers and posters can be found at <http://www.ashrae.gr/einb2024a.php>

Authors of accepted papers and posters are responsible for their travel and accommodation. An author must register and present his paper during the Conference in person, one mandatory author registration per paper, in order to be included in the final program and the paper in the Conference Proceedings that will be published in an electronic media publication with open access (e-Proceedings book with an ISBN number).

THE CONFERENCE SESSIONS / TOPICS

The Conference will present the state of the art in building design, construction, commissioning, operation & maintenance as well as emerging new technologies & materials. The conference topics include, but are not limited to:

- **SUSTAINABILITY**
 - Energy Efficiency First
 - Buildings and energy transition
 - Sustainability audits and tools
 - Hydrogen and new fuels
- **HEALTH & SAFETY**
 - Healthy buildings
 - Indoor environmental quality
 - Indoor air quality
- **DECARBONIZATION**
 - Zero carbon buildings
 - Zero carbon cities
 - Embodied carbon & LCA
 - New building materials
 - Operational carbon
 - CO₂ Capture, Storage & Reuse
 - Building Renovation
 - Reducing the Carbon Balance of the Building in its Operations
 - Reducing Carbon Emissions During the Construction of a Building
 - International initiatives
 - Building Electrification
- **RESILIENCE**
 - Resilience to climate crisis
 - Role of AI and smart technologies
 - Assessment of climate-resilient buildings and cities
 - HVAC System resilience
 - Grid resiliency
- **POLICIES & LEGISLATION**
 - Policies & Legislation
 - Green financing
 - Standards and codes
 - Commissioning processes for buildings and systems
- **DIGITAL ENVIRONMENT**
 - Artificial intelligence in building automation and controls
 - Smart buildings and cities
 - Smart readiness index
 - Simulation tools
 - Digital twins
 - Monitoring building performance
 - Cybersecurity and large data
- **INFRASTRUCTURE**
 - Influence of Infrastructure in the health and efficiency of buildings & indoor environmenty.
- **REFRIGERANTS**
 - Refrigerants and their effect on climate change
 - New refrigerants
 - Retrofits
 - Legislation and International agreements
- **AVANT GARD APPLICATIONS**

IMPORTANT DATES (UPDATED):

- September 30, 2024: **NEW DATE** Paper Submission Deadline
(Submit your paper using the conference template to EinB2024@ashrae.gr)
- October 7, 2024: **NEW DATE** Notification of decision / comments for full papers
- October 21, 2024: **NEW DATE** Final Paper Submission Deadline
(Submit your revised paper to EinB2024@ashrae.gr)
- October 28, 2024: **NEW DATE** Final Notification of decision
- November 4, 2024: **NEW DATE** Registration deadline for Authors
(only registered speakers will be included in the final program)
- November 4, 2024: Final Program
- **November 22-23, 2024: International Conference "ENERGY in BUILDINGS"**

POSTER SESSION DATES

- October 14, 2024: Poster Submission Deadline
- October 21, 2024: Final Notification of decision
- October 31, 2024: Registration deadline for Authors
(only registered speakers will be included in the final program)
- **November 22-23, 2024: International Conference "ENERGY in BUILDINGS"**

PUBLICATION

Accepted full papers will be published in an electronic media publication (e-Proceedings book with an ISBN number). Oral presentations will be videotaped and uploaded for free viewing on the Conference website. Only the papers presented during the Conference will be included in the e-Proceedings.

Past e-Proceedings

Conference Proceedings of the 23 papers presented at "ENERGY in BUILDINGS 2016" are available online at <http://ashrae.gr/EinB2016.php> (note that the size of the file is 105MB).

Conference Proceedings of the 29 papers & posters presented at "ENERGY in BUILDINGS 2017" are available online at <http://ashrae.gr/EinB2017.php> (note that the size of the file is 175MB).

Conference Proceedings of the 38 papers & posters presented at "ENERGY in BUILDINGS 2018" are available online at <http://ashrae.gr/einb2018.php> (note that the size of the file is 120MB).

Conference Proceedings of the 28 papers & posters presented at "ENERGY in BUILDINGS 2019" are available online at <http://ashrae.gr/einb2019.php> (note that the size of the file is 73MB).

ENQUIRIES

All enquiries should be directed to: EinB2024@ashrae.gr

Dimitris A. Charalambopoulos, M.Sc.
Mechanical Engineer
D.A. Charalambopoulos & Assocs,
Engineering Consultants, Hellas
EinB2024 Conference General Chair

Constantinos A. Balaras, Ph.D. FASHRAE
Dr. Mechanical Engineer
Research Director, Group Energy Conservation
Institute for Environmental Research &
Sustainable Development, NOA, Athens Hellas