

Call for Papers

The 1st ACM International Workshop on Advancements in Building Energy Benchmarking (BenchSys)

Co-located with ACM BuildSys 2022

November 9-10, 2022, Boston, Massachusetts, USA

Building energy benchmarking is a proven energy management strategy that can positively quantify - and relatively quickly provide objective and reliable information on building energy use and the benefits of improvements. Energy benchmarking is a growing practice in many cities across the world as part of the energy disclosure policy. Many cities have already started to reap the benefits of energy benchmarking with up to 8% energy savings. However, there remains a gap in the widespread adaptation of benchmarking methodologies in terms of their scalability and standardization (data acquisition, analytics, validation, reporting, and automation). Several government organizations, industry practitioners, and researchers are working towards building a holistic and standardized energy benchmarking system.

The first ACM international workshop on “Advances in Building Energy Benchmarking” invites papers on the current developments in building energy benchmarking. Researchers and practitioners working on data acquisition technology and processes, data sharing protocols and policies, benchmarking modeling methodologies, standardization and widespread adoption, strategy and collaboration, case studies, open source platforms and crowdsourcing are invited to participate. The workshop also aims to explore the existing challenges in data acquisition techniques in emerging economies. It will foster a discussion on the widespread adoption of energy benchmarking methods while bringing together researchers and practitioners from diverse backgrounds to discuss related challenges and breakthroughs.

Topics of interest for the workshop include (but are not limited to) the following:

- Data acquisition technology and processes
- Building energy data sharing protocols and policies
- Data-driven modeling methodologies
- Top-down statistical analysis
- Simulation-based energy benchmarking
- ML, AI and analytical tools for enabling benchmarking
- Standardization, scalability and widespread adoption
- Urban-scale digitalization strategy and collaboration
- Case studies and field studies including user studies
- Open source platforms and crowdsourcing
- Advancements in energy disclosure policies and limitations

High-quality technical articles are solicited, describing advances in design, implementation, and validation of building energy benchmarking systems, as well as those which describe policy implications.

Technical papers, up to 4-6 pages (everything except references), reporting on novel research, to be presented at the workshop as an oral presentation

Submitted papers must not be under review or published elsewhere. The review of all papers will follow the general single-blind policy. The submission must be in PDF format and be formatted according to the official ACM Proceedings format. Papers that do not meet the size and formatting requirements may not be reviewed. Word and LaTeX templates are available on the ACM Publications Website. Submission implies the willingness of at least one author to register and present the paper at the workshop.

Important dates:

Paper Registration and Submission:	September 4, 2022 (AOE)
Notification of Acceptance:	September 25, 2022 (AOE)
Final Manuscript Due:	October 2, 2022 (AOE)
Submissions portal:	November 9-10, 2022