## International Conference on Sustainability in Energy and Buildings

# **Invited Sessions**

**Title of Session:** Smart Cities & Sustainability: Integrating Technology for Urban Resilience and Sustainable

### Name of Chair: Dr Abhirup Khanna; Dr Tanupriya Choudhury

#### **Description:**

The integration of smart technologies in urban areas has transformed the way city's function and respond to the needs of their residents. The proposed special session, "Smart Cities & Sustainability," will bring together experts from academia, industry, and government to discuss and explore the potential of smart technologies in promoting sustainable urban development. The session will cover the latest research, case studies, and technological innovations that drive cities toward becoming more resilient, environmentally sustainable, and socially inclusive. As urban populations continue to grow, the need for sustainable and efficient urban management solutions becomes more critical. The concept of Smart Cities encompasses various technologies like IoT, AI, and data analytics to optimize resource use, improve infrastructure, and enhance the quality of life for residents.

Potential topics include, but are not limited to:

- Energy-efficient Smart Grids and Renewable Energy Integration
- Water Resource Management and Smart Waste Management Systems
- Urban Mobility Solutions and Sustainable Transportation
- Smart Infrastructure for Disaster Resilience and Emergency Response
- Data Analytics for Sustainable Urban Planning
- IoT and Sensor Networks for Real-time Environmental Monitoring
- AI for Optimizing Urban Resource Allocation
- Policy and Governance in Smart Cities for Inclusive Development
- Case Studies of Successful Smart Cities and Sustainability Projects

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#### **Short Bio**

Abhirup Khanna is an accomplished professional currently working as an Assistant Professor (Senior Scale) at UPES, Dehradun with a strong background in the field of education and research. He is an alumnus of The University of Melbourne, Australia. With over eight years of experience, he has made significant contributions to the institution and the academic community as a whole. In his current role at UPES, Abhirup serves as a respected faculty member and a valuable mentor to students pursuing cloud computing programs. He is known for his dynamic teaching style and his ability to inspire and motivate learners. Throughout his career, he has published various research papers in reputable journals, and has had the privilege of presenting his findings at international conferences and workshops. These experiences have not only helped in refining his research skills but have also exposed Abhirup to diverse perspectives and cutting-edge developments in the industry.

Tanupriya Choudhury (Senior Member, IEEE) received the bachelor's degree in computer science engineering from the West Bengal University of Technology, Kolkata, India, the master's degree in computer science engineering from Dr. M.G.R. University, Chennai, India, and the Ph.D. degree, in 2016.,He has fifteen years of experience in teaching and research. He is currently working as a Professor with the Department of Computer Science Engineering, University of Petroleum and Energy Studies (UPES), Dehradun. He has filed 14 patents to date and received 16 copyrights from MHRD for his software. His research interests include human computing, soft computing, cloud computing, and data mining. He has been associated with many conferences throughout India, as a TPC member and the session chair. He is a Lifetime Member of IETA, a member of IET (U.K.), and other renowned technical societies. Recently, he received the Global Outreach Education Award for Excellence in Best Young Researchers, in GOECA 2018.