

**International Conference on Sustainability in Energy and Buildings
Invited Sessions**

Title of Session: Intelligent and data-driven decision making in green urban mobility

Name, Title, and Affiliation of Chairs

Chair:

Associate Professor Chiara Bordin
Department of Computer Science
UiT, The Arctic University of Norway
chiara.bordin(at)uit.no

Co-Chaired by:

Prof Sambheet Mishra
Department of Electrical, IT, Cybernetics
University of South-Eastern Norway
sambeet.mishra(at)usn.no

Associate Professor Maria Teresa Vespucci
Department of Management,
Information and Production Engineering
University of Bergamo, Italy

Description:

In an era where sustainable urban transport has become a top priority, the combination of intelligent technology and data-driven techniques has emerged as a game-changing force in determining the future of green urban mobility. Cities throughout the world are working to optimize transportation systems, reduce environmental impact, and improve the overall quality of life for urban people by leveraging advanced analytics, artificial intelligence, and real-time data streams. This requires a highly interdisciplinary approach that includes social, technical, and economical considerations.

By leveraging advanced analytics and real-time data, cities can optimize transportation systems to reduce operational costs, enhance resource efficiency, and maximize return on investment in green mobility infrastructure. Data-driven insights enable more informed allocation of financial resources, allowing cities to prioritize investments in areas with the highest potential for reducing emissions, improving air quality, and alleviating congestion. Furthermore, intelligent mobility solutions, such as dynamic pricing models and demand-responsive transportation services, can unlock new revenue streams and cost-saving opportunities while providing affordable and accessible transportation options for urban residents.

Storage plays a pivotal role in enabling intelligent and data-driven decision-making in green urban mobility by facilitating the efficient management and utilization of energy resources. Whether it's storing renewable energy generated from sources like solar or wind power, or storing electricity to power electric vehicles (EVs), energy storage systems provide essential flexibility and reliability to urban transportation networks.

Beyond technical and economic considerations, understanding and addressing the needs, preferences, and behaviors of diverse urban populations are crucial for fostering widespread adoption and equitable access to sustainable transportation options. By including social aspects in decision-making, cities can create transportation systems that not only minimize environmental impact but also promote social equity, accessibility, and quality of life for all residents.

This interdisciplinary approach, which includes smart infrastructure, transportation planning, and environmental sustainability, has the potential to reshape how people move inside cities while also reducing the environmental impact of transportation. Stakeholders hope to build a more efficient, just, and environmentally friendly urban transportation ecosystem by implementing innovative strategies such as predictive modelling, dynamic routing algorithms, and personalised travel recommendations. As cities face the challenges of population expansion, congestion, and climate change, incorporating intelligent and data-driven decision-making remains a cornerstone in the pursuit of greener, more resilient urban mobility solutions.

We invite manuscripts covering a range of challenges and opportunities in the field of intelligent and data-driven decision-making in green urban mobility, addressing both technical and societal aspects of this important area of research and practice.

The topics of interest include, but are not limited to:

- Electric vehicles
- Mobile storage
- Optimization of Electric Vehicle Charging Infrastructure
- Storage for green transportation
- Vehicle to grid applications
- Multi-Modal transport integration for energy transition
- Optimal waste collection management
- Waste-to-energy technologies
- Shared Mobility and micro mobility
- Storage for maritime transport
- Extreme weather and electric vehicles charging
- Predictive Maintenance for Green Urban Fleets
- Dynamic Pricing Models for Sustainable Transportation
- Smart Traffic Management Systems
- Green urban Mobility Simulation and Scenario Planning
- Smart charging of electric vehicles
- Data Privacy and Security in Urban Mobility Systems
- Social Equity in Green Urban Mobility
- Policy Evaluation and Impact Assessment
- Behavioural change and nudging in transportation habits for a greener society

Submission

Each submission should be at most 10 pages in total including bibliography and well-marked appendices and must follow the Procedia proceedings format. Submissions for the conference must be made as complete papers (there is no abstract submission stage) submitted as PDF documents through the PROSE online submission and review system. <http://seb-24.kesinternational.org/submission.php>

Important dates and deadlines

- Submission of papers: 13th May 2024
- Notification of Acceptance: 17th June 2024
- Final Camera-Ready Publication File Upload and Author/Early registration: 15th July 2024
- Conference: 18-20 September 2024

Publication

The conference proceedings will be published by Springer as book chapters in a volume of the KES Smart Innovation Systems and Technologies series, submitted for indexing in Scopus and Thomson-Reuters Conference Proceedings Citation Index (CPCI) and the Web of Science

Website URL

<http://seb-24.kesinternational.org/index.php>

Email & Contact Details:

Associate Professor Chiara Bordin

Department of Computer Science

UiT, The Arctic University of Norway

chiara.bordin@uit.no

Prof Sambeet Mishra

Department of Electrical, IT, Cybernetics
University of South-Eastern Norway
sambeet.mishra(at)usn.no

Associate Professor Maria Teresa Vespucci

Department of Management,
Information and Production Engineering
University of Bergamo, Italy
maria-teresa.vespucci(at)unibg.it