

PAPER INDEX

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				1335	Why Insulation Falls Short in India's Residential Buildings A Life Cycle Cost Analysis Comparing Insulation and Air-Conditioning Systems	Gaurav Vakil ^{1,3} , Yashima Jain ^{2,4} , Prasad Vaidya ^{2,3}	1. eCube Consultancy, Aurangabad, India 2. Indian Institute for Human Settlements, Benagluru, India 3. Alliance for an Energy Efficient Economy, New Delhi, India 4. Lawrence Berkeley National Laboratory, Berkeley, USA
				1183	Assessing the Potential Impact of Kinetic Facades on Building Energy Efficiency	Ginka Rajeshwar Rao	School of Architecture and Planning, Woxsen University, Hyderabad, Telangana, India
				1263	One Watt per Square Foot: Redefining Building Energy Standards	Sneha Murthy, Venkatesh S, Zameer Ahmed, Eunice Miraclyn	McD BERL, India
				1284	XAI for Democratization of Deep Learning led Chiller Plant Performance Optimization for Commercial Buildings	Vamanie Perumal ^{1,2} , Sibibalan Balasubramaniam ² , Jayesh Jain ² , Satyanarayan Seshadri ^{1,2}	1. Indian Institute of Technology Madras, Chennai, India 2. EnergyEta Solutions Pvt. Ltd., Bangalore, India
			North East Room	1255	Rewind or Refurbishment of Electric Motors – A Study Towards Achieving Sustainability and Energy Efficiency Goals	Shruthi RN Rohit Pandita Raghu H	ABB India Ltd., Bengaluru, India
				1164	Electric Vehicle Adoption Patterns and Energy Infrastructure Analysis in Hyderabad, India A Socio-Technical Perspective	Charan Vijayan ¹ , Anoushka Mukherjee ²	1. IIHS, Bengaluru, India 2. AECOM, New Delhi, India
				1228	Concept of EV-Centric Inter-State Bus Terminals (ISBTs) as Catalysts for Accelerating EV Adoption in Hilly Regions: A Case Study of Meghalaya	Anmol Jain ¹ , Md Saddam Hussain ¹ , Sumedh Agarwal ¹ , Vikas Nimesh ²	1. Alliance for an Energy Efficient Economy, Delhi, India 2. Indian Institute of Technology Delhi, Delhi, India
				1197	Waterway Transportation: A solution to transit in Tier 2 and Tier 3 cities	Anish Perumal, Rohan Chaturvedi	R V College of Architecture, Bengaluru, India
				1368	Saving 15% Energy Usage Using Intelligent Automation for a Super-Specialty Hospital in Kerala	Listin Abey Mathew, K Selvakumar, Joyeeta Mukhopadhyay	Smart Joules Pvt Ltd, New Delhi, India
			Australia Room	1172	Clean cooking transitions for urban poor in Odisha: Bringing together the demand and supply sides	Neha Malhotra Singh, Katie Pyle, Anand Iyer	Janaagraha Centre for Citizenship and Democracy, Bengaluru, India
				1242	A Feminist Approach to Empowering Women in Rural India through Solar Energy	Shreya Borah, Priyani Pranab	Department of Policy and Management Studies, TERI School of Advanced Studies, New Delhi
				1161	Policy Advocacy and Women-Led Co-operatives as Heat Stress Mitigation Strategy	Vivek Gilani, Vedangi Sohoni, Vinita Rodrigues, Kirti Makhija	Fairconditioning Foundation, Pune, India
				1338	Developing Seasonal Energy Efficiency Ratio (SEER): A Climate-Specific Approach for India	Raj Gupta ¹ , Rana Veer Pratap ² , Jyotirmay Mathur ¹ , Vishal Garg ³	1. Centre for Energy and Environment, Jaipur, India 2. Alliance for Energy Efficient Economy, New Delhi, India 3. Plaksha University, Mohali, India

Day	Session	Time	Location	PaperID	Title	Authors	Organisation
Day 1	Session 2	11 am-12:30 pm	Main Auditorium	1246	Optimizing HVAC Energy Efficiency with Digital Twin-Enhanced Micro-Zonal Occupant-Centric Control (MZOCC)	Jeslu Celine Jacob ¹ , Debapratim Pandit ² , Joy Sen ²	1. Stanford University, California, USA 2. Indian Institute of Technology, Kharagpur, India
				1117	Integrated Architecture Framework for Indoor Environment and Energy Optimization	Arsh Arora, Ronak Sutaria, Kevin Joshi, Gaurav Rajan	Respirer Living Sciences, Pune, India
				1141	"It's cool and breezy in here!": Case study of an earth-tube cooled building in Ahmedabad	Niyati S. Naik ¹ , Dnyanada Joshi ²	Assistant Professor, Faculty of Architecture, CEPT University, Ahmedabad, India
				1179	Post-occupancy Unobtrusive Adjustments for Enhancing Daylight Access: A Study of Multi-Occupant Office Spaces in Ahmedabad	Parvathy Rajan, Minu Agarwal	CEPT University, Ahmedabad, India
				1342	The difficulties in quantifying indoor thermal comfort	Ojo Patrick Duke ^{1,2,3} , Anupama Kowli ¹ , Jenny Zhou ²	1. Department of Electrical Engineering, Indian Institute of Technology Bombay, Mumbai, India 2. Department of Civil and Environmental Engineering, Monash University, Clayton, 3. 800, VIC, Australia 3. IITB-Monash Research Academy, IIT Bombay, Mumbai, 4. 00076, Maharashtra, India
			North East Room	1188	Techno-Economic Assessment of Heat Pumps for Decarbonizing Dairy Processing Industry	Nishant Modi ¹ , Aswin Raghunathan ^{1,2} , and Satyanarayanan Seshadri ^{1,2}	1. Energy & Emissions Research Group (EnERG), Department of Applied Mechanics and Biomedical Engineering, Indian Institute of Technology Madras, Chennai, India. 2. Trigen Decarbonisation Private Limited, Chennai, India.
				1182	Advancing Performance Evaluation and Policy Implementation for More Sustainable Air Conditioners and Heat Pumps	Miquel Pitarch Mocholi ¹ , Won Young Park ² , Yash Shukla ³ , Ankit Kalanki ⁴ , Brian Holuj ¹ , Nihar Shah ² , Patrick Blake ¹ , Saikiran Kasamsetty ¹	United Nations Environment Programme; 2. : Lawrence Berkeley National Laboratory; 3. : CEPT Research and Development Foundation, CEPT University; 4. : RMI
				1231	Improving Radiant Cooling Ceiling Panels: A product development experience	Manoj Hegde ¹ , Amanda Thounaojam ¹ , Prasad Vaidya ¹ , Guruprakash Sastry ² , Punit H Desai ²	1. Indian Institute for Human Settlements, Bangalore, India 2. Infosys Limited, Bangalore, India
				1285	Dynamic Display of Power in Room Air Conditioner- via Urja Sanchay	Paras Bhattarai, Sumedh Agarwal	Alliance for an Energy Efficient Economy (AEEE), New Delhi
				1167	Bridging Climate Goals and Local Action, A Planning Support System for Urban Resilience	Saket Sarraf ¹ , Shivang Vyas ² , Archana Mittal ²	1. ps Collective, Ahmedabad, India 2. Independent consultant, Ahmedabad, India
			Australia Room	1260	Enhancing Urban Flood Resilience with Nature-based Solutions: A Comparative Review of Global Case Studies	Devesh Tripathi, Aaditya Pratap Sanyal	Indian Institute of Technology (BHU), Varanasi, India
				1305	Analyzing Urban Heat Island Dynamics in Lucknow for Sustainable Heat Mitigation Strategies	Anugrah Singh, Farheen Bano, Ritu Gulati	Faculty of Architecture and Planning, AKTU, Lucknow, India
				1178	Post occupancy assessment of urban cooling strategies for heat island mitigation	Deepa Parekh ¹ , Sakshi Agrawal ¹ , Shatakshi Suman ² , Aun Abdullah ² , Atul Patil ² , Akhil Singhal ³ , Mrinal Shrivastava ³	1. Kapadia Associates, Mumbai, India 2. Lodha Group, Mumbai, India 3. RMI India Foundation, Mumbai, India
				1298	Building Stock Intelligence: Leveraging Geospatial Analytics for Urban Landscape Assessment in India	Rohit Jindal, Jorley Johnson	Alliance for an Energy Efficient Economy, New Delhi, India



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Day 2	Session 3	9 am-10:30 am	Main Auditorium	1126	Million square feet of super-efficient office space: A case study	Pooja Suresh Hollannavar ¹ , Prasad Vaidya ¹ , Manoj Hegde ¹ , Guruprakash Sastry ³	1. Indian Institute for Human Settlements, Bangalore, India 2. Infosys, Bangalore, India
				1290	Surviving the Choppy Waters: A Case of Floods and Resilience in Kolhapur	Soham Dange	Visvesvaraya National Institute of Technology, Nagpur
				1323	Performance Assessment of BIPV Cladding: Integration Approaches for Summer and Winter	Priyanka Rai, Amartya Chowdhury	Centre for Energy and Environment, Jaipur, India
				1159	Design To Renew: Environmental Retrofit Pathways to Delhi's Low Rise High Density Residential Fabric	Harshit Narnoli, Joana Goncalves, Simos Yannas	Architectural Association School of Architecture, London, United Kingdom
				1207	Assessment of Solar-Air Temperature Dynamics using Real-Time Climatic Data via a Revamped Radiant Time Series Approach	Shyamvishal Dangi ¹ , R. R. Bhavsar ¹ , Shashi Kumar Jain ²	1. Space Applications Centre, Ahmedabad, India 2. Technocrats Institute of Technology, Bhopal, India
			North East Room	1214	Smart Cooling Strategies for Cold Storage: R290-Based Subcooling and Solar Integration	Mani Sankar Dasgupta	Birla Institute of Technology and Science, Pilani, India
				1232	Evidence-based analysis of cold storage inefficiencies in Uttar Pradesh	Akansha Ujala Dean, Santosh Kumar Saini, Khushboo Gupta	Alliance for an Energy Efficient Economy (AEEE), New Delhi, India
				1237	On-Board Propane Refrigeration for Post-Harvest Fish Preservation in Small Fishing Boats: A Energetic and Environmental Assessment	Prosenjit Singha, Mani Sankar Dasgupta	Department of Mechanical Engineering, BITS Pilani, 333031. , India,
				1302	Mathematical modelling and sizing of solar photovoltaic-powered decentralised cold room with hybrid storage system	Sreelekha Arun ¹ , Anindita Roy ¹ , Stefano Landini ² , Akshay Pahade ³	1. Symbiosis Institute of Technology, Pune, India 2. University of East Anglia, Norwich, UK 3. Gratitude Synergy, Pune, India
			Australia Room	1148	Climate Smart Innovation: Driving Market Transformation for Built-Environment Startups	Suyashi Srivastava ¹ , Ritabrata Sen ¹ , Prasad Vaidya ¹ , Geetha Krishnan ²	1. Alliance for an Energy Efficient Economy (AEEE), Delhi, India 2. Indian Institute for Human Settlements (IIHS), Bangalore, India
				1281	Studying energy transition governance in the buildings sector: Insights from the Energy Transition Preparedness Initiative (ETPI)	Rushabh Soni ¹ , Sumedha Malaviya ² , Deepak Tewari ³	1. WRI India, Mumbai, India 2. WRI India, Bengaluru, India 3. WRI India, New Delhi, India
				1283	Bridging the gaps: A Critical Evaluation of Building Byelaws and Strategies for Integrating Sustainability	Harshada Akolkar, Shweta Kulkarni	Prayas Energy Group, Pune, India
				1261	Financing Sustainable Development in Urban India	Winamra Negi	AEEE, New Delhi, India

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				1279	Sustainable Design of a Commercial Building in Delhi through High-Performance Analysis and Life Cycle Assessment	Ankur Kulkarni, Swati Sawant, Ambar Mittal	Kaizen Design Solutions Pvt Ltd, Mumbai, India,
				1111	Analysis of Life-Cycle Carbon Emissions from Urban Residential Buildings Located at Bengaluru	Saswati Chetia ¹ , Nivit Mital ¹ , Sonija Kapoora Phogat ¹ , Prashant Bhanware ¹ , Mohit Jain ¹ , Sameer Maithel ²	1. Greentech Knowledge Solutions (P) Ltd., New Delhi, India 2. Independent Practitioner, Bengaluru, India
				1269	Climate-Responsive Architecture in Arid Regions: A Correlative Study of India and KSA	Ruman Madambi, Shamri. NP	Eranad Knowledge City College of Architecture, Manjeri, Malappuram, India
				1245	Evaluating the influence of trees evapotranspiration on building cooling demand A study in hot and dry climate	Neha Salat, Subham Das, Tej Chawda	1. CEPT University, Ahmedabad, India 2. CARBSE, CEPT University, Ahmedabad, India
			North East Room	1149	B-TMSG– DC (Biomass Gasifier based Thermoelectric Static Module Generator	Vijay Mamtani	Prayogik, Bhopal, India
				1151	SCADA-Integrated Residential BTU Metering: Enhancing Energy Efficiency and Smart Monitoring	Kartik Kumar Prajapati, Jaydeep Chakravorty	Indus University, Ahmedabad, India
				1173	Insights on Decarbonization Strategies for Ethylene Production through Planning and Thermodynamic Models	Bhawna Chauhan, Asad H. Sahir	Indian Institute of Technology Ropar, Rupnagar, India
				1177	Solar Irradiance Forecasting: From Machine Learning Models to Poor Man's Ensemble	Mathew George, Ankit Varma, Prasad Vaidya	Indian Institute for Human Settlements (IIHS), Bangalore, India - 560024
				1202	Energy Audits for Circular Economy: Advancing Sustainable Manufacturing in Nepal's Pulp and Paper Industry	Amrit Abhamani Dhakal ^{1,2,3} , Yaju Shrestha ^{1,3} , Hemanta Bhandari ^{1,2,3} , Ayush Adhikari ^{1,2,3} , Muna Bhattarai ^{1,3} , Sampurna Ghimire ¹	1. Rastriya Urja Dakshata Kendra Pvt. Ltd., Kathmandu, Nepal 2. Institute for Energy Efficiency and Climate Studies, Kathmandu, Nepal 3. Association of Energy Engineers- Nepal Chapter, Kathmandu, Nepal
			Australia Room	1128	Cold Chains and Carbon Gains: Tapping India's Frozen Potential	Vivek Singh	Alliance for an Energy Efficient Economy, New-Delhi, India
				1215	Energy Consumption in the Indian Manufacturing Sector during 2000-01 to 2021-22: An Index Decomposition Analysis in the Context of Perform, Achieve and Trade	Chalantika Chakraborty, Nisha Rani, Shyamasree Dasgupta	School of Humanities and Social Sciences, Indian Institute of Technology Mandi.
				1249	Scaling DRE-based Micro Cold Rooms in Maharashtra Through Policy and Financing Solutions	Shubham Mankar	Alliance for an Energy Efficient Economy, New-Delhi, India
				1191	Analyzing the Policy Landscape for Supporting the Clean Energy Transition in Small and Medium Enterprises in India	Gowthami TS	World Resources Institute

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				1175	Identifying synergies between circular economy and resilience through shelter design in impacted communities	Mehak Gupta ¹ ; Swarnahiya Ganguly ¹ ; Asad Sahir ²	1. Consulting Architect, Alumnus - MBS School of Planning and Architecture, New Delhi 2. Indian Institute of Technology Ropar, India
				1258	Systematic Literature Review of GIS and AI applications to Construction & Demolition Waste Management to promote Circular Economy.	Parvinder Kaur Marwah, Prof. (Dr.) Neeraja Lugani Sethi	Guru Gobind Singh Indraprastha University, University School of Architecture and Planning, New Delhi
				1247	Assessing Thermal Comfort and Retrofit Performance through Simulation in a High-Rise Aluminium Formwork Apartment under Composite Climate	Rahul Ukey, Himanshu Saini, Krishan Sharma, Brijesh Pandey, Raj Kumar Verma	Alliance for an Energy Efficient Economy, New-Delhi, India
			North East Room	1145	Charge Ahead: Harnessing Electric Vehicles for Utility Growth and a Greener Tomorrow	Anmol Jain ¹ , Md Saddam Hussain ¹ , Sumedh Agarwal ¹ , Vikas Nimesh ²	1. Alliance for an Energy Efficient Economy, Delhi, India 2. Indian Institute of Technology Delhi, Delhi, India
				1153	EVCI Planner Tool: A systematic approach to siting charging infrastructure in Indian cities and along freight corridors	Shaurya Anand ¹ , Prajкта Adhikari ¹ , Ira Athale Prem ²	1. MP Ensystems, Mumbai, India, 2. MP Ensystems, Goa, India ²
				1184	Deep Learning and GIS for Optimal Placement of Electric Vehicle Charging Infrastructure in Urban Networks	Hindesh Akash Dr. Pushpendra Singh Abhishek Padmanabhan Jyotirmayee Sabat	Atria University
				1344	Assessing Health Impacts of Auto-Rickshaw Drivers and its Relationship with PM Exposure Along Kolkata's Arterial Routes	Sampreet Dasgupta, Kapil Kumar Meena, Dr. Deepanjan Majumdar, Dr. Arkopal K. Goswami	Indian Institute of Technology Kharagpur, Kharagpur, India
			Australia Room	1347	Solar-Powered Regenerative Cooling for Hot and Dry Regions: A Case Study of Dew Point Regenerative Cooling Technology Implementation in India	Jeeten Desai	Ambiator Private Limited, India
				1349	A Multi-Faceted Approach to Scaling Community Solar in Urban India	Saket Sarraf, Shreya Bansal	ps Collective, Ahmedabad, India
				1355	B-TMSG– DC (Biomass Gasifier based Thermoelectric Static Module Generator	Vijay Mamtani	Prayogik, Bhopal, India
				1373	Role of Advanced Filter Media Technologies in Optimizing Indoor Air Quality and Energy Performance in Office Buildings	Manu Shetty	Hollingsworth & Vose, India

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				1350	Measuring What is Inside: LCA of Office Interiors in India's IT Hubs	Mili Jain ¹ , Harekrishna Mishra ² , Sruthin Vijay ¹ , Avnish Parekh ¹	1. Monk Spaces, New Delhi, India 2. ITC Limited, Bengaluru, India
				1356	In-Situ Monitoring-Based Comparative Study on Enhancing Thermal Comfort through Passive Design in Cold-Climate Housing: Jiri, Nepal	Jahnvi Mehta, Prashant Bhanware, Saswati Chetia	Greentech Knowledge Solutions Pvt. Ltd., New Delhi, India
				1358	Thermal Comfort Monitoring in Low-Income Housing: A Comparative Study in Bardiya, Nepal	Jahnvi Mehta, Prashant Bhanware, Saswati Chetia	Greentech Knowledge Solutions Pvt. Ltd., New Delhi, India
				1360	Net zero energy in commercial buildings: A case study of Design2Occupancy	Sushant Koolwal, Ashu Gupta, Balwinder Singh, Nishtha Jain	Design2. Occupancy, Jaipur, India
			North East Room	1352	Sustainable Cooling: Measured Performance of an Indirect Direct Evaporative Cooling Installation	Arjita Gupta ¹ , Prasad Vaidya ¹ , Tiger Aster ² , Vivek Leonard ¹	1. : IIHS, India; 2. : Ambiator
				1359	Advancing Cool Roofs in Indian Cities: Case Studies from Uttar Pradesh and Rajasthan	Anshima Mishra ¹ , Ritika Kapoor ¹ , Gerry George ¹ , Sri Saahitya Uppalapati ²	1. Natural Resources Defense Council India, New Delhi 2. Natural Resources Defense Council, New York
				1362	Design and Experimental Evaluation of a Sustainable HVAC System Coupled with Latent Heat Thermal Energy Storage	Sudhir Kumar Gupta ¹ , B. Premachandran ¹ , Dibakar Rakshit ^{1,2} , K. Ravi Kumar ^{1,2} , K. S. Reddy ³	1. Indian Institute of Technology Delhi, Hauz Khas, New Delhi 1. 1. 001. 6, India 2. Indian Institute of Technology Delhi Abu Dhabi, Khalifa City B, Abu Dhabi, UAE 3. Indian Institute of Technology Madras, Chennai 60003. 6, India
			Australia Room	1374	Energy efficient building and HVAC industrial site at Vadodara (HILTI Group)	Ankit Srivastava ¹ , Gernot Schubert ² , Pierre Jaboyedoff ³	1. Hilti, Vadodara, India 2. Hilti, Schaan, Liechtenstein 3. Effin'Art, Crissier, Switzerland
				1353	Design and Development of a Desiccant Coated M-cycle Cooler	Pranav Kumar Iyer	Indian Coast Guard, India
				1354	Root Cause Analysis on Energy Savings in Affinity Law-Based Applications Using Energy Efficient Motors	Prakash. V ¹ , Kalpana, J ² , Ravi Sankar. V ³ , Siva Kumar. M ⁴	1. Kalasalingam Academy of Research and Education, Virudhunagar, India, 2. NIT-Tiruchirappalli, Trichy, India, 3. Thiagarajar college of engineering, Madurai, India, 4. SRM TRP Engineering College, Trichy, India
				1371	M&V for Energy Efficiency Projects: From Invisible Savings to Verified Performance	Vipin Rohilla ¹ , Anand Kumar Singh ¹ , Rohan Kadamb	Alliance for an Energy Efficient Economy, New Delhi, India
				1372	Case Study: Transition from Coal-Based Furnace to Gas-Based Furnace in Moradabad Brass Cluster	Mrinal Saurabh Bhaskar ¹ , Balendu Bhushan Pandey ² , Vipin Rohilla ³	1. AEEE 1, Mumbai 1, India 1 2. AEEE 2, New Delhi 2, India 2 3. AEEE 3, New Delhi 3, India 3