



University of
Salford
MANCHESTER



International Retrofit Conference 2025

Programme & Abstract Booklet

3-4 July 2025

University of Salford

Day 1 Programme (Thursday 3 July 2025)

Time	Event		
08:30-09:20	New Adelphi Atrium Registration and Networking		
09:20-09:30	New Adelphi Theatre Opening: <i>William Swan, Director at Energy House Labs</i>		
09:30-10:00	New Adelphi Theatre Keynote Speaker 1: The Wicked Problem of Retrofit <i>William Swan, Director at Energy House Labs</i>		
10:00-10:30	New Adelphi Theatre Keynote Speaker 2: Beyond Incrementalism: The Radical Retrofit Needed for True Building Decarbonisation <i>Jan Rosenow, Senior Associate of the Cambridge Institute for Sustainability Leadership</i>		
10:30-11:00	New Adelphi Atrium Coffee Break		
11:00-11:30	New Adelphi Theatre Keynote Speaker 3: The multiple benefits, challenges and dilemmas of retrofit. <i>Gavin Killip, Professor of Buildings & Energy Policy at Nottingham Trent University</i>		
11:30-13:15	Parallel Sessions (15 mins presentation per speaker + 15 mins Q&A for all speakers)		
New Adelphi Theatre Performance and evaluation 1		Room 1.16 (Performance Rehearsal Room) Retrofit design and delivery 1	Room 1.17 (Studio Theatre) Scaling up and occupant
Chair: Yingchun Ji, University of Salford		Chair: David Glew, Leeds Beckett University	Chair: Angela Connelly, Manchester Metropolitan University
Evaluating the hygrothermal performance and associated benefits and risks of replacement infill panels for historic timber-framed buildings in the UK. <i>Chris Whitman, Cardiff University</i>		Thermal Imaging in Building Diagnostics: A Systematic Review of Applications, Challenges, and Opportunities <i>Ibrahim Abaji, University of Salford</i>	Enhancing Labour Productivity in Retrofitted Works Towards Construction and Environmental Sustainability in Ghana <i>Emmanuel Akoi-Gyebi Adjei, Accra Technical University</i>
How can we ensure that a net-zero retrofit has been achieved? <i>Lubo Jankovic, University of Salford</i>		Transforming retrofit: how understanding housing as a cultural asset can develop more effective relational and regenerative retrofit designs. <i>Lucy McFadzean, University of Exeter</i>	A Proposal for a Retrofit Master Degree in University Education: Bridging the Skills Gap <i>Chamara Sandaruwan, University of Salford</i>
Are we underestimating the embodied impact of home improvements?		Timber MMC Retrofit Case Study Analysis of Embodied Carbon Impact	A Five-Dimensional Framework for Assessing Landlord Knowledge in Housing Retrofit Projects

<i>Rosemary Fieldson, University of Lincoln</i>	<i>Jiar Sadiq, Edinburgh Napier University</i>	<i>Fengwen Yan, University of Manchester</i>
Appraisal Of Energy Management Measures in Residential Sector in Nigeria <i>Olusola Akinsanya, Federal Polytechnic Ado Ekiti Nigeria</i>	Qualitative analysis of stakeholders' perspectives on the adoption of Nature Based Solutions (NBS) in the adaptive reuse of urban housing projects: An interim report <i>Zahra Sharif Tehrani, University of Plymouth</i>	Towards a Socio-technical Post Occupancy Evaluation Methodology for Private Rental Residential Retrofit Occupant Satisfaction <i>Jill Zhao, UWE Bristol</i>
Effect of heating system heat flow pathway on energy utilisation <i>Andy Williams, University of Chester</i>	Is Pas 2035 the Silver Bullet for Retrofit? <i>Paul Mundy, UWE Bristol</i>	Automating O&M Manual Data Extraction for Retrofit Applications: Assessing GPT-4o's Performance and Challenges <i>Peter Childs, Imperial College London</i>
A comparison of SAP assumptions vs measured U-value and airtightness in pre-1919 dwellings. A case study approach. <i>Richard Fitton, University of Salford</i>	Multi-Objective Optimisation of Zero-Operational Carbon Retrofit Strategies for Office Buildings in Tropical Climates: Insights from an Indonesian Case Study <i>Nissa Aulia Ardiani, University of Liverpool</i>	Enhancing Productivity in Retrofitting Works: Perspective of Labour <i>Emmanuel Akoi-Gyebi Adjei, Accra Technical University</i>
Q&A session for all speakers	Q&A session for all speakers	Q&A session for all speakers
13:15-14:15	New Adelphi Atrium Lunch	
14:15-14:45	New Adelphi Theatre Keynote Speaker 4: Future-Fit Retrofit: Navigating the Nexus of Complexity, Innovation, and Resilience <i>Rokia Raslan, Professor of Built Environment Decarbonisation at the UCL Institute for Environmental Design and Engineering</i>	
14:45-15:15	New Adelphi Theatre Keynote Speaker 5: Retrofit Re-examined: Reflections on UK's first zero carbon retrofit <i>John Christophers, Retrofit Designer of Zero Carbon House</i> <i>Lubo Jankovic, Professor of Energy & Buildings at Energy House Labs</i>	
15:15-15:30	New Adelphi Atrium Coffee Break	
15:30-17:15	Parallel Sessions (15 mins presentation per speaker + 15 mins Q&A for all speakers)	
New Adelphi Theatre Performance and evaluation 2	Room 1.16 (Performance Rehearsal Room) Retrofit design and delivery 2	Room 1.17 (Studio Theatre) Performance and evaluation 3 & policies
Chair: Chris Whitman, Cardiff University	Chair: Jill Zhao, UWE Bristol	Chair: Rosemary Fieldson, University of Lincoln

Study of compressed earth brick and bio-based test houses in Sense-City equipment: instrumentation, hygrothermal behavior and energy efficiency <i>Yan Ulanowski, Université Gustave Eiffel</i>	Assessment of Cooling Loads and Energy Cost Implications for Integrated Insulating Materials in Retrofitting Direct Iron Processing Plant Buildings for Improved Sustainability and Energy Efficiency <i>Anthony Adeyanju, The University of the West Indies</i>	Barriers to the effective assessment of economic benefits of retrofit projects. <i>Sharon Bhorkar, Leeds Beckett University</i>
A comparison of low- and high-pressure airtightness test methods in existing UK dwellings <i>Felix Thomas, Leeds Beckett University</i>	Exploring Net-Zero Solutions for High-Density Building Retrofits <i>Sam Ahmadzadeh, University of the West of Scotland</i>	Evidence Landscape for Surfactant Based Energy Saving Heating and Cooling Water Additives <i>Andy Williams, University of Chester</i>
Performance assessment of a 'new skin' deep renovation concept through in-situ measurements <i>Twan Rovers, Saxion University of Applied Sciences</i>	Viability study of external thermally insulated panelised systems for housing retrofit <i>James Wakefield, Retrofit Laboratories Ltd.</i>	Heritage Retrofit Methodology: A Comprehensive Framework for Scalable Net-Zero Retrofit <i>Haniyeh Mohammadpourkarbasi, University of Liverpool</i>
Comparison of modelling techniques and HTC measurements in a UK dwelling pre- and post- retrofit <i>Sarah Price, Leeds Beckett University</i>	Transformative justice framework for analysing home energy retrofits <i>Ketki Mehta, University of Salford</i>	Retrofitting As Strategy For Residential Energy Management In Nigeria <i>Olusola Akinsanya, Federal Polytechnic Ado Ekiti Nigeria</i>
Simulating HTC Measurements for Increased Confidence in Retrofit Performance Predictions <i>Mark Collett, Leeds Beckett University</i>	Grassroots to Industry: Retrofit and Restoration in Undergraduate Architectural Studies. <i>Maria Yioutani-Iacovides, University of Salford</i>	Bringing mitigation and adaptation together to ensure healthy and resilient homes for all: what the research says <i>Angela Connelly, Manchester Metropolitan University</i>
Impacts of air permeability on heating demand for residential housing retrofit in the UK <i>Yingchun Ji, University of Salford</i>	Lean Retrofit: Methods and Application for Best Practice <i>Paul Coates, University of Salford</i>	Deciding on retrofit: engaging with home owners in Greater Manchester <i>Graeme Sherriff, University of Salford</i>
Q&A session for all speakers	Q&A session for all speakers	Q&A session for all speakers
17:15-18:15	Tour of Energy House 2.0	
19:30-22:30	Conference Dinner	

Day 2 Programme (Friday 4 July 2025)

Friday 4 July 2025

Time	Event		
08:30-09:20	New Adelphi Atrium Registration and Networking		
09:20-09:30	New Adelphi Theatre Opening: <i>William Swan, Director at Energy House Labs</i>		
09:30-10:00	New Adelphi Theatre Keynote Speaker 1: Residential heating optimisation and affordability – are we failing the least well off? <i>Colin Timmins, Director of Homes at National Energy Action</i>		
10:00-10:30	New Adelphi Theatre Keynote Speaker 2: The Retrofit of Traditional and Historic Building <i>John Edwards, Director from Edwards Hart Consultants (national authorities on heritage retrofit)</i>		
10:30-11:00	New Adelphi Atrium Coffee Break		
11:00-11:30	New Adelphi Theatre Keynote Speaker 3: Accelerating Retrofit through Devolution <i>Dan Griffiths, Greater Manchester Combined Authority</i>		
11:30-12:30	Parallel Sessions		
Retrofit Assessment – An introduction and discussion around the upcoming standard BS 40104 Assessment of dwellings for retrofit <i>Colin McKerracher, BSI</i>	New Adelphi Theatre BSI Launch (1 hour panel discussion)	Room 1.16 (Performance Rehearsal Room) Industry sponsor presentation 1 (30 mins per speaker)	Room 1.17 (Studio Theatre) Industry papers 1 (15 mins presentation per speaker + Q&A for all speakers)
	Chair: Richard Fitton, University of Salford	Chair: William Swan, University of Salford	Chair: Lubo Jankovic, University of Salford
		How do we tackle the current funding landscape to enable more retrofit in social housing? <i>Regan Costello, Seddon</i>	Home Advantage: supporting households transition to net zero <i>Elizabeth Murray-Clarke, Hubbub</i>
			Sunamp Heat Battery as a Pre-heating Solution for Domestic Hot Water Heating: A Case Study Evaluation <i>Catalina Dobas, Sunamp Ltd</i>
		Insights from airtightness testing 35,000 existing UK homes <i>Luke Smith, Build Test Solutions</i>	Lessons Learned from Retrofit Projects in Canada <i>Mike Battistel and Zahra Mosharzadeh, Cascadia Windows & Doors</i>
			Evaluating the Energy-Saving Potential of Innovative Window Blinds in the UK

		<i>Christopher Tsang, University of Salford</i>
		Q&A session for all speakers
12:30-14:00	New Adelphi Atrium Lunch & Exhibition	
14:00-15:00	Parallel Sessions	
New Adelphi Theatre Industry sponsor presentation 2 (30 mins per speaker)	Room 1.16 (Performance Rehearsal Room) Industry sponsor presentation 3 (30 mins per speaker)	Room 1.17 (Studio Theatre) Industry papers 2 (15 mins presentation per speaker + Q&A for all speakers)
Chair: William Swan, University of Salford	Chair: Richard Fitton, University of Salford	Chair: Christopher Tsang, University of Salford
My Innovation Journey <i>Keith Rimmer, Thermocill</i>	Heating for Smaller Homes <i>Oliver Baker, Ambion Heating</i>	Open Source Property Archotyping for Domestic Retrofit Knowledge Sharing at Scale <i>Jon Moorhouse, Constructive Thinking Studio Ltd</i>
		Unlocking Retrofit for Blocks of Flats: how and when is building performance modelling useful for people who live in flats? <i>Lizzy Pettitt, KLH Sustainability</i>
Affordable zero carbon retrofit, from calculation to delivery <i>Charlie Baker, Red co-operative ltd</i>	Measuring the thermal performance of buildings at scale <i>Richard Jack, Build Test Solutions</i>	Retrofit of floor insulation and scaling with robotic technology <i>Peter Childs, Imperial College London and Q-Bot Ltd</i>
		Comparative Analysis of Residential Building Retrofit Processes in Spain and United Kingdom: Regulatory Frameworks, Implementation Strategies, and Funding Mechanisms <i>Yashna Calleechurn, Constructive Thinking Studio Ltd</i>
		Q&A session for all speakers
15:00-15:30	New Adelphi Theatre Keynote Speaker 4: Technology Pathways for Energy-Efficient Homes: A Decision-Making Toolkit <i>Filip Descamps, Partner at Daidalos Peutz building physics engineering (Leuven, Belgium)</i>	
15:30-16:00	New Adelphi Theatre Keynote Speaker 5: Exploring the Retrofit Experience for Homeowners <i>Marianne Heaslip, Technical Director, People Powered Retrofit</i>	
16:00-16:10	New Adelphi Theatre Closing: <i>William Swan, Director at Energy House Labs</i>	
16:10-17:00	Tour of Energy House 2.0	