

**EAST MIDLANDS ENERGY CONFERENCE – 3 DECEMBER 2025**  
**MASSON MILLS, DERBYSHIRE**  
**AGENDA**

08:00am	<b>Registration, coffee, tea, biscuits and networking</b>
09:00am (5mins)	<b>Welcome to the Conference</b> – Richard Blackmore, Director of Policy and Insight, East Midlands Chamber (Derbyshire, Nottinghamshire, Leicestershire)
09:05am (10mins)	<p><b>Welcome</b> - Ben Sumner, Innovation Clusters Director, University of Nottingham</p> <p>Ben Sumner is Innovation Clusters Director at the university and its former Director of Engagement and Partnerships. His focus is on building partnerships with industry to accelerate the real-world impact of zero carbon technologies being developed at Nottingham</p>
09:15am (15mins)	<p><b>Welcome</b> - Dean Needle, Director Derwent Hydroelectric Power (DHP) - introduction to DHP's operations.</p> <p>Overview of DHP detailing complex projects, providing support for both private and corporate clients, including Derby City Council, Chatsworth and Cromford Mill.</p>
09:30am (15mins)	<p><b>1Energy - District Heat Networks – the next generation</b> - Fei Zheng, Project Director, The Derby Energy Network</p> <p>Detail of a new initiative in Derby City to reshape the way Derby heats homes and buildings. This low-carbon heat network is delivered by 1Energy who has secured £100 million in private capital to develop a city-wide heat network on top securing of £23 million in government funding to kick-start the project.</p>
09:45am (40mins)	<p><b>Energy Research Challenges - student case studies on the future of energy creation and storage</b> – Introduced by Professor David Grant, Director of the University of Nottingham Energy Institute</p> <p><b>Transport and mobility: Title: Electric Machines Driving Aircraft Electrification - Linnan Sun</b> Aircraft are undergoing a steady transition from conventional systems to more-electric and all-electric architectures. Throughout this evolution, electric machines play an increasingly critical role. Ongoing research on machine technologies enhances performance and facilitates this electrification journey.</p> <p><b>About the speaker:</b> Linnan holds dual PhD degrees in Electro-Mechanical Engineering from Ghent University and Nanjing University. She is currently an Anne McLaren Fellow at the University of Nottingham. Her research focuses on the design of electric machines for aircraft electrification and advanced propulsion systems.</p> <p><b>Energy generation and management: Metal Hydride Buffering of Offshore Generated Hydrogen - Amelia-Rose Edgley</b> Green hydrogen can be generated using offshore wind, for future power and fuel requirements. However, return to shore can pose difficulties due to the intermittency of wind. Intermediate buffer storage of the hydrogen can help solve this but requires large volume requirements in gaseous form. Metal hydrides are a potential solution to combatting this</p>

	<p>issue, and the research aims to prove the viability of this, whilst also finding a suitable candidate.</p> <p><b>About the speaker:</b> Amelia-Rose is a final year PhD student in Sustainable Hydrogen. She is currently completing her thesis on the use of metal hydrides as buffer storage</p> <p><b>Communities and built environment: Community Energy in Practice: Lessons from Real-World Demonstrators - Mitchell Searjeant</b> Insights from real-world community energy projects including Trent Basin and the Meadows in Nottingham. Drawing on hands-on experience with data collection, forecasting, billing innovation, and resident engagement, it explores how communities can operate as flexible, low-carbon energy ecosystems. The presentation emphasises the importance of accurate forecasting of solar generation and electricity demand to fully utilise flexible assets such as battery storage and optimise community-level performance. It also reflects on the challenges and opportunities involved in deploying solar and battery systems, implementing fair billing mechanisms, and enhancing energy resilience within the built environment.</p> <p><b>About the Speaker:</b> Mitchell is a PhD student and researcher specialising in community energy systems, data-driven modelling, and techno-economic analysis. His work focuses on bridging research and practice through demonstrator projects that improve flexibility, transparency, and fairness in local energy networks.</p>
10:25am (15mins)	<p><b>Regional energy update from the East Midlands Combined County Authority - Michael Gallagher, Director of Green Growth &amp; Climate Resilience, East Midlands Combined County Authority (EMCCA)</b></p> <p>We will hear about the work of the Green Growth and Climate Resilience team in the context of the wider EMCCA organisation. We will cover</p> <ul style="list-style-type: none"> <li>- Projects that have been completed</li> <li>- Projects that are in progress</li> <li>- Future ambitions of the organisation</li> <li>- Detailing the collaborative network that is driving change in the region and the strategies and plans that underpin the activity.</li> </ul>
10:40 (30mins)	<b>Break</b>
11:10am (20mins)	<p><b>STEP Fusion: Positioning East Midlands at the heart of the emerging fusion energy sector – Ben Bradley, Head of Communications and Engagement, UK Industrial Fusion Solutions Ltd.</b></p> <p>The presentation will provide a brief introduction to fusion energy, and describe the pathway to its commercial realisation via the STEP programme, which is being led by UK Industrial Fusion Solutions, Ltd. Targeting 2040 for the delivery of the STEP Prototype Plant at the West Burton site in Nottinghamshire, we will discuss how this programme is designed to drive benefits, both regionally and nationally, and highlight some of the exciting opportunities for the businesses and universities of our region.</p> <p>UK Industrial Fusion Solutions Ltd (<b>UKIFS</b>), is a wholly owned subsidiary of the UK Atomic Energy Authority (UKAEA) Group</p> <p>Ben joined as Head of Communications and Engagement in March 2025, where he leads the strategic development and delivery of all internal and external communications.</p>

	His connection to the STEP programme goes back to 2021, when he led the campaign to bring STEP Fusion to West Burton as Leader of Nottinghamshire County Council. As a former Member of Parliament and Board Member of the East Midlands Combined Authority, Ben brings significant experience and a unique understanding of both local and national stakeholders.
11:30am (15mins)	<p><b>Swadlincote Energy Recovery Facility (SERF) – market leading Energy from Waste (EfW) project</b> – Adam Hinds, Director, R&amp;P Clean Power</p> <p>Overview of a new Energy from Waste project being developed in in Swadlincote, Derbyshire, the Swadlincote Energy Recovery Facility (SERF).</p> <p>This plant will combust 230,000 tonnes of Derbyshire's waste to generate c.23MWe of net power and up to 20MWth of heat which will be available for offtake by local businesses and industries. This low carbon baseload power and heat will support offtakers meet their sustainability goals whilst promoting a circular economy and contributing to the region's waste management targets. The plant will stimulate job creation and will mobilise over £250m of private sector investment into the local economy.</p>
11:45am (20mins)	<p><b>Flogas(DCC Energy UK) Business Case Study</b> - Jaz Aujla, Strategic Energy Partner, Flogas (DCC Energy UK)</p> <p>How the company has supported the transition from fossil fuels to lower carbon alternatives and now providing a “transitional” energy source to deliver decarbonisation goals, including some of the work they are doing with Bio-LPG.</p>
12:05pm (15min)	<p><b>The Peak Cluster</b> – John Egan, CEO, Peak Cluster Ltd</p> <p>Overview of the Peak Cluster, which brings together the UK's leading producers to decarbonise 40% of the UK's cement and lime production using carbon capture and storage technology.</p>
12:20pm (40min)	<p><b>Panel Discussion - the approach to energy production, storage and infrastructure and the role of business in supporting decarbonisation</b> - Chaired by Richard Blackmore, Director of Policy and Insight, East Midlands Chamber</p> <ul style="list-style-type: none"> <li>• Professor David Grant, Director of the University of Nottingham Energy Institute</li> <li>• Adam Hinds, Director, R&amp;P Clean Power</li> <li>• Jaz Aujla, Strategic Energy Partner, Flogas (DCC Energy UK)</li> <li>• Michael Gallagher, Director of Green Growth &amp; Climate Resilience, East Midlands Combined County Authority (EMCCA)</li> </ul>
13:00pm	Close – buffet lunch

From 2pm to 3:30pm – Our hosts are offering a discounted tour of Sir Richard Arkwright's 1783 cotton spinning mill to explore the extensive collection of heritage textile machinery, along with their hydroelectric capability: <https://www.eventbrite.co.uk/e/emc-private-museum-tour-tickets-1571323584139?aff=oddtcreator>