CONFERENCE 2025 AGENDA

IDRIC

Green Industrial Futures Centre for Doctoral Training

WIFI Network: Conference-Pullman Password: Meeting1

09.15-10.00	**Registration** *Refreshments provided*
10.00-11.15 **Nobel Suite**	**Welcome:** ***Professor Mercedes Maroto-Valer,*** Director of IDRIC and CDT-GIF, Heriot-Watt University **Keynote:** ***Laura Sandys CBE,*** Chair, Electrify Industry **IDRIC & CDT-GIF Review:** ***Professor Mercedes Maroto-Valer*** **Lightning Talks: Emerging PhD research activities from our CDT-GIF students:** ***Antigoni Theocharidou*** - Integrating greenhouse gas removals (GGR) into the UK Emissions Trading Scheme (UK ETS) ***Kayleigh Hepburn*** - Researching the role of SMEs in net zero ***Tom Gray*** - How do stakeholder needs and values shape the successful implementation of hydrogen energy systems within regional decarbonisation strategies? ***Lisa Zhang*** - Engaging marginalised communities in energy developments ***Jainaba Conteh*** - Location, Location, Location ***Gift Udoh*** - Digital twins for business parks: Hybrid renewables and storage in Edinburgh Park
11.15-12.15 **Parallel Sessions**	
Nobel Suite	**Keynote:** ***Dr Emily Nurse,*** Head of Net Zero, Climate Change Committee **Panel: Gridlock or greenlight? The Future of Industrial Electrification in the UK** This panel will explore what it will take to enable and accelerate industrial electrification in the UK in terms of capacity adequacy, technological readiness, financing, and economic business models and how this must be supported by reformed planning and consenting regimes. It will look at not just the questions of end-user technology, but also those relating to supporting infrastructure and innovation as well as to supply chain adequacy and readiness. The aim is to keep the conversation future-focused, centred on what "scaling by 2030" actually means and what needs to happen now to get there. How can theoretical strategies be replaced by concrete plans with detailed milestones and responsibility allocations? **Chair:** ***Peter Taylor,*** Chair in Sustainable Energy Systems, University of Leeds **Panellists:** ***Chris Williams,*** Director of Sustainable Industries and Commissioner, Electrify Britain ***Emily Nurse,*** Head of Net Zero, Climate Change Committee ***Jane Dawson,*** Head of External Affairs, Electrical Contractors' Association ***Min Guan,*** Head of Systems Insights, Energy Transitions Commission
Hyde Park 6 and 7	**Research and Innovation Agenda – Session 1** Interactive workshop to shape a new section of our 'Research and Innovation Agenda for Net Zero Industries. *Note: Agenda of session 1 & 2 is the same*
12.15-13.15	**Lunch and Networking**

13.15-14.30 **Parallel Sessions**	
Nobel Suite	**Panel: From Evidence to Action: Scaling Hydrogen with Research-Driven Solutions** *Discussions on our newly published "Frontiers Report Series"* This panel will discuss two new IDRIC reports on hydrogen generation and hydrogen transport & storage. Drawing on insights from across IDRIC's research portfolio, the reports offer recommendations for industry and policymakers to advance net zero goals. Experts from academia, industry, and government will share perspectives on the key findings and how the recommendations can be taken forward. **Chair: *Keith McLean,*** Managing Director, Providence Policy **Panellists: *Jon Maddy*,** Director of Hydrogen R&D Centre, University of South Wales ***Azhar Juna*,** Senior Policy Advisor, Hydrogen UK ***Jonathan Oxley*,** Senior Manager Net Zero, CBI
Hyde Park 6 and 7	**Research and Innovation Agenda – Session 2** Interactive workshop to shape a new section of our 'Research and Innovation Agenda for Net Zero Industries. *Note: Agenda of session 1 & 2 is the same*
14.15-14.45 **Nobel Suite**	**Lightning Talks: Emerging PhD research activities from our CDT-GIF students:** ***Grace James*** - Powering jets with CO_2: How ready are the electrocatalysts? ***Julian Black*** - Development of electrocatalysts and membrane electrode assembly for energy conversion and storage ***Michal Ciesielka*** - Enhancing water oxidation with RuO_2–Graphene composites for economical green hydrogen generation ***Iliana Dimitrova*** - Flashback in hydrogen-fuelled gas turbine combustors ***Abdolali Mosallanezhad*** - Advancing underground hydrogen storage: A data-driven approach to site selection and performance optimization ***Efsion Andre*** - Development of generalised multi-well CO2 storage proxy models for saline aquifers and depleted gas reservoirs in CCUS networks ***Mike Ownsworth*** - Post-combustion CO2 capture solvents: addressing the knowledge gap with long-term testing
14.45-15.30	**CDT & ECR Poster Showcase** *Refreshments provided*
15.30-16.45 **Nobel Suite**	**Panel: AI-powered pathways to industrial decarbonisation** Discover the possibilities of artificial intelligence in accelerating the transition to net zero in industries. The panel will discuss how AI can drive industrial decarbonisation (highlighting key opportunities and challenges), two pioneering case studies demonstrating real-world applications of AI in reducing industrial emissions, and will conclude with an interactive panel discussion. **Chair: *Sherif Elsayed-Ali,*** Executive Director, Future of Technology Institute **Panellists: *Professor Susana García,*** Heriot-Watt University ***Buffy Price,*** Co-Founder and COO, Carbon Re **Keynote: *Mattie Yeta,*** Chief Sustainability Officer at CGI & Director of the Institute of Environmental Management and Assessment **Closing Remarks: *Professor Mercedes Maroto-Valer*** *PhD student and ECR poster winners to be announced.*