



# ENERGY

## LANDSCAPE UK [ELUK 2025] CONFERENCE & EXHIBITION

*"EMPOWERING THE UK'S ENERGY FUTURE: COLLABORATION, INNOVATION,  
SKILLS FOR NET ZERO SUCCESS"*

**15-16 October 2025 | Central  
London**

### **Conference Agenda: Day 1, 15<sup>th</sup> October 2025**

08:30 - 08:50: **Registration and Welcome Coffee**

08:50 - 09:00: **Welcome Remarks**

Introduction by Andrew Beales, Managing Director at Energise Landscape Ltd

09:00 - 09:15: **Opening Address**

Keynote Address by Government Official

09:15 - 09:30: **Official Keynote Address**

Matthew Vickers, Director of Connections Reforms at **National Energy Systems Operator (NESO)**

### **09:30 - 10:20: Panel 1: Rising to the Challenge: The UK's Role in Global Net-Zero Leadership**

This opening session will set the stage for the UK's energy future by exploring the intersection of strategic planning, technological advancements, geopolitical dynamics, and public engagement. With contributions from global experts and diverse stakeholders, the panel will discuss how to move from ambitious policy announcements to tangible action, while fostering public support and ensuring energy resilience in a changing world.

#### **Key Topics to Be Discussed:**

- **From Policy to Action: Strategic Energy Transition**
  - Crafting a roadmap to transition from policy announcements to impactful implementation, with a focus on nuclear and renewable energy sectors.

- Drawing on international perspectives from the US, Europe, Asia, and the UK to discuss financing strategies and the geopolitical influences shaping the energy landscape.
- **Energy Resilience and Geopolitical Dynamics**
  - Assessing the UK's energy resilience amidst global supply chain challenges and evolving geopolitical tensions.
  - Examining how lessons from international debates, such as the US energy sector's trajectory, can inform the UK's strategy.
- **Creating a Unified Narrative for the Energy Transition**
  - Highlighting the importance of storytelling in communicating the benefits of the energy transition to the public, industry, and policymakers.
  - Exploring how to craft a compelling narrative similar to the digital revolution, emphasising the immediate advantages of clean energy such as reduced energy costs and job creation.
- **Public and Political Leadership in Climate Action**
  - Discussing the role of elections in the EU, UK, and US in shaping energy policy and the political narratives around climate action.
  - Engaging voices from across the political spectrum, including conservative perspectives, to build balanced and enduring public support.
- **Building Public Trust and Engagement**
  - Demonstrating the tangible benefits of energy transition initiatives to citizens, including cleaner air, reduced energy bills, and long-term economic opportunities.
  - Partnering with media, advocacy groups, and community leaders to broaden understanding and engagement with clean energy policies.
- **Technology, Innovation, and Public-Private Collaboration**
  - Showcasing advancements in energy storage, hydrogen integration, and smart grid technologies to enhance energy resilience.
  - Highlighting the role of public-private partnerships in scaling up renewable energy projects and driving innovation in the green economy.

This session will explore how strategic energy planning, geopolitical awareness, and effective communication can position the UK as a global leader in clean energy innovation and climate resilience. Join us to hear from global experts and engage in discussions that will shape the UK's energy horizon for 2025 and beyond.

#### Panelist

Bill Esterson, Labour MP for Sefton Central and Energy Security and Net Zero Select Committee Chair at **House of Commons**

Richard Tice, Deputy Leader at **Reform UK** and **MP for Boston and Skegness**

Simon Virley, Vice Chair and Head of Energy and Natural Resources at **KPMG UK**

Natascha Engel, Chief Executive Officer at **Palace Yard**

Trevor Hutchings, Chief Executive at **REA (Renewable Energy Association)**

Alessandra De Zottis, Head of Government and Regulatory Affairs at **Sonnedix**

Rob Gilbert, Director of Supply Chain at **Great British Energy**

10:20 – 10:50: **Morning Break**

10:50 - 11:40: **Panel 2: Financing Net Zero: Unlocking Investments and Financial Frameworks for a Sustainable Future**

This session will focus on the pivotal role of strategic investments and innovative financial frameworks in accelerating the UK's clean energy transition. The discussion will emphasise how financial mechanisms, insurance integration, and public-private collaborations can drive decarbonisation while mitigating risks and ensuring long-term success.

**Key Topics to Be Discussed:**

- **Investment in Clean Energy Projects**
  - Exploring innovative financing structures, including the integration of insurance products, to unlock capital for large-scale clean energy initiatives.
  - Examining how financial frameworks can prioritise sustainability goals and deliver measurable environmental and economic outcomes.
- **Strategic Financial Frameworks**
  - Highlighting the importance of a well-defined investment roadmap to meet the UK's short- and long-term energy demands.
  - Exploring how risk-sharing mechanisms, such as guarantees and blended finance, can attract private capital to high-impact projects.
- **Insurance as an Enabler**
  - Showcasing the role of insurance in reducing the financial uncertainties associated with clean energy projects.
  - Discussing the development of tailored insurance solutions that protect investors and enhance project bankability.
- **Funding Decarbonisation and Low-Carbon Technologies**
  - Analysing financial tools like carbon pricing and tax credits to incentivise investments in low-carbon technologies.
  - Examining funding models that support the development and deployment of next-generation energy solutions.
- **Public-Private Collaborations**
  - Highlighting case studies of public-private collaborations, such as GB Energy and the UK Infrastructure Bank, that have catalysed clean energy investments.



- Exploring how these partnerships can unlock funding at scale to accelerate the UK's net-zero transition.
- **Creating a Stable Financial Ecosystem**
  - Discussing the importance of transparent policies and long-term regulatory stability to foster investor confidence.
  - Encouraging adoption of ESG (Environmental, Social, and Governance) reporting to attract green finance and ensure accountability.

Gain valuable insights into the financial strategies and tools that can drive the UK's net-zero transition. This panel will offer actionable guidance on leveraging investments, financial innovations, and insurance solutions to accelerate decarbonisation while ensuring a resilient and sustainable energy future.

#### Panelist

David Mackey, Chief Executive Officer at **The Carbon and Energy Fund (CEF)**

Allan Baker, Global Head of Energy Transition – Energy+ Group at **Société Générale**

Joe Dutton, Energy Innovation Lead at **AXIS**

### 11:40 – 12:30: **Panel 3: Powering a Net-Zero Grid: Building a Resilient, Affordable, and Inclusive Electricity System**

This session will explore the transformation required to modernise the UK's electricity system by 2030, balancing the scaling of renewables, modernisation of the grid, and the implementation of effective regulatory frameworks. It will also emphasise the importance of diversity, community-driven initiatives, and strategic investments in delivering a clean, affordable, and secure energy future for the UK.

#### Key Topics to Be Discussed:

- **Scaling Renewable Energy and Modernizing the Grid**
  - Highlighting the rapid deployment of renewable technologies such as offshore wind, solar power, and green hydrogen.
  - Discussing the critical role of advanced grid technologies in optimising energy distribution and enabling a resilient and clean energy system.
- **Unlocking Investments and Economic Opportunities**
  - Exploring reforms to unlock £40 billion annually in private investment for clean energy projects and infrastructure.
  - Showcasing how clean energy investments can reindustrialise Britain, creating thousands of skilled jobs across engineering, construction, and manufacturing sectors.
- **Regulatory and Policy Reforms for Energy Affordability**

- Analysing how speeding up planning permissions, connection systems, and renewable auctions can catalyse energy transition efforts.
- Exploring strategies to reduce energy bills and stabilise finances by reducing reliance on fossil fuels.
- **Decarbonising Heat and Community-Driven Projects**
  - Evaluating technologies such as heat pumps, solar panels, and green gas to reduce heating-related emissions.
  - Highlighting the potential of smaller, local projects, including initiatives on Britain's energy coasts, to complement national efforts and strengthen public buy-in.
- **Diversity, Inclusion, and Public Support**
  - Discussing the importance of diverse panels and cross-sector collaboration to ensure comprehensive and representative decision-making.
  - Emphasising the need for effective communication strategies that demonstrate the tangible benefits of the energy transition, from reduced bills to environmental gains.
- **Workforce Development and Skills Training**
  - Addressing the workforce challenges through targeted education and apprenticeship programs, creating pathways for engineers, welders, and mechanics.
  - Fostering partnerships between government, industry, and academia to ensure a skilled workforce ready to support clean energy projects at scale.

Discover how a strategic, inclusive, and community-focused approach can modernise the UK's electricity system by 2030. Gain insights into unlocking investment opportunities, advancing renewable technologies, and ensuring public support for a resilient, affordable, and sustainable energy grid.

#### Panelist

Abbie Badcock-Broe, Head of Corporate, UK and Decarbonisation Strategy at **National Grid**

Asif Rehmanwala, CEO at **Ecotricity & Green Britain Group**

Lawrence Slade FEI, Chief Executive at **Energy Networks Association (ENA)**

Sam Mathew, Director, Industry Lead - UK Energy & Utilities at **Microsoft**

Simon Morrish, Group CEO at **Xlinks Limited**

Neil Kenward, Director for Strategy, Economics, Research and Net Zero (SERN) at **Ofgem**

Susana Neves e Brooks, Head of Connections Strategy and Reform at **National Grid Electricity Distribution**

12:30 - 13:30: **Networking Lunch**

**13.30 - 14:20: Panel 4: Energising Tomorrow: Strategic Infrastructure and Investment for the UK's Renewable Powerhouse**

This panel will explore the transformative strategies needed to build a resilient, innovative, and secure energy infrastructure for the UK's renewable future. From wind farms to solar arrays and advanced grid systems, industry leaders will discuss the infrastructure, investment, and policy frameworks required to meet the ambitious 2030 clean energy targets while addressing challenges like intermittency, biodiversity, and public acceptance.

**Key Topics to Be Discussed:**

- **Scaling Renewable Energy and Grid Modernisation**
  - Highlighting wind's record contribution of 83 TWh to electricity generation in 2024 and the growing role of solar, such as the newly approved 5,000-panel solar farm in Cornwall.
  - Tackling challenges of scaling renewables, including grid access and the need for advanced energy storage solutions to manage intermittency.
  - Examining local renewable projects and their broader implications, such as community solar farms and their role in decentralising energy production.
- **Unlocking Investments for Renewable Energy Infrastructure**
  - Strategies to unlock £40 billion annually in private funding for renewable projects and infrastructure.
  - Examining how stable policies, such as the Clean Power 2030 Action Plan, can attract investors while addressing concerns about cost impacts on households.
  - Analysing the UK's position in a competitive global landscape, particularly in light of initiatives like the US Inflation Reduction Act.
- **Balancing Growth and Environmental Impact**
  - Lessons from recent projects, such as the Cornwall solar farm, balancing the need for clean power with concerns about flooding, biodiversity, and local wildlife.
  - Exploring how renewable projects can integrate biodiversity enhancements, sustainable designs, and community collaboration to minimise environmental impact.
- **Energy Security and Managing Intermittency**
  - Highlighting the role of battery storage and incentives for energy use during peak renewable production periods, such as windier days.
  - Addressing the need for gas power stations as reserve capacity during low renewable output periods, while planning for their phased reduction.
- **Cybersecurity and Infrastructure Resilience**

- Understanding the importance of robust cybersecurity measures to protect an increasingly digitalised energy infrastructure.
- Ensuring reliable infrastructure in regions like the North Sea while maintaining grid stability during rapid renewable adoption.
- **Public and Industry Collaboration for Long-Term Success**
  - Demonstrating how community-driven projects and transparent communication can enhance public buy-in and support for renewable infrastructure.
  - Highlighting the importance of skills training, particularly in regions with renewable energy projects, to ensure a robust and inclusive workforce.

Explore how strategic investments, innovative infrastructure, and balanced planning can secure the UK's place as a global leader in clean energy. Gain insights into overcoming policy, financial, and environmental challenges to build a renewable powerhouse for a sustainable future.

#### Panelist

Adrian Del Maestro, VP Global Energy Advisory at **AECOM**

Kate Gilmartin, Chief Executive Officer at **British Hydropower Association (BHA)**

Chris Norbury, Chief Executive Officer at **E.ON UK**

Emma Voss, Vice President Commercial and New Markets, Offshore Wind at **Statkraft**

Robert McKeon, Head of Business Development UK - Renewable Gases Europe at **ENGIE UK**

Andrew Elmes, Head of Net Zero Business Development, UK&I at **Siemens Gamesa**

#### 14:20 - 15:10: **Panel 5: Nuclear Horizons: Empowering the UK's Energy Transition through Nuclear Technology**

This panel will examine the transformative role of nuclear energy in shaping the UK's secure, low-carbon energy future, with a specific focus on the revolutionary potential of Small Modular Reactors (SMRs). Expert panelists will explore how nuclear technology can drive economic growth, enhance energy security, and accelerate decarbonisation, while addressing key challenges such as public perception, workforce readiness, and sustainable financing.

#### Key Topics to Be Discussed

- **Nuclear Energy's Role in Energy Security and Decarbonisation**
  - Exploring nuclear energy's contributions to the UK's energy independence and carbon reduction goals.
  - Highlighting the ability of nuclear power to provide reliable, low-carbon energy to stabilise supply amidst growing reliance on renewables.
- **Small Modular Reactors (SMRs): Powering the UK's Clean Energy Revolution**

- Discussing the flexibility, scalability, and reliability of SMRs, including their ability to provide consistent electricity during gaps in renewable energy generation.
- Examining how SMRs can support regional regeneration through job creation, local supply chain development, and skills training, with case studies such as Teesside's Community Nuclear Power project.
- Highlighting SMRs' ability to adapt output based on demand and their role in producing hydrogen or synthetic fuels to decarbonise hard-to-abate sectors like aviation and shipping.
- Reviewing the advanced passive safety features and fuel flexibility of SMRs, which allow operation on various fuels, including recycled plutonium.
- **The Economic Impact of Nuclear Commercialisation**
  - Exploring public-private partnerships and the financial mechanisms needed to scale nuclear energy effectively, including Great British Nuclear's (GBN) role in advancing SMRs.
  - Addressing public apprehension about nuclear facilities and the importance of robust policy frameworks to attract long-term investment in the nuclear sector.
- **Overcoming Bottlenecks in Supply Chains and Regulation**
  - Identifying regulatory and supply chain challenges that could hinder the deployment of SMRs and other nuclear technologies.
  - Highlighting strategies to streamline manufacturing processes, accelerate deployment timelines, and build investor confidence in nuclear projects.
- **Workforce Development and Planning for the Future**
  - Tackling workforce challenges, including an impending retirement wave of experienced engineers, and emphasizing the need for skills development and strategic workforce planning.
  - Addressing how collaboration with educational institutions and major nuclear developers can sustain the growth of the civil nuclear sector.
- **Innovations in Emerging Fields and Global Partnerships**
  - Discussing the potential for nuclear technologies to power emerging fields, such as electric vehicles and hydrogen production.
  - Highlighting the importance of international partnerships to accelerate innovation and secure the UK's position as a leader in next-generation nuclear markets.

Join this compelling discussion to gain insights into the future of nuclear energy in the UK, including the transformative impact of SMRs. Discover how innovation, political support, and public-private collaboration can position nuclear technology as a cornerstone of the UK's energy transition, driving economic growth, regional regeneration, and a secure, sustainable energy future.

### Panelist

Robert Alford CChem, CSci, CMgr, FNucl, Delivery and Engagement lead for Nuclear Energy Applications at **United Kingdom National Nuclear Laboratory**

Simon Emeny, Director - Specialist Markets at **LRQA**

Andrew Storer, Founder at **Nuclear Collaboration Ltd (NucCol)**

Andrew Champ, Country Director at **GE Hitachi Nuclear Energy International – UK**

Virginia Crosbie, **Former Member of Parliament for Ynys Môn** and Partner at **Nuclear Capital LLP**

15:10 - 15:40: **Afternoon Break**

### 15:40 - 16:30: **Panel 6: Building the Workforce of the Future: Skills for Energy Transition and Net-Zero Goals**

This panel will address one of the most pressing challenges in the energy transition: equipping the UK workforce with the skills necessary to achieve its ambitious net-zero goals. Expert speakers will provide insights into the evolving skills landscape, innovative training solutions, and the strategic partnerships needed to bridge the workforce gap, with a strong emphasis on diversity, inclusion, and regional development.

#### **Key Topics to Be Discussed:**

- **The Skills Gap and Workforce Readiness**
  - Evaluating the scale of the skills crisis: The UK energy sector needs 10,000 new workers annually by 2030 to meet its energy transition targets.
  - Exploring transferable skills from fossil fuel industries to renewable energy, hydrogen, nuclear, and carbon capture.
  - Introducing initiatives like the UK Energy Skills Passport to standardise training and simplify transitions across sectors.
- **Upskilling and Reskilling for the Green Economy**
  - Analysing government-backed training programs and their role in enabling workers to seize opportunities in clean energy.
  - Showcasing case studies from regions such as Aberdeen, Cheshire, and Lincolnshire, where targeted investments are driving workforce readiness in offshore wind, nuclear, and solar industries.
  - Spotlighting examples like Shell's Energy Transition Skills Hubs and Orsted's wind turbine technician apprenticeships to retrain oil and gas workers for renewable energy roles.
  - Addressing the challenge of retaining apprentices and skilled workers in a competitive global market, with lessons from international energy hubs such as the UAE.
- **Education Reform: Building Skills from the Ground Up**

- Recognising the critical role of early STEM education in creating a future talent pipeline for the energy transition.
- Highlighting the innovative use of virtual reality classrooms and immersive training tools to prepare students and workers for real-world renewable energy challenges.
- Tackling the sharp decline in UK apprenticeship starts by exploring reforms to the apprenticeship levy and advocating for career pathways into green jobs.
- **Regional Skills Development and Local Empowerment**
  - Showcasing targeted funding for regional training centres, skills mapping, and career advisory programs in key growth regions such as Pembrokeshire, Cheshire, and North East Lincolnshire.
  - Examining how regional development initiatives, like the nuclear fuel cluster in Cheshire, can reindustrialise local communities, create high-quality jobs, and boost the local economy.
- **Diversity and Inclusion in the Energy Sector**
  - Confronting the lack of diversity in the energy workforce and addressing barriers faced by women, ethnic minorities, and individuals with disabilities.
  - Advocating for inclusive hiring practices and ensuring equitable access to education and training opportunities in the energy sector.
  - Examining global best practices, such as Enel's community-driven training programs in Spain and partnerships with organisations like Morgan Sindall, which focus on outreach and diversity.
- **Public-Private Partnerships and Strategic Collaboration**
  - Exploring successful collaborations between government, industry, trade unions, and educational institutions to accelerate skills development and align with net-zero goals.
  - Highlighting the importance of funding programs such as the Office for Clean Energy Skills Fund, which supports skills mapping and training initiatives to meet clean energy targets by 2030.
  - Discussing global examples, including Schneider Electric and National Grid, in aligning workforce skills with future projects to meet industry demand.
- **Empowering Communities Through Green Jobs**
  - Highlighting the economic potential of clean energy with up to 1.18 million low-carbon jobs projected in the UK by 2050.
  - Examining how the skills transition can empower local communities, foster regional growth, and tackle inequalities in areas transitioning from fossil fuels.
  - Reviewing innovative projects, such as Teesside's carbon capture initiative, as models for integrating skills development into transformative industrial projects.



This session will provide actionable strategies and foster dialogue on how to address the workforce challenges of the energy transition. Join us to explore how investing in skills development can unlock the potential of the green economy, create high-quality jobs, and drive a sustainable, inclusive energy future for the UK.

#### **Panelist**

Jamie East, Director and Principal Consultant at **Radiant Energy & Education**

Sarah Mintey MBE, Chief Executive Officer at **Developing Experts**

Lynne Matthews National Nuclear Skills Strategic Advisor at **EDF Energy**

Lee Callaghan, Founder & CEO at **ViRenewables**

Greg Beach, Chief Operating Officer at **V360XR**

Emily Hill, Principal Consultant at **PA Consulting**

16.30 - 16.40: **Closing Remarks by Managing Director of Energise Landscape Ltd**

16.40 - 18.30: **Networking Evening**

#### **Conference Agenda: Day 2, 16<sup>th</sup> October 2025**

08.30 - 08.55: **Registration and Welcome Coffee**

08.55 - 09.00: **Welcome Remarks by Andrew Beales, Managing Director at Energise Landscape Ltd**

09.00 - 09.10: **Keynote Address**

Trevor Hutchings, Chief Executive at **REA (Renewable Energy Association)**

#### **09.10 - 10.00: Panel 7: Decarbonising UK Industrial Clusters: The Path to Net Zero**

This session will examine the vital role of industrial clusters in driving the UK's decarbonisation agenda. Panelists will explore strategies for transitioning these high-emission hubs to net zero through innovative technologies, collaborative action, and government support. The discussion will highlight success stories and challenges in implementing Low Carbon solutions such as carbon capture, hydrogen integration, and renewable energy deployment across key UK regions.

#### **Key Topics to Be Discussed:**

- **The Strategic Importance of Industrial Clusters**
  - Understanding the concentration of energy-intensive industries and their contribution to the UK's greenhouse gas emissions.

- Exploring the role of clusters in fostering innovation, collaboration, and systemic decarbonisation.
- **Roadmaps to Decarbonisation: Success Stories Across the UK**
  - Case studies of industrial cluster transformation in regions such as Teesside, Humber, and South Wales.
  - Highlighting projects like Grangemouth's CO<sub>2</sub> collection network and the Black Country's Zero Carbon hubs.
- **Low Carbon Energy and Infrastructure Development**
  - Investigating how renewable energy, carbon capture, and hydrogen integration are powering the transition in clusters.
  - Addressing infrastructure needs, including pipeline retrofitting, storage, and transport networks.
- **Circular Economies and Collaborative Innovation**
  - Emphasising the importance of collective action among industries to reduce waste, share resources, and implement circular economy principles.
  - Showcasing innovative solutions that integrate energy, waste flows, and industrial processes.
- **Policy, Investment, and Regional Development**
  - Discussing the role of government initiatives, such as the Industrial Strategy Challenge Fund and Ten-Point Plan for a Green Industrial Revolution.
  - Examining the economic opportunities in decarbonising industrial regions, including job creation and regional regeneration.

This session will provide actionable insights into the opportunities and challenges of transforming the UK's industrial clusters into global leaders in sustainability. Join us to explore the blueprint for a net-zero industrial future, where collaboration, technology, and innovation converge to create a cleaner, greener economy.

#### Panelist

Chris Rowell, Head of Net Zero at **Tees Valley Combined Authority**

Matthew Rhodes, Director at **Black Country Industrial Cluster**

Jane Gaston, Chief Executive Officer at **Net Zero North West**

Jonathan Briggs, Project Director for the Humber Zero carbon capture project at **VPI**

Ben Burggraaf, Chief Executive Officer at **Net Zero Industry Wales**

Dr Chris Manson-Whitton, Chief Executive Officer at **Progressive Energy Ltd**

10:00 - 10:30: **Morning Break**

10:30 - 11:20: **Panel 8: Hydrogen Horizons: Catalysing the UK's Clean Energy Revolution**

This panel will explore hydrogen's transformative potential as a cornerstone of the UK's journey to net-zero. With a focus on both challenges and opportunities, experts will delve into the critical role hydrogen can play in decarbonisation, energy innovation, and industrial transformation, offering actionable strategies to accelerate the hydrogen economy.

**Key Topics to Be Discussed:**

- **The Strategic Role of Hydrogen in Decarbonisation**
  - Examining hydrogen's role in national and regional decarbonisation strategies, particularly in hard-to-abate sectors such as industrial manufacturing, transportation, and heavy goods.
  - Comparing the scalability and economic viability of green hydrogen (produced via renewable energy) versus blue hydrogen (produced with carbon capture).
  - Highlighting the ongoing debate about subsidies and the policy support needed to drive market adoption for both green and blue hydrogen.
  - Discussing hydrogen's most promising applications in industrial clusters rather than domestic uses, focusing on hubs like Teesside and Aberdeen.
- **Advancements in Hydrogen Production and Storage**
  - Highlighting innovative production methods, including advancements in electrolysis and emerging carbon capture technologies for cleaner blue hydrogen production.
  - Addressing the critical role of storage and distribution solutions in enabling hydrogen scalability and promoting its integration into the broader energy system.
  - Exploring the potential for hydrogen as a key enabler of international trade in clean energy, leveraging its versatility as an energy carrier.
- **Public Perception, Safety, and Community Engagement**
  - Confronting safety concerns and public skepticism surrounding hydrogen adoption, focusing on the need for clear communication and education.
  - Sharing examples of how transparency and community involvement have fostered acceptance and trust in hydrogen projects, particularly in industrial regions.
  - Demonstrating the environmental and economic benefits of hydrogen to local communities, positioning it as a driver of green jobs and regional growth.
- **Infrastructure Development and Policy Alignment**
  - Stressing the urgency of investing in hydrogen infrastructure, including storage, transportation networks, and refueling stations, to support its integration across industries.

- Discussing how the UK can align its hydrogen strategy with EU regulations and global initiatives, ensuring competitiveness in the international hydrogen economy.
- Highlighting the role of government-backed projects and planning frameworks in overcoming regulatory and logistical challenges.
- **Collaborative Action for a Hydrogen-Powered Future**
  - Emphasising the importance of collective action among government, industry, academia, and communities to build a cohesive hydrogen strategy.
  - Exploring the role of platforms like all-party parliamentary groups (APPGs) in fostering sophisticated, bipartisan debates that inform hydrogen policy and innovation.
  - Examining how public-private partnerships can accelerate hydrogen adoption, drawing lessons from international success stories.
- **Unlocking Hydrogen's Potential Beyond Energy**
  - Highlighting the synergies between hydrogen and other renewable technologies, including geothermal energy, to drive decarbonisation.
  - Examining hydrogen's role as a driver of innovation in sectors beyond energy, including chemical production, aviation, and maritime transport.
  - Showcasing how hydrogen development can position the UK as a global leader in clean energy solutions, unlocking economic opportunities and fostering industrial resilience.

This session will provide critical insights into hydrogen's strategic role in the UK's energy transition and its potential to revolutionise the clean energy landscape. Join us to explore how hydrogen can catalyse the UK's clean energy revolution, transform industrial processes, and empower communities on the road to net-zero.

#### Panelist

Helen Leadbetter, Technical Strategy Lead – Zero Emission Flight at **UK Civil Aviation Authority**

Joe Seifert, Chief Executive Officer at **EET Hydrogen**

Rob Dale, Founder at **Beyond2050**

Mike Rendall, Group Chief Technology Officer at **AFC Energy**

#### 11:20 - 12:10: **Panel 9: Balancing Act: The Role of Oil and Gas in Achieving the UK's Net Zero Goals**

As the UK transitions to a net-zero economy, the oil and gas sector remains a critical player in balancing energy security with sustainability. This panel will explore how the industry can evolve to align with the country's ambitious climate targets, with a particular focus on the transformative potential of Carbon Capture, Usage, and Storage (CCUS) technologies.

### **Key Topics to Be Discussed**

- **The Future of Oil and Gas in a Net-Zero World**
  - Evaluating how oil and gas can coexist with the UK's net-zero ambitions while supporting energy security and economic growth.
  - Exploring the impact of new drilling licenses and policies on investor sentiment, energy supply, and the nation's transition roadmap.
  - Highlighting government actions, including the signing of landmark CCUS contracts, as a pathway to redefining the oil and gas sector's role in a low-carbon economy.
- **Game-Changing Investments in Carbon Capture**
  - Examining the significance of the UK's first CCUS contracts signed for the East Coast Cluster in Teesside, set to begin construction in mid-2025.
  - Detailing how projects like Net Zero Teesside Power will provide low-carbon power to up to 1 million homes by 2028, creating 2,000 immediate jobs and tens of thousands in the future.
  - Addressing the role of CCUS in revitalising industrial heartlands, unlocking £4 billion in supply chain contracts, and driving growth in innovative clean energy technologies.
- **Policy, Regulation, and Global Leadership**
  - Discussing the UK's £21.7 billion funding commitment to CCUS and how government-backed business models are designed to attract investment and accelerate deployment.
  - Assessing the challenges posed by the Public Accounts Committee's skepticism regarding CCUS feasibility, alongside expert insights advocating its essential role in decarbonisation.
  - Highlighting how lessons from Norway's Northern Lights project and other international CCUS success stories can inform UK policy and execution.
- **Workforce Transition to a Greener Economy**
  - Exploring strategies for retraining and reskilling oil and gas workers for roles in CCUS, renewable energy, and other low-carbon sectors.
  - Emphasising collaboration between industry and government to ensure workforce development aligns with regional job creation goals, particularly in areas like the North East.
  - Discussing the broader socio-economic benefits of a just transition for workers and communities dependent on the oil and gas sector.
- **Public Engagement and Perception of CCUS**
  - Addressing public skepticism around the safety and efficacy of CCUS technologies, with a focus on transparent communication and education campaigns.

- Developing public-facing narratives that highlight CCUS as a vital enabler of job creation, energy security, and climate action.
- **Strategic Actions for the UK's Clean Energy Future**
  - Examining opportunities for CO<sub>2</sub> storage infrastructure development and the scaling of transportation networks to support the growth of CCUS.
  - Investigating how CCUS complements renewable energy technologies and contributes to decarbonising industries such as steel, cement, and chemicals.
  - Advocating for long-term policy clarity and alignment with global decarbonisation efforts to position the UK as a leader in clean energy innovation.

This session will provide a comprehensive overview of how the oil and gas sector can adapt to the net-zero challenge, with a focus on the pioneering role of CCUS in the UK's energy transition. Join us to explore the balance between energy security, economic growth, and sustainability, and how strategic investments are reshaping the future of the energy industry.

#### Panelist

Chris Gilbert, Director at **Decarbonisation Consulting Ltd**

Mark Sommerfeld, UK Director at **Carbon Capture and Storage Association (CCSA)**

Biraj Borkhataria, Global Head of Energy Transition Research at **RBC Capital Markets**

Michael Foley, EU and UK Low Carbon Solutions Executive at **ExxonMobil**

Nick Curum, Co-Founder of the **AI Energy Think Tank**

Orlando Minervino, Business Development Manager (Decarbonisation Strategy) at **Xoserve**

Philipp Lukas, Chief Executive Officer at **Future Biogas**

12:10 - 13:10: **Networking Lunch**

13:10 – 14:00: **Panel 10: Integrating Energy Systems for the UK's Net Zero Future**

This session will delve into the transformative potential of energy system integration, focusing on flexibility and digitalisation as solutions to the energy trilemma. By creating a more interconnected and consumer-centric energy network, the UK can unlock distributed energy solutions, optimise renewable resources, and empower consumers to drive the energy transition.

#### Key Topics to Be Discussed:

- **Flexibility as the Cornerstone of Energy System Integration**
  - Exploring how flexibility supports renewable energy integration, balancing supply and demand in a decarbonised grid.
  - Highlighting distributed energy resources—EVs, heat pumps, and rooftop solar—as enablers of a more resilient and efficient energy network.

- Understanding the role of flexibility markets in empowering consumers to actively contribute to energy system stability.
- **Digitalisation and Democratisation of Energy**
  - Demonstrating how digital tools, such as AI, smart meters, and blockchain, enhance transparency and enable real-time energy management.
  - Discussing consumer engagement strategies, including gamification and peer-to-peer energy trading, to decentralise energy ownership.
  - Promoting community energy projects as a pathway to democratise access and participation in the energy transition.
- **Electrification as a Driver of Integration**
  - Assessing the electrification of transport, heating, and industrial processes as key levers for decarbonization.
  - Examining vehicle-to-grid (V2G) technology as a means to store renewable energy and stabilise the grid during peak demand.
  - Exploring the synergy between smart charging, solar energy, and decentralised solutions for cost-effective energy systems.
- **The Consumer-Centric Energy Ecosystem**
  - Shifting the narrative to position consumers as active participants in the energy transition through prosumer models.
  - Highlighting the financial and environmental benefits of distributed energy solutions for households and businesses.
  - Empowering consumers to optimise energy usage through accessible digital platforms and tailored insights.
- **Policy and Collaboration for a Decentralised Future**
  - Reviewing government policies and regulatory frameworks that enable flexibility and smart grid integration.
  - Showcasing public-private partnerships driving innovation in distributed energy and digital solutions.
  - Aligning industry efforts to create a more decentralised, equitable, and resilient energy system.

Gain fresh perspectives on how energy system integration, powered by flexibility and digitalization, can reshape the UK's energy landscape. This panel will provide actionable insights into leveraging distributed energy solutions, consumer engagement, and advanced digital tools to achieve the UK's net-zero ambitions while ensuring a sustainable, affordable, and reliable energy future.

#### Panelist

Leo Rayman, CEO and founder at **EdenLab**

Jeremy Yapp, Policy and Regulation Director (UK & EU)

Jon Ferris, Head of Flexibility and Storage at **LCP Delta**

Sarah Honan, Head of Policy at **ADE: Demand**

**14:00 - 14:50: Panel 11: Data Centers and AI – Balancing Innovation with Sustainability**

This session will address the rapidly growing energy demands of AI infrastructure and explore how the UK can balance its AI ambitions with sustainability goals. The panel will discuss energy challenges, innovative solutions, and collaborative strategies to ensure data centers evolve in alignment with net-zero targets.

**Key Topics to Be Discussed:**

- **The Energy Challenge of AI Expansion**
  - Exploring AI's surging computational and energy demands and its implications for energy infrastructure.
  - Assessing how the UK can scale renewable energy production to meet AI's projected 20-fold increase in computing power by 2030.
  - Investigating immediate strategies to meet AI energy needs while maintaining net-zero commitments.
- **Data Centers and Energy Infrastructure**
  - Analysing the role of hydrocarbons and wind farms in bridging short-term energy gaps for data centers.
  - Discussing co-location with renewable energy sources and investments in technologies like small modular reactors (SMRs).
  - Addressing logistical and policy challenges in integrating data centers into a sustainable energy framework.
- **Balancing Innovation with Sustainability**
  - Optimising AI models and hardware to reduce energy consumption without compromising performance.
  - Designing data centers with sustainability at the forefront, including energy-efficient cooling systems and circular economy practices.
  - Navigating the trade-offs between fostering AI innovation and adhering to environmental stewardship principles.
- **Leveraging Policy and Leadership**
  - Highlighting the role of government and private sector collaboration in accelerating renewable energy projects for AI infrastructure.
  - Discussing how streamlined permitting and clear policies can enable faster development of energy solutions for data centers.
  - Evaluating the role of nuclear energy and SMRs in supporting sustainable AI infrastructure growth.
- **Advancing Cross-Sector Collaboration**

- Showcasing case studies of successful public-private partnerships addressing AI's energy needs.
- Exploring how collaboration across energy, technology, and policy sectors can unlock innovative solutions for sustainable AI expansion.
- Building frameworks for long-term planning that align AI development with decarbonization goals.
- **Creating a Resilient Energy Ecosystem for AI**
  - Emphasising the importance of grid resilience to handle AI's increasing energy demands.
  - Encouraging the adoption of ESG (Environmental, Social, and Governance) reporting to attract green financing and ensure accountability in AI infrastructure projects.
  - Promoting investment in emerging technologies like hydrogen and advanced energy storage to future-proof AI growth.

Gain actionable insights into the intersection of AI and sustainability, and explore how innovative strategies, policy support, and collaborative approaches can enable the UK to power the AI revolution without compromising its net-zero ambitions. This panel will provide guidance for policymakers, energy leaders, and technology innovators on shaping a sustainable AI future.

#### Panelist

Jeptha Allen, Head of Digital Infrastructure Advisory at **CBRE**

Ruan Steyn, Manager, Sizewell C Nuclear Island at **Sizewell C**

Dr Tony Rooke, Executive Director and Head of Transition Advisory, Climate Risk and Resilience at **Howden**

Derreck Van Gelderen, Associate Partner, Head of AI Strategy and AI Energy Lead at **PA Consulting**

14:50 - 15:20: **Afternoon Break**

#### 15:20 - 16:10: **Panel 12: Future Energy Sources: Pioneering Technologies to Achieve Net Zero**

This session delves into transformative energy technologies that will play a pivotal role in achieving the UK's net-zero ambitions. From fusion energy and advanced nuclear solutions to space-based solar power, panelists will discuss how these groundbreaking innovations can drive clean energy transitions, create jobs, and secure the UK's position as a global leader in sustainable energy.

#### Key Topics to Be Discussed

- **Fusion Energy: Unlocking Limitless Power**

- Exploring the UK's leadership in fusion energy, including the £410 million Plan for Change investment and the STEP prototype power plant in Nottinghamshire, which aims to commercialise fusion by 2040.
- Highlighting global partnerships, such as the £40.5 million UK-US fusion project with Tokamak Energy, advancing lithium research and enhancing plasma-facing components for fusion reactors.
- Analysing fusion's potential to revolutionize clean energy with virtually limitless, safe, and carbon-free power, while creating thousands of jobs in the UK's former coal regions.
- **Next-Generation Nuclear Power: The Role of Advanced Modular Reactors (AMRs)**
  - Examining how AMRs can provide a flexible, reliable, and safe energy source, supporting baseload electricity needs in a net-zero energy mix.
  - Highlighting ongoing R&D efforts and public-private collaborations to position the UK at the forefront of nuclear innovation.
  - Discussing the synergies between nuclear energy and other renewable technologies.
- **Space-Based Solar Power (SBSP): Harvesting Energy from Space**
  - Showcasing the ambitious vision for SBSP, harnessing solar energy via orbiting satellites to provide a continuous, renewable energy supply.
  - Examining the technological advancements and international partnerships needed to make SBSP commercially viable by the 2030s.
  - Highlighting potential economic and environmental benefits, including enhanced energy security and reduced reliance on terrestrial infrastructure.
- **AI and Energy Optimization: A Catalyst for Efficiency**
  - Exploring the role of AI in optimizing energy systems, from predictive grid management to enhancing operational efficiency in fusion and SBSP technologies.
  - Highlighting the establishment of the UK's first AI Growth Zone at the Culham fusion energy campus, advancing AI-driven innovations in energy research.
- **Critical Minerals: Ensuring a Secure and Sustainable Supply Chain**
  - Recognising the essential role of critical minerals such as lithium, copper, nickel, cobalt, and rare earth elements in supporting technologies like fusion, nuclear, SBSP, batteries, and electricity networks, and the need for resilient, responsible supply chains.
  - Highlighting strategies to enhance mineral security, including scaling up recycling to reduce new mining needs by up to 40% by mid-century, fostering international collaboration, and developing policies to support sustainable clean energy innovation.
- **Global Synergies and Policy Alignment**



- Emphasizing the importance of international collaboration, such as the UK-US partnership on fusion energy, in fostering knowledge-sharing and accelerating technology development.
- Discussing how governments, industry, and research institutions can align policies to support these next-generation energy solutions.

Gain valuable insights into the cutting-edge technologies shaping the future of energy. This session will offer a roadmap for leveraging fusion, fission, and space-based solar power to meet the UK's net-zero goals while driving economic growth, creating jobs, and enhancing global energy security.

#### Panelist

Martin Soltau CEng, BSC(Hons), FIMechE, co-Chief Executive Officer at **Space Solar**

Dr Elina Militello Asp, Scenarios Team Lead, Plasma Science and Fusion Operations Division at **UK Atomic Energy Authority**

Itxaso Ariza, Chief Technology Officer at **Tokamak Energy**

Rosemary Wildblood, Energy Transition Development Lead at **Decision Analysis Services (DAS)**

Ryan Ramsey, Chief Operating Officer at **First Light Fusion**

Tristram Denton, UK Director at **Fusion Industry Association**

16:10 - 16:20: **Insights and Action: Summary, Key Takeaways, and Future Steps Towards UK Net Zero**