ST GEORGE'S HOUSE

Developing the UK's Fusion Strategy

Tuesday 4th – Wednesday 5th November 2025

Participants' Biographies



Miss Emily Ashwell

Emily is a corporate finance and governance expert, with 25 years' experience delivering complex commercial outcomes for governments, corporates and shareholders in the UK and internationally.

Emily has spent 10 years at UK Government Investments, leading teams to deliver corporate finance and corporate governance work for Ministers and senior stakeholders across Whitehall, including for HMT, MOD, DESNZ, BEIS and DCMS.

From February 2024 to February 2025, she was Director of Industrial Strategy & Commercial for the Nuclear Fuels Programme and Nuclear Skills Director at the Ministry of Defence. She was Director of Investment at the Department for Business & Trade from June 2023 to January 2024.

Prior to joining the civil service, Emily spent 13 years as a corporate finance adviser in the City, focused on M&A.



Dr Adam Baker

Adam is currently head of Fusion Policy and Strategy at the Department for Energy Security and Net Zero. following a brief stint in academia, he has 23 years' experience in the civil service having worked in operations, project development and policy in areas such as social justice, employment support, international science infrastructure and fusion. He has spent the last 10 years working in fusion policy and was responsible for developing the UK's previous fusion strategies. In 2024 he was awarded an OBE for services to fusion energy.



Mr Madhav Bakshi

Madhav is Head of Fusion Delivery at the Department for Energy Security and Net Zero. Madhav looks at strategic programme leadership to advance the UK's fusion energy ambitions. Madhav and his team also lead on policy around AI and fusion, supporting initiatives like the STRIDE programme which will enable the transformation of the Culham Campus into a global centre for fusion and AI innovation. Madhav's previous roles in Government include leading the Permanent Secretaries' Office in DESNZ.



Dr Tim Bestwick

Tim is Chief Executive Officer at the UK Atomic Energy Authority. An engineer by background, he joined UKAEA in 2018 after leading commercialization and campus development at UKRI-STFC. Before this he worked for IBM, Sharp and the optoelectronic start-ups Kamelian and Bookham Technology. Tim has a strong interest in commercializing public-sector technology and has been instrumental in starting and growing multiple technology businesses. He was awarded an OBE in the King's Birthday Honours List in 2023 for services to the commercialization of science, technology, and innovation. Tim also chairs the Harwell Campus Board and the UK's 'Space Partnership' Board.



Professor Sir Ian Chapman

Ian is CEO of UK Research and Innovation (UKRI). He has held several international roles in fusion and currently chairs the International Atomic Energy Agency International Fusion Research Committee. Previously he was CEO of the UK Atomic Energy Authority. His research has been recognised with multiple international awards.

Ian is a Fellow of the Institute of Physics, the Royal Academy of Engineering, the Royal Society, and an Honorary Fellow of the Nuclear Institute. He is also a visiting Professor at Durham University. He was knighted in the King's New Year's Honours in 2023.



Mrs Harriet Dalrymple

Harriet joined the DESNZ Fusion Energy Team in February 2025 to lead work on the STEP programme, JET decommissioning, and international engagement on fusion. Prior to this Harriet was leading DESNZ work on strategy for electricity market reform. Harriet has spent over ten years in various roles in the Civil Service at the Treasury, the Foreign, Commonwealth and Development Office and the Department for Energy Security and Net Zero. She is an expert on electricity and carbon markets, and the UK's economic and energy relationship with China.



Mr Tris Denton

Tris has some 20 years' experience in clean energy projects, primarily Fission and Fusion, having worked for the NIA, RWE, Hitachi, UKAEA (STEP), and the Moltex Group. Tris specialises in Programme Structuring; Commercial Structuring; Business Operations; Complex Project Execution; Site Selection; and Stakeholder Relations. He now manages a portfolio of clean energy roles, including supporting UKIFS as they mobilise the operational structures to deliver STEP, and advising TerraPower on non-US deployment. Within this, Tris is UK Director of FIA - the global trade association for the fusion industry.



Professor David Gann CBE FREng

David is currently the Chair of UK Industrial Fusion Solutions Ltd, where his leadership is focused on the delivery of the STEP programme to design and build the world's first prototype fusion energy plant. He was previously Chair of the UK Atomic Energy Authority (2018-2023). David frequently advises governments and was a member of the UK Government's Innovation Expert Group and the Ministry of Defence's Technology and Innovation Board.

David is an entrepreneur, who mentors start-ups, advises Boards, and has formed several companies. He is a non-executive director of VenCap plc, a leading venture fund-of-funds, currently on the Advisory Board of Euroclear, the Board of GenIP plc, and was Group Innovation Executive at Laing O'Rourke plc. His pro bono work includes co-founding the Villars Institute, a Swiss foundation focusing on systems leadership to halt climate change and bio-diversity loss; and he is a board member of the London Symphony Orchestra.

David publishes widely on technology management and innovation strategy, authoring nine books to date. He has a PhD in Industrial Economics, is a Chartered Civil Engineer, Fellow of the Royal Academy of Engineering, Fellow of the Institution of Civil Engineers and is an Honorary Fellow of the Royal College of Art. David was awarded the CBE for services to engineering in the Queen's honours birthday list 2010.



Mr Chris Good

Chris is an accomplished investment professional with a strong private equity and venture capital track record and nearly two decades of experience at Cinven.

He specializes in identifying high-potential companies in emerging technologies. Experienced in guiding portfolio companies through critical growth phases.

Chris brings deep industry networks and market insights to Pine Island's investment strategy.



Mr Will Goodlad

Will is as an Advisor to the Deep Tech team at Oxford Science Enterprises, supporting the growth of portfolio companies. He serves as its nominated Director at Alloyed and Odqa Renewable Energy Technologies. Since joining OSE as a founding Principal in 2015, he was also responsible for leading OSE's investments into Brill Power (sold to PETL), Evolito, First Light Fusion, ORCA Computing, Oxford Quantum Circuits, Oxford Ionics (sold to IonQ), OXLiD (sold to Gelion) and YASA (sold to Mercedes-Benz). Previously he worked for the China Britain Business Council in Beijing, E.L.I. Holdings in Chengdu, Text Publishing in Melbourne and as a Publishing Director at Penguin UK, commissioning many internationally bestselling books of science and ideas. Will holds a BA in Philosophy, Politics and Economics from the University of Oxford and an MSc in Economic History from the London School of Economics. He is a Trustee of the marine research foundation Nekton.



Mr Norman Harrison CBE DBA

In a very successful 40 year career in the nuclear sector, Norman has been Director of both Heysham 1 and Sizewell B. nuclear power stations.

He has a long running involvement with the UK Atomic Energy Authority (UKAEA), becoming Director of the Dounreay site in Caithness, Scotland and then CEO of UKAEA overall from 2006 – 2010, during which he led on a major privatisation programme. He later re-joined the UKAEA as a Non-Executive Director board member from 2016 until 2020. He remains as a senior advisor to the UKAEA Board. He is an independent main board member of General Fusion and Chair of General Fusion (UK) Ltd.

He is uniquely positioned within the nuclear sector having had a senior input to both the fusion and fission communities; this was recognised by the award of Commander of the order of the British Empire (CBE) in the 2021 birthday honours list of the Queen for services to Fusion and the Nuclear Industry.

He actively inputs to the present phase of Small Modular Reactor (SMR) and Advanced Modular Reactor (AMR) development programmes.

In previous roles he has been a Trustee and Director of the Nuclear Liabilities Fund and the Deputy Chair of the Board of Governors at Manchester Metropolitan University. He holds an honorary Doctorate in Business Administration awarded by Manchester Metropolitan University and holds Fellowships with the Nuclear Institute, Royal Society of Chemistry and Royal Society of Art.



Mr Edward Lewis-Smith

Edward joined UKAEA in 2023 to take up the new role of Head of Strategy, Governance and Executive Office. Edward previously worked for twelve years across the Civil Service in areas including international research infrastructure (BEIS), European defence and security (MoD), Personal Taxation policy, pension payment scheme delivery (both HM Treasury), and Private Office (Dept for Education). Between 2018-2023 Edward led work in government on UKAEA programmes and fusion energy R&D policy, developing the UK's policy position on fusion regulation and representing the UK oversees on fusion.



Mr Warrick Matthews

Tokamak Energy is a leading global commercial fusion energy company based near Oxford, UK. It is a world leader in two transformative technologies: the compact spherical tokamak and high temperature superconducting (HTS) magnets. One company, with licensable technology for commercialising clean, limitless and affordable fusion energy and enabling new levels of performance in HTS applications that change the world in which we live today.

Warrick joined Tokamak Energy in January 2023. He leads a team of over 280 people with world-class scientific, engineering, industrial and commercial capabilities, with the goal of delivering clean, limitless and affordable fusion energy in the 2030s.

Warrick also leads new business division, TE Magnetics, which is focussed on becoming the leading supplier of HTS technology to multiple markets, including renewable energy, medicine, science and propulsion in water, land, air and space.

Prior to Tokamak Energy, Warrick worked at Rolls-Royce for 24 years where he held a variety of customer-facing and operations leadership roles and was most recently Chief Procurement Officer for the Civil Aerospace division.



Mr Paul Methven CB

Paul is the CEO of UK Industrial Fusion Solutions Ltd. UKIFS is the new Government-owned company leading delivery of the STEP Programme, working collaboratively with industrial partners. STEP aims to deliver a prototype fusion energy plant and, through that endeavour, to stimulate a new industrial supply chain.

Born on the Isle of Skye, Paul joined the Royal Navy in 1988. His early career blended operational submarine tours and shore-based roles in engineering support and procurement. His later career focussed on complex programme leadership. He was the MOD Programme Director for the Type 26 Global Combat Ship and Offshore Patrol Vessel projects, led work on the National Shipbuilding Strategy and, as Director

Submarines Acquisition in the rank of Rear Admiral, was the Director responsible for the Astute Class submarine programme, the SSN Replacement design programme and the Dreadnought programme. He then switched to fusion as Director of STEP at UKAEA, taking STEP from initial formation to joining the GMPP with a delivery model defined, a site chosen and a concept plant design developed, before launching UKIFS to take STEP forward.

Paul is a graduate of the Major Projects Leadership Academy and was made a Companion of the most honourable Order of the Bath in the 2019 New Year's Honours.



Professor Paul Monks CB

Paul is Professor in Atmospheric Chemistry and Earth Observation Science at the University of Leicester. He also serves as the Chair at the British Geological Survey and the Henry Royce Institute. He is a science trustee at the UK Centre for Ecology and Hydrology.

Paul served as the Chief Scientific Advisor (CSA) at the Department of Energy Security and Net Zero (DESNZ) delivering independent and impartial science and engineering advice to ministers and policymakers across the DESNZ policy and delivery portfolio and Clean Energy Superpower Mission. As CSA he advised on a wide range of topics including Critical Minerals, Nuclear Fission and Fusion, Climate Change, CCS, Energy systems and GGR as well as setting up a Science and Technology Advisory Council.

Prior to DESNZ, Paul was CSA for the Department for Business, Energy and Industrial Strategy (BEIS) from 2020 to 2023. Before joining BEIS, he was Pro-Vice Chancellor and Head of the College of Science and Engineering at the University of Leicester.

Paul was previously Chair of the Defra Air Quality Expert Group (AQEG) and Deputy Chair of the Defra Science Advisory Council, alongside roles in the UKRI-NERC advice structures. He has worked internationally as the European representative on the Environmental Pollution and Atmospheric Chemistry Scientific Steering Committee (EPAC SSC) of the World Meteorological Organisation and on the International Commission on Atmospheric Chemistry and Global Pollution (ICACGP).

As founding director of G-STEP (a university innovation initiative), he developed a business facing organisation with the aim of innovating using satellite-based earth observation (EO) data to enhance the competitiveness of industry, particularly focused on small and medium sized businesses (SMEs).

Paul was awarded the Companion of the Order of the Bath (CB) in the King's New Year Honours 2025 for Services to Science in Government.



Dr Richard Pearson

Richard is a British fusion innovator and entrepreneur whose work bridges advanced technology development, policy, and commercial strategy for next-generation fusion technology systems. His research and professional focus centre on tritium supply, fuel cycle technologies, and the pathways needed to accelerate fusion's commercial deployment.

Richard is a Visiting Assistant Professor of Fusion Energy and Innovation at Eindhoven University of Technology and he is the incoming Editor-in-Chief of the Journal of Fusion Energy. Richard holds a PhD in Fusion Engineering & Innovation (The Open University, UK) and an MSc in Nuclear Engineering (Imperial College London).

As co-founder and formerly Chief Innovator at Kyoto Fusioneering, he helped grow the company from inception to a leading developer of tritium and plasma-heating technologies. His work combines deep technical insight with an entrepreneurial approach to translating complex fusion systems into deployable, commercial solutions.



Mr Gary Reed

Gary is the Technical Director for Assystem's Fusion and Modular Nuclear business with responsibility for technical strategy, capability development and strategic bids and projects. Chartered Engineer with broad experience across fission nuclear and fusion energy including ITER, STEP, the UK submarine programme and Small Modular Reactors.

Active in Government and private sector collaborations including support to HMG consultations, Nuclear Regulatory Taskforce, board member on the Fusion Industry Taskforce, and led industrial capability analysis and planning in the nuclear sector.

Areas of expertise: Fusion energy and fission nuclear, engineering, regulatory requirements, capability and capacity planning, transferable skills in the context of the nuclear and fusion sectors.



Mr David Sandford

David is the Deputy Director for Fusion Energy at the Department for Energy Security and Net Zero (DESNZ). Prior to joining in 2023, David worked for over a decade at HM Treasury, latterly as Head of Corporate Finance, and also spent time as an Executive Director at UK Government Investments (UKGI). David originally read Natural Sciences at the University of Bath and spent a year at the ESRF synchrotron in France.



Dr Robbie Scott

Robbie is the Chief Scientist of UPLiFT (UK Programme of Laser Inertial Fusion Technology for Energy). He is also Chair of the UK Inertial Fusion Consortium and a Senior Plasma Physicist at the Central Laser Facility, STFC Rutherford Appleton Laboratory.

He is the inventor of the 'Shock-Augmented Ignition' laser inertial fusion concept, which has the potential to double fusion-energy-gain. He also invented a new laser concept which is predicted to reduce the cost of laser fusion systems by approximately a factor of 10. He is a co-author on the seminal National Ignition Facility (NIF) fusion ignition paper.

Robbie has worked in laser inertial fusion since 2007, completed his PhD at Imperial College London in 2011, and worked on NIF at Lawrence Livermore National Laboratory until 2013. Before inertial fusion, he worked as a mechanical analysis and design engineer in the oil industry, then in the design and deployment of large-scale scientific research facilities.



Mr Rory Scott Russell

Rory serves as General Partner at East X Ventures, the venture capital arm of London-based quantitative commodities firm East X. East X Ventures launched the "Starmaker One" fusion industry fund in 2025, the first of its kind in Europe, and Rory sits on the board of Tokamak Energy and fusion industry companies digiLab, Luffy AI, Mach42 and Astut. A graduate in Artificial Intelligence and Computer Science from the University of Edinburgh and a former energy-tech founder, he blends technical fluency with commodity-market experience to back science-driven breakthroughs.



Mr John Staples

John is Director for Advanced Nuclear Strategy and Fusion Energy in the Department for Energy Security and Net Zero.

He is responsible for UK policy regarding fusion energy and advanced nuclear technologies. He is also leading the Department's work to establish Great British Nuclear (GBN) - the UK's new nuclear delivery body.

Previously he was Director for Net Zero Strategy, leading the team responsible for ensuring the UK government meets it decarbonisation targets. Prior to that he worked in Her Majesty's Treasury for over a decade in a range of senior roles. His work there included setting up the UK Infrastructure Bank and developing the UK's National Infrastructure Strategy.



Mr Paul Stein CBE

Paul is the Chief Executive Officer of Floral Energy Limited, a clean energy company which was founded in 2024 to serve the energy needs of large data centres and other high reliability energy requirements. Paul has had a broadly based career in telecommunications, defence, aerospace and energy. He was Managing Director of Roke Manor Research until 2006, then Director General of Science and Technology at the Ministry of Defence, Chief Technology Officer of Rolls-Royce plc until 2022, then chaired its spin-out business Rolls-Royce Small Modular Reactors. Paul is a Board member of iRocket LLC, a space launch business, an advisor to Zap Energy LLC, a Seattle based fusion company, and mentors several start-ups. He has been appointed to the National Cyber Advisory Board and served on the Prime Minister's Council for Science and Technology from 2020 to 2024.



Mr Alex Taylor

Alex has worked in the fusion policy team in the Department for Energy Sector & Net Zero from 2020 to 2021 and since 2023 after attaining a degree in chemistry from the University of Nottingham. Within that time, he has been responsible for developing the UK's proportionate regulatory position for fusion, leading international engagements to harmonise regulatory standards and developing UK fusion strategy as the Head of Fusion Energy Regulation Policy.



Mr Bernard Taylor CVO, CBE, DL, DCL, HonFREng, FRSC

Bernard is Chairman of the UK Atomic Energy Authority. He is a scientist (organic chemist) who has worked in manufacturing industry and then corporate finance at a senior level for many years. He is a director of UK Biobank, Chairman Emeritus of Evercore Partners International, Chairman of Thomas White Oxford Limited, Chairman of Oxford University Property Development Limited, Chairman of the Advisory Board of the Royal Society and is a director and a founder of Oxford Science Enterprises plc. He is Deputy Steward of the University of Oxford and a Fellow of both St. John's College and New College. He is an Honorary Fellow of the Royal Academy of Engineering and has been a Deputy Lieutenant of Oxfordshire since 2011. He was Chairman of the Royal Commission for the Great Exhibition of 1851 from 2011 until 2022 and Finance Commissioner for eight years before that.



Mr Mark Thomas

Mark is Chief Executive Officer of First Light Fusion.

First Light is enabling the commercialisation of fusion energy through its unique amplifier technology, which sits at the heart of inertial fusion power plants. This novel and versatile technology supports cheaper, simpler and faster pathways to clean energy.

Mark joined First Light in January 2025, following 30 years in the Aerospace and Defence sector, having held senior leadership roles in Rolls-Royce plc and Reaction Engines.

Mark is a Chartered Engineer, Fellow of the Royal Academy of Engineering and the Royal Aeronautical Society. He studied at the University of Cambridge.



Professor Roddy Vann

Roddy has been at the University of York since 2005. He is Director of the EPSRC Centre for Doctoral Training in Fusion Power: a collaboration across six UK universities and more than twenty non-academic partners currently training over a hundred PhD students in fusion science. Roddy is also Director of the Fusion Industry School, Chair of the Board of Governors of FuseNet (the European Fusion Education Network) and Skills Pillar Lead for the Fusion Industry Taskforce. His primary research focus is microwave physics for applications in tokamaks. He holds Part III in maths from Cambridge and PhD in physics from Warwick.



Dr Melanie Windridge

Melanie is a founder, advisor and communicator in fusion energy. She is the founder of Fusion Energy Insights, a co-founder of FusionX Group and Fusion Advisory Services, and a Director of the Fusion Igniter. Melanie has a PhD in plasma physics from Imperial College London, worked for eight years with Tokamak Energy, and was involved in the formation of the Fusion Industry Association (and was UK Director/Communications for the first three years) before starting Fusion Energy Insights and the other companies. She sits on advisory boards including the UK Fusion Cluster, London GreenCity and Energy for the Common Good (US). She is a Fellow of the Clean Growth Leadership Network.