The UK Atomic Energy Authority's mission is to lead the delivery of sustainable fusion energy and maximise scientific and economic benefit

UK Atomic Energy Authority

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www.gov.uk/ukaea

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UK Atomic Energy Authority

Annual Report and Accounts 2024/25

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United Kingdom Atomic Energy Authority

Annual Report and Accounts 2024/2025

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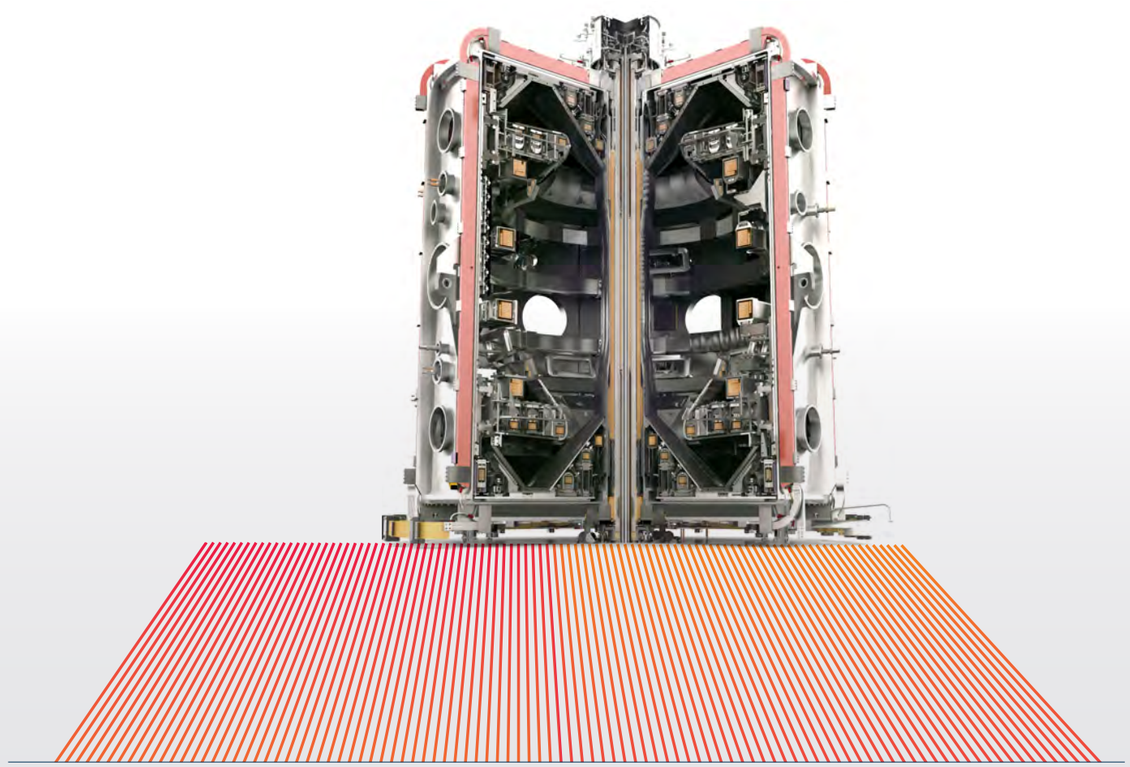


Fusion energy at a glance

UKAEA leads the world in fusion research with a wide range of programmes covering plasma science, robotics, materials testing and development, and tritium science. Our scientists and engineers are working with partners around the globe to develop fusion as a new source of clean energy for tomorrow's power plants.

WHAT IS FUSION?

Fusion takes place in the hearts of stars and provides the power that drives the universe.

Scientists and engineers all over the world are developing the technology to sustain this process on Earth to create a new source of sustainable energy.

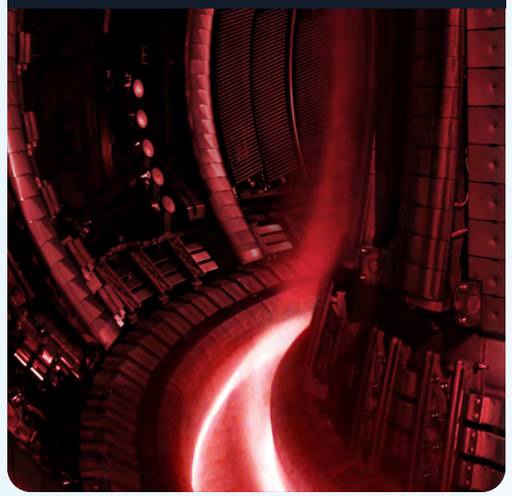
HOW DOES IT WORK?

D + T

Fusion energy can be generated in a variety of ways, with UKAEA focused on Magnetic Confinement Fusion (MCF).

He + n

Energy is released when the lighter deuterium and tritium atoms fuse together to form a heavier helium atom and a neutron.



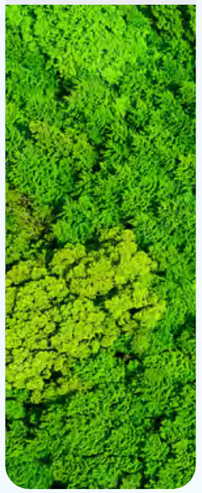
Stephen Hawking

I would like nuclear fusion to become a practical power source. It would provide an inexhaustible supply of energy, without pollution or global warming.

BENEFITS OF FUSION

Low carbon

Fusion energy is carbon-free at the point of generation.

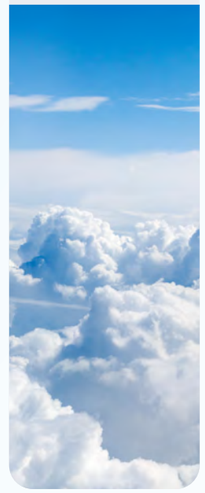


Lower hazard

A chain reaction cannot occur, and the waste produced will be shorter lived and lower level than in fission.

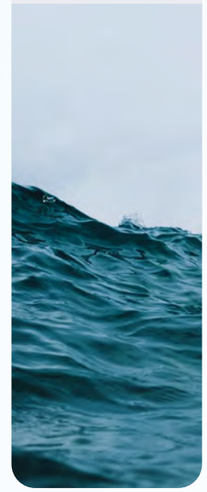
Continuous

Fusion energy is continuously deployable, as it does not depend on external factors such as wind or sun.



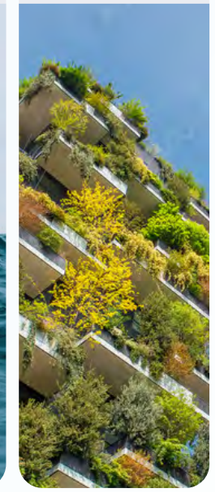
Sustainable

Fusion fuel is potentially abundant in our seas and the Earth's crust.



High fuel efficiency

Fusion produces more energy per gram of fuel than any other process that could be achieved on Earth.



AT A GLANCE

Strategy

UKAEA is a Public Sector Research Establishment (PSRE) responsible for the delivery of the UK's fusion energy research programmes. It is classed as a non-departmental public body (NDPB) and is sponsored by the Department for Energy Security and Net Zero (DESNZ).

STRATEGIC PILLARS

TECHNICAL LEADERSHIP

UKAEA's research programmes, delivered with its academic and industrial partners, focus on developing, innovating upon, and applying the fundamental science and engineering underpinning fusion power plant design. The UK Fusion Research Programme comprises the majority of UKAEA's research activity; it focuses on the research and development required to commercialise fusion energy and train the next generation of fusion scientists and engineers. The programme is funded by the Engineering and Physical Sciences Research Council (EPSRC), which is part of UK Research and Innovation (UKRI). In March 2022 a new five-year research programme began with a focus on solving the integrated scientific and engineering challenges that are central to Magnetic Confinement Fusion (MCF).

INTERNATIONAL LEADERSHIP

UKAEA has long-standing international relationships in MCF fusion research. New partnerships, such as those with US, Canada, Korea, Singapore and Germany, have been recently established to strengthen collective effort by scientists and engineers to address technical challenges, allow shared access to facilities and stimulate new R&D opportunities, standardise international regulatory frameworks and codes, develop resilient supply chains and promote skills development. International collaborations will accelerate global fusion energy development and reduce the cost and risk of the commercialisation of fusion energy.

COMMERCIAL LEADERSHIP

The ability to realise commercial value from fusion and adjacent technologies is a critical part of UKAEA's mission. That value may relate to intellectual property associated with specific processes, systems, technologies and components used in fusion facilities and/or less tangible know-how, related to the ability of a corporate entity (research laboratory, major engineering firm or SME supplier) to design, develop, operate and decommission such facilities. As fusion's technical risks are addressed over the coming years, it is expected that inward investment into fusion and adjacent technologies will increase in response to growing commercial potential. This could take many forms such as the creation of spin out companies and joint ventures or the licensing of IP into industry to develop fusion technology ready for deployment.

OUR MISSION

Leading the delivery of sustainable fusion energy and maximising the scientific and economic benefit

OUR STRATEGIC GOALS

SOLVING PROBLEMS

Solve challenges of sustainable fusion energy - from design through to decommissioning - with world-leading science and engineering.

PRODUCT

Enable partners to design, deliver, and operate commercial fusion power plants.

PROSPERITY

Drive UK economic growth and a thriving industry that exports fusion technology around the world.

PLACE

Create clusters that accelerate innovation in fusion and related technologies.

PEOPLE

Develop the talented, diverse people needed to deliver fusion energy.

OUR VALUES

Innovation

Commitment

Trust

Collaboration

Operating model

WHAT WE DO?

BUILD
THE KNOWLEDGE
BASE OF FUSION

- Operate fusion research facilities and sustain technical centres of excellence for use by fusion powerplant programmes in the UK and internationally
- Solve challenges across the full lifecycle of fusion, from design to operations to decommissioning, and integrate solutions across disciplines

DELIVER FUSION
POWERPLANTS, SYSTEMS
AND TECHNOLOGIES

- Work with industrial partners in a national programme to deliver the STEP prototype fusion powerplant
- Use our skills, facilities, and expertise to work with industry in developing fusion power plant systems and technologies

ENABLE
THE FUSION
COMMUNITY

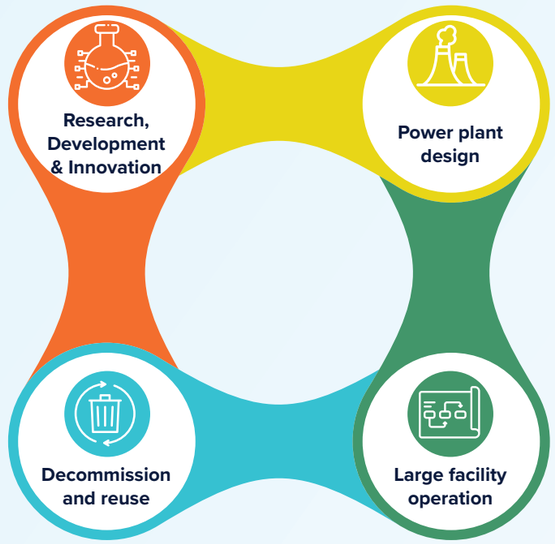
- Provide thought-leadership on the opportunities and requirements for fusion power
- Create fusion innovation clusters
- Grow a fusion industry
- Produce skilled people
- Inform fusion regulatory and insurance practices
- Identify growth opportunities for fusion technology

HOW WE DO IT?

UKAEA has capability across the full spectrum of technical disciplines needed for fusion:

PLASMA SCIENCE AND OPERATIONS | INTEGRATED ENGINEERING | ROBOTICS | TECHNOLOGY | TRITIUM FUEL CYCLE | MATERIALS | COMPUTING

UKAEA delivers programmes across the full lifecycle of fusion:



AT A GLANCE

HOW ARE WE STRUCTURED?

UKAEA GROUP

THE UK'S PUBLIC-SECTOR RESEARCH ESTABLISHMENT FOR FUSION

- The research arm of UKAEA Group

UK INDUSTRIAL FUSION SOLUTIONS

- A company limited by shares, initially owned wholly by UKAEA and set up to deliver the STEP programme

OTHER JOINT VENTURES (JV) / SUBSIDIARIES / ROLES

- Joint Venture for Harwell
- Captive insurance company, AEAIL
- Administer the UKAEA Pension scheme on behalf of DESNZ

PRINCIPLES

These principles are a commitment from UKAEA to its staff and wider partners and stakeholders:

SAFETY
Safety and wellbeing of our people is our top priority

EQUALITY OF OPPORTUNITY
Diversity of thought and people who are representative of society is crucial for our mission

ENVIRONMENTAL SUSTAINABILITY
We will strive for energy-efficient delivery, minimising our environmental impact

RESPONSIBLE FINANCIAL MANAGEMENT
We will use our resources carefully and will be accountable for our investment decisions

WORKING WITH BUSINESS
Strong and effective public-private partnerships are an essential part of our operation

STAKEHOLDERS

Our Stakeholders are the foundation of our strategy and delivery model:

Historical context and key changes

1920s

Arthur Eddington suggests that stars draw their energy from the fusion of hydrogen into helium.

1930s

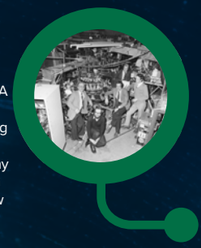
Rutherford and Oliphant at the University of Cambridge show the fusion of deuterium into helium and observe that "an enormous effect was produced".

1940-50s

Researchers start looking at possibilities of replicating the process of fusion on Earth. The UKAEA starts the ZETA experiment in 1957.

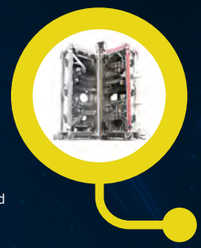
1960s

Culham Laboratory in Oxfordshire opens. Lev Artsimovich from the USSR presents results at the 1965 IAEA conference at Culham describing encouraging results from a device called a tokamak–many magnetic confinement fusion devices are now based on this design.



1970s-80s

Small tokamak devices were then built at Culham such as TOSCA. European countries came together to design and build JET at Culham.



1990s

JET sets 1st world records and the Culham laboratory operates the first full-sized spherical tokamak, START, followed by MAST.

2000s

Several privately backed fusion companies launch.

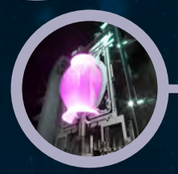
In the last decade

August 2014

The RACE centre of excellence opened with the building following in 2016. RACE collaborates internationally to design, operate and deliver robotics for extreme industrial environments.

May 2016

The Materials Research Facility (MRF) opens, enabling industrial and academic researchers to analyse the effects of irradiation on materials as part of the National Nuclear User Facility (NNUF) initiative.



October 2019

The conceptual design phase for STEP, a prototype fusion power plant, begins.

The Oxfordshire Advanced Skills (OAS) centre opens on Culham Campus aiming to train up to 350 apprentices each year.

October 2020

The Fusion Technology Facility (FTF) in South Yorkshire opens, our first new research site outside of Culham since the 1950s, bringing highly skilled jobs, fostering collaborations with research organisations and engaging industry.

MAST Upgrade starts operation with the engineering team achieving the Royal Academy Major Project Award. The upgrade enabled longer pulses, increased heating power and a stronger magnetic field – and an innovative new plasma exhaust system.

May 2021

A second JET campaign begins, using the fuel mixture of deuterium and tritium.

April 2022

RAICo Programme Collaboration starts to use robotics and AI in nuclear decommissioning environments.

June 2022

Tritium research centre (H3AT) opens at Culham to lead the delivery of tritium lifecycle solutions and technology both in fusion and adjacent sectors.

October 2022

West Burton site announced as the future home of STEP. It will create thousands of highly skilled jobs in the area and attract high-tech industries.

December 2023

JET runs its last pulse (having achieved a world record in October) and starts repurposing and decommissioning.

November 2024

UKIFS Ltd is stood up as a subsidiary company of UKAEA to deliver the STEP programme and stimulate growth of a UK fusion energy industry.

March 2025

The partnership between UKAEA and Eni S.p.A is launched, to work on the world's largest and most advanced tritium fuel cycle facility in the UK.

Throughout this Annual Report, and other documents produced by the organisation, the term UKAEA refers to the public sector research establishment, which does not include UKIFS. UKAEA Group will be used instead when referring to the Group, including subsidiaries.

This annual report focuses on performance and delivery against key goals for UKAEA Group, setting this within the broader context of global fusion research and development.

Key Changes this Year

We continue to support our research and innovation activity across all stages of the fusion lifecycle. With a budget of £469M for 2025/26, of which £403M is grant-in-aid from the Department of Energy Security & Net Zero (DESNZ), we are increasing efforts to strengthen UK fusion research and support growth and innovation in the UK supply chain.

EXTERNAL CHANGES

International Landscape

We have developed new international partnerships over the year in alignment with other nations' growing focus on fusion. The landscape is shifting rapidly which presents opportunities as well as challenges. See ***Strategic Pillars on page 6***.

EUROfusion

EUROfusion is a Europe-wide initiative to coordinate fusion research. Throughout 2024/25 the UK funded its own participation in EUROfusion to utilise this valuable network of researchers and facilities.

ITER

The ITER project is the world's largest fusion experiment to date, and aims to demonstrate fusion energy production at an industrial scale. While UKAEA has not been able to participate in ITER through Fusion for Energy (F4E), the UK's domestic Fusion Futures programme aims to provide UK companies with similar opportunities, to develop capabilities in developing fusion systems and solutions at industrial scale.

UK context

Following the General Election in July 2024, the Budget in October 2024 for financial year 2025/26 demonstrated support for fusion. UKAEA was awarded £403M in HMG funding. The Government has announced £2.1BN funding for Fusion over four years from financial year 2026/27 onwards.

2024/25 UKAEA delivery highlights

The Bluemira v1.0 whole plant design framework code was developed and open-sourced, benefiting international fusion power plant demonstration design activities. ***See pages 24-25***.

UKAEA has had a very successful year in growing commercial income and supporting wider economic impact through its Business Development function. ***See page 34***.

Alongside the launch of UKIFS, UKAEA has established a robust internal governance arrangement including a "Fusion Partner Office" so that it can execute its R&D responsibilities as one of UKIFS' three Whole Plant Partners. ***See pages 31-32***.

Following the end of JET operations in December 2023, repurposing and decommissioning activities are fully underway after a two-year transition. ***See pages 28-29***.

The £200M Fusion Foundations Programme has now concluded, delivering 21 projects that have provided significant benefits across Culham Campus and beyond. Focused on facilities, infrastructure and skills, it has been transformational in developing Culham Campus. This enables us to welcome more industry and commercial partners onto site, strengthening the broader UK fusion ecosystem. ***See pages 40-41***.

The Fusion Opportunities, in Skills, Training, Education & Research (FOSTER) programme completed its first year of delivery, supporting PhDs, launching international fellowships, and engaging school children through outreach activities. ***See pages 48-49***.

Chair's statement

"HOW EXCEPTIONAL OUR SKILLED AND DEDICATED WORKFORCE IS – AND HOW EXCITING THE ROAD AHEAD WILL BE"

Bernard Taylor
Chair

My first full year as Chair of UKAEA has reinforced to me how exceptional our skilled and dedicated workforce is and how exciting the road ahead will be. Leading global efforts in fusion science and engineering is and will always remain core to our purpose. At the same time, UKAEA is changing as we lay the foundations for fusion industrial innovation, delivery and commercialisation.

We saw a major and important change in November, when we formally established UKAEA's wholly owned subsidiary company UK Industrial Fusion Solutions Ltd (UKIFS). UKIFS will partner with industry to deliver the flagship STEP (Spherical Tokamak for Energy Production) programme, to develop and build a fusion prototype power plant at West Burton in Nottinghamshire. I commend colleagues across UKAEA and UKIFS on their herculean efforts to set up UKIFS and to start the process of establishing major future industrial collaborations.

UKAEA's fusion R&D programme continues to be globally unparalleled in its breadth for a single research organisation. 2024/25 marks the halfway point in our UKRI-EPSRC (UK Research and Innovation – Engineering and Physical Sciences Research Council) funded research programme. The successes achieved already are laid out on ***pages 24-25***.

We reported extensively on the end of JET operations in last year's Annual Report. The JET Decommissioning and Repurposing Programme (JDR) made great strides in 2024/25, notably removing components from inside the JET tokamak to generate a set of samples that give the UK a world-first data set from a fusion machine.

In January we welcomed to Culham The Rt Hon Ed Miliband MP, Secretary of State for Energy Security & Net Zero. He announced an annual funding settlement for UKAEA from the Department for Energy Security & Net Zero in 2025/26 of £403M to deliver on its priority programmes and realise the scientific and economic benefits for the UK. That same month, we hosted The Rt Hon Peter Kyle MP, Secretary of State for Science, Innovation and Technology as part of the Government's announcement of the UK's first AI Growth Zone right here at Culham. I would also like to thank all our team of dedicated Civil Servants in DESNZ for their constant support and help as we work together to deliver our mission.

In March I was delighted to see the conclusion of efforts to secure a commercial partnership with the Italian energy company Eni S.p.A, to support at Culham the world's largest and most advanced tritium fuel cycle facility. The partnership between UKAEA and Eni S.p.A will bring additional skills and investment into this project by jointly building and commissioning the H3AT Tritium Loop. Indeed, throughout the year we have been successful in attracting commercial investment, significantly exceeding our initial target by securing £9.5M in commercial bids, and launching new partnerships including the US Department of Energy, and fusion companies. We have also launched new partnerships with the US Department of Energy, and fusion companies General Fusion and Novatron. We have also launched a £12M, 4-year, national programme for advanced steel development to be used in high temperature nuclear applications across a dozen enterprises.

The UKAEA Board has remained the same throughout 2024/25, though in May 2025 we said farewell to Lady Eithne Birt. Eithne has served on the Board since 2020, chairing the Board's People and Remuneration Sub-Committee. She also served as interim chair in 2023/24. Eithne's background in organisational strategy, change and talent management has been invaluable throughout that time, and we thank her for everything and wish her all the very best in the future. In June, we were delighted to welcome Claire Flint onto the Board as Non-Executive Director. She will bring with her deep and broad experience of strategic HR and organisational development matters as she takes on the Chair of the People and Remuneration Sub-Committee.

My Board colleagues and I take great pleasure in working with the enormously talented UKAEA executive team. As with the whole of UKAEA's workforce, the executive team is packed with deep experience and huge talent. The team exemplifies UKAEA's greatest strength – its people.

Finally, we must say goodbye to Professor Sir Ian Chapman, UKAEA's CEO for the last nine years, who will leave the organisation in July 2025 to become the CEO of UK Research and Innovation. Ian's leadership, vision and all-round technical excellence has steered the UKAEA through huge success, including the triumphant final experimental campaign of JET, the development of a concept design for the UK's fusion prototype power plant STEP, and the consolidation of the UKAEA as the global hub for fusion research for the coming decades. I have immensely enjoyed working with Ian, who has imbued me with his enthusiasm and love of UKAEA. Our loss is the gain of UKRI and the UK– we need dynamic leaders in UK science and innovation who can translate our world-leading research base into economic success. We will miss him, but I know Ian will be brilliant and we should be proud that he goes on to this vital role for the UK.

Tim Bestwick, who has acted as Chief Development Officer and Deputy CEO since 2023 will become interim CEO while we find Ian's successor. I am very much looking forward to working with Tim.

It continues to be a great pleasure and privilege to serve UKAEA. I look forward with enthusiasm to the challenges and opportunities ahead.

Bernard Taylor
Chair

Chief Executive's statement

"UKAEA TURNED 70 YEARS OLD IN 2024, BUT CONTINUES TO REINVENT ITSELF, NOW AS THE PREEMINENT FUSION ORGANISATION GLOBALLY"

Professor Sir Ian Chapman
Chief Executive and Accounting Officer

This is the ninth statement I have written for our Annual Report and Accounts, and each time I have begun by speaking about the imperative to decarbonise our power production. 2024 was the hottest year on record, and global temperatures have now exceeded 1.5°C above pre-industrial levels as targeted by the Paris Agreement. Despite this very present crisis which accounts for enormous cost each year, both monetary and human, our actions to reduce greenhouse gas emissions are not commensurate. The tension between emissions and growth is ever-present, no better exemplified than in China where 2024 saw 350GW of additional renewables capacity (a staggering 4.5 times that achieved in Europe) but at the same time 95GW of new coal power generation began construction (roughly twice the whole of the UK's average electricity consumption). This is precisely why our mission to deliver sustainable fusion power and maximise economic benefit is so important – we aim to do good for the world, and to do well for the UK, simultaneously.

We welcomed a new Government this year, and pleasingly have continued to see good support for funding in 2025/26. We have hosted the Secretaries of State from the Departments for Energy Security & Net Zero and Science, Innovation and Technology as well as numerous other ministers, all of whom recognise the importance of our mission and leave impressed by the brilliance of our people. We continue to have an excellent partnership with DESNZ, working together to deliver Government's priorities.

UKAEA turned 70 years old in 2024, but continues to reinvent itself, now as the preeminent fusion organisation globally, supported by a Government commitment to a record budget of over £2.5BN for the five year period to 2030. We may be an old organisation, but we continue to do plenty of new things. This year we have seen delivery of many new buildings at our Culham campus revitalising the organisation through the successful delivery of the £200M Fusion Foundations programme, on time and on budget. Culham was announced as the first AI Growth Zone in the UK, whilst we also set up a new subsidiary company, UK Industrial Fusion Solutions, which took ownership of the STEP programme in November this year.

UKIFS is already taking big steps by seeking Whole Plant Partners to join us on a multi-decadal design and build programme, as well as publishing a special issue in Philosophical Transactions – the oldest scientific journal in the world – describing a snapshot in time of the concept design for STEP. We have also secured approval for the next tranche of the STEP programme from 2025-2029. We are proud of the new company we have formed, the prowess of the team we have assembled, and the relationship we have developed with the community and region that have welcomed us to our new site in the East Midlands.

Beyond STEP, all of UKAEA's programmes are going well. We spent 100% of our budget for 2024/25 and delivered the majority of our objectives for the period. Amongst the successes were the contract award for a fusion-spectrum neutron source to underpin our new LIBRTI tritium-breeding test facility, the successful completion of the first sample removal campaign from JET, first operations with a cryo-pumped exhaust system in MAST Upgrade and corresponding improvement in fusion performance, and the awarding of £22M for a new Fusion Engineering Centre for Doctoral Training.

We also continue to secure economic value for the UK from our fusion research and innovation. This year has seen the establishment of the Starmaker One venture capital fund specifically targeting companies with presence in the UK, the announcement of a partnership between UKAEA and Eni S.p.A, an international energy company, to deliver H3AT – the world's most advanced tritium research facility, and a number of international fusion companies relocating a part of their operations to the Culham campus. Finally, we have seen two new spin-out companies from UKAEA this year with a healthy pipeline now in place for many more in the next few years.

We haven't succeeded in everything though. We had sought a technical cooperation agreement to enable our continued participation in the ITER programme, but for various non-technical reasons this did not prove possible. Meanwhile, our new magneto-hydrodynamic test facility, CHIMERA, based in our South Yorkshire facility, has not progressed at the rate we had hoped. I hope we make better progress on both issues in 2025/26.

The greatest privilege of my job is to represent our dedicated, talented people; this year we have welcomed a further 320 new starters to the organisation, which has continued to grow to around 2,574 people. We are a hugely multicultural team, comprising 68 different first nationalities – to be a world-class organisation by definition you have people from around the world. We need to overcome some astonishingly difficult challenges, and we can only do that with the best minds. This year we have thanked our previous Director of Finance, Alli Brown, for her huge contribution to the growth of UKAEA and welcomed Jill Evans as her successor. We have also welcomed Sharon Taylor as our

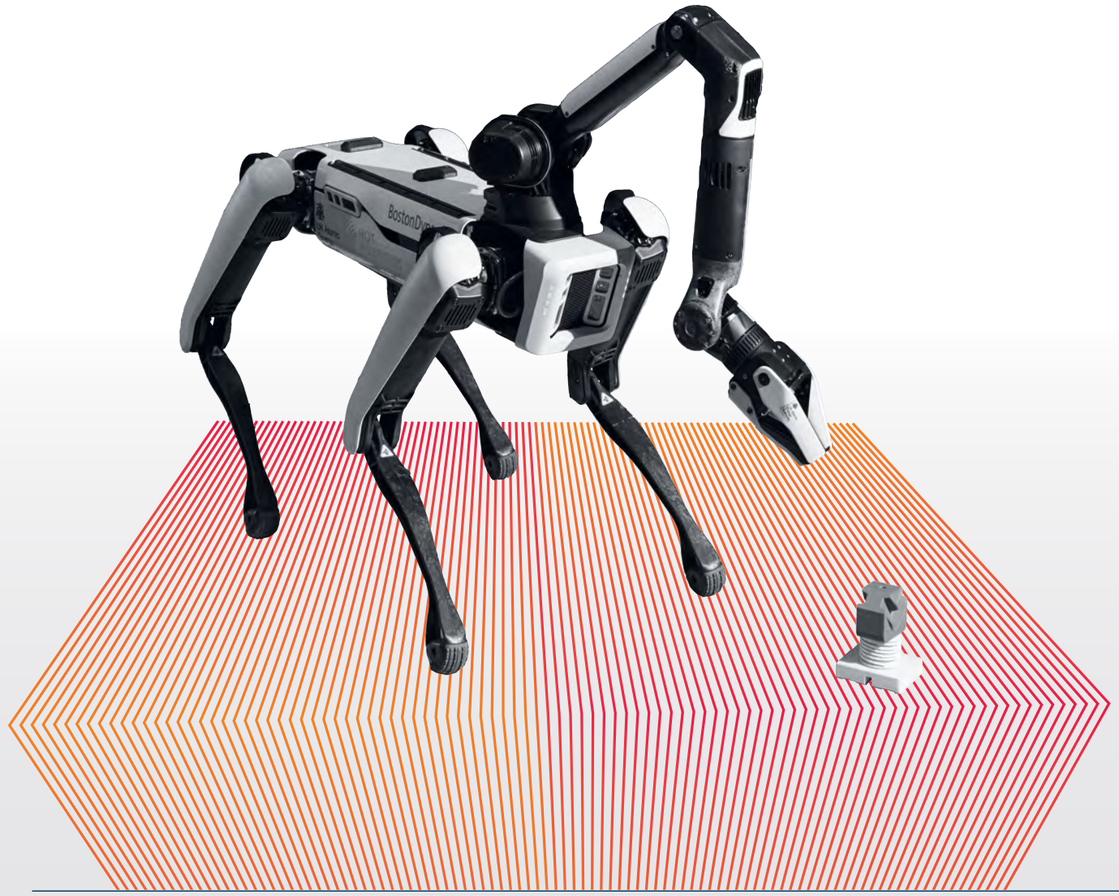
Chief Executive's statement continued

new Director of People and Culture. I was delighted to see OBEs awarded to our Director of JET decommissioning and repurposing, Zac Scott, for his work before joining UKAEA, and to Adam Baker from the Department for Energy Security & Net Zero for his decade of commitment to fusion policy.

This is the last time that I will write in this report as I leave UKAEA at the end of July. As CEO for nine of the 70 years of UKAEA's existence I have simply been one of its caretakers, and I really have tried to take care of it. I love UKAEA, and more specifically, I have loved representing such talented, altruistic people. Over the last nine years we have achieved extraordinary things, setting multiple world records, building unprecedented facilities, driving significant inward investment into the country, establishing the skills and supply chain for the future fusion industry, and perhaps most importantly, giving the UK a great chance to deliver fusion power and change the world for the better. I am as optimistic and enthused by our mission now as I was in 2016. I will leave you with words from Mark Carney, now the Prime Minister of Canada, who said: "Companies, and those who invest in them and lend to them, who are part of the solution, will be rewarded. Those who are lagging behind and are still part of the problem will be punished". What gives me more cause for optimism than anything is that many companies and investors are now seriously involved in fusion and together with the brilliant people at UKAEA, anything is possible.

Professor Sir Ian Chapman
Chief Executive and Accounting Officer
11th July 2025

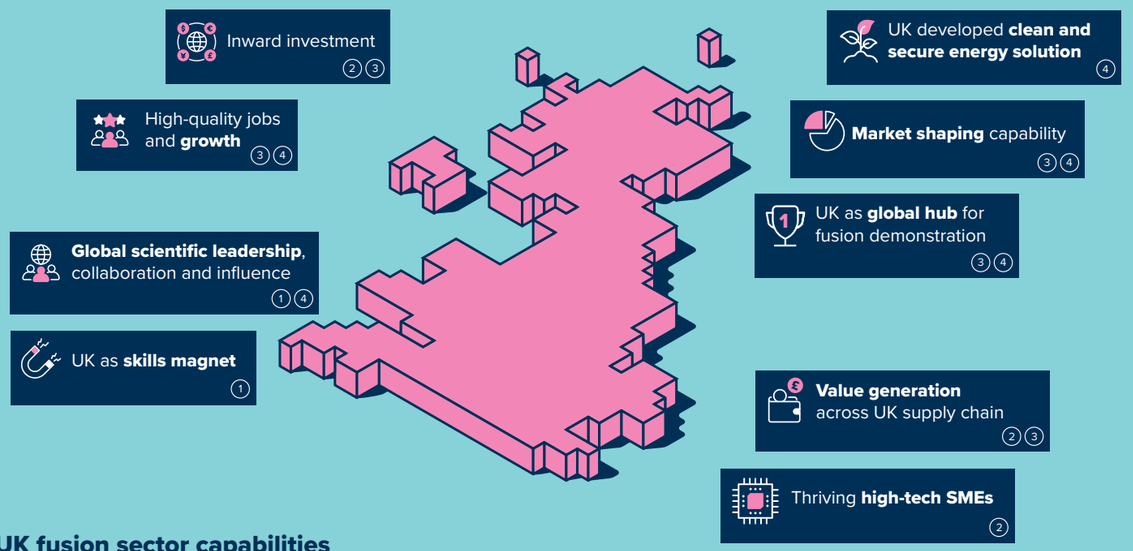
MEASURING PERFORMANCE



Measuring Impact on the UK

UKAEA's mission – to lead the delivery of sustainable fusion energy and maximise the scientific and economic benefits – is a broad and long-term endeavour. The Government is providing record levels of funding for *UKAEA's programmes and activities* in view of those scientific and economic benefits, both short and long-term. Those programmes aim ultimately to build a UK fusion sector with the breadth of capability required to deliver those long-term benefits. This is illustrated below.

What are we aiming for?
Long-term benefits

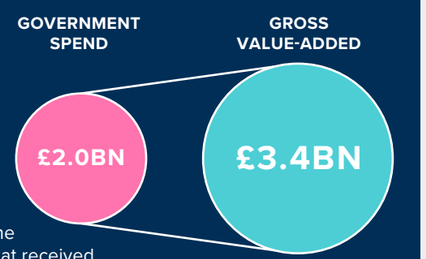


UK fusion sector capabilities

1. Foundational research and skills
2. Supply chain technology innovation
3. Industrial-scale systems capability and capacity
4. Power plant integration and delivery

UKAEA Fusion R&D: Economic Impact and Funding (2009/10 - 2024/25)

UKAEA uses different approaches to evaluate realisation of these benefits. Quantitative analysis undertaken by UKAEA and DESNZ suggests that the gross value-added (GVA) impact of UKAEA fusion R&D activities between 2009/10 and 2024/25 was £3.4BN, with UK Government spend of £2.0BN over the same period.[1]

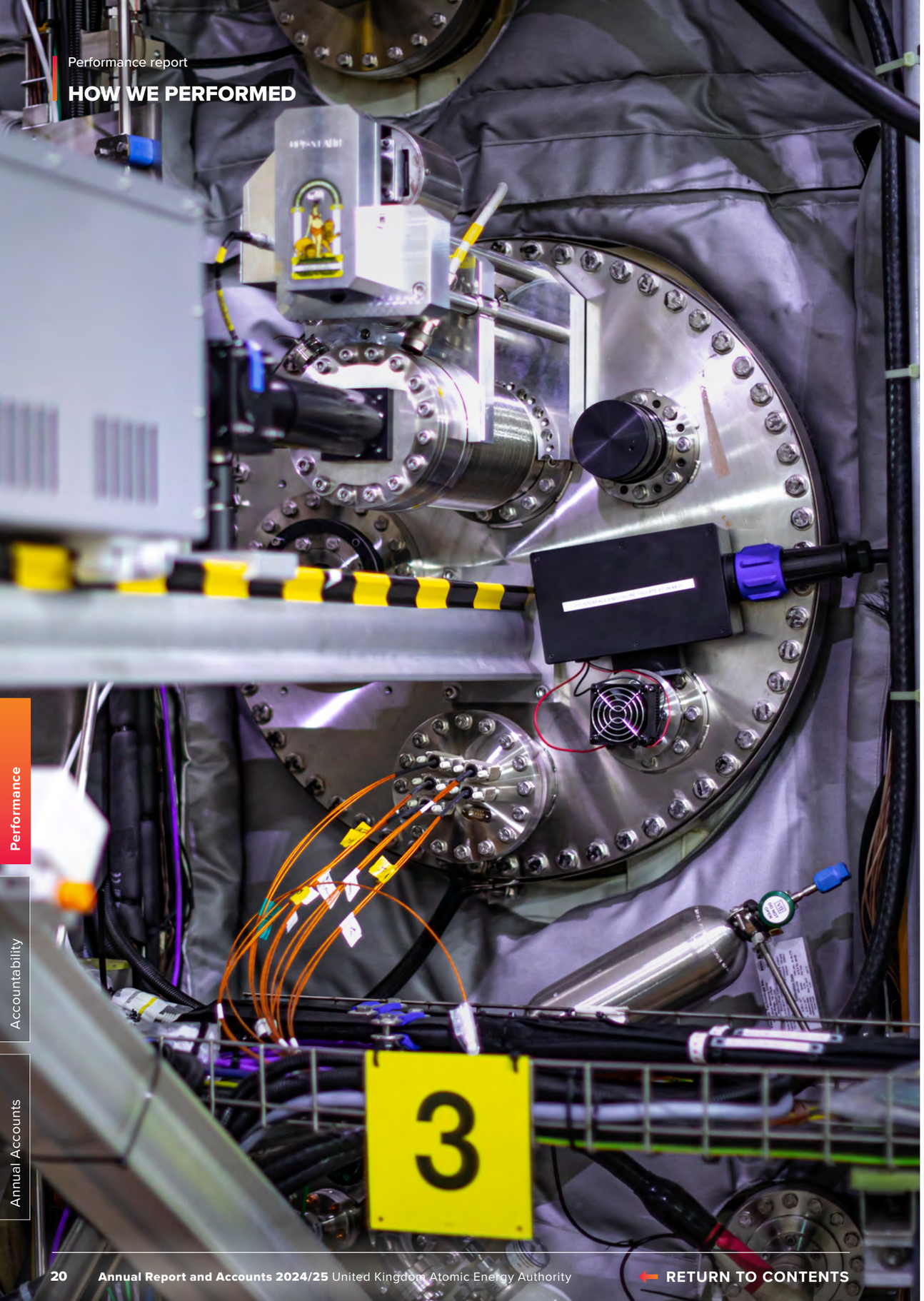


[1] GVA and UK government funding in 2024/25 prices, direct and indirect effects only. The amount of GVA for every £1 in UK government funding has reduced compared to the London Economics analysis undertaken in 2020 because between 2009/10 and 2023/24 the amount of UK government funding has increased in relation to external funding, primarily that received from the European Commission to operate the Joint European Torus (which ceased operations in 2023).

UKAEA is developing an Impact Reporting Framework, to provide a broad picture of the ongoing scientific and economic benefits of UKAEA's programmes and activities across priority 'impact areas'. Examples of analysis undertaken to date are shown below for these 'impact areas'.

UKIFS is separately tracking the impact of its programmes and work, and will include details of this in its own Annual Report. Impacts in 2024/25 include skills and workforce growth, new commercial and inward investment generation, and advancing site development work with regional impact at West Burton.

- **UK jobs in fusion:** Between 2020/21 and 2024/25, an average of 6,000 jobs per year were supported in the UK economy by UKAEA activity, 60% of which were in the UK supply chain rather than working directly for UKAEA.
- **UK skills growth:** Within this year, UKAEA's FOSTER programme has supported 31 PhDs, secured partnerships with 2 leading UK universities to expand Masters-level training for fusion in the UK, engaged nearly 50,000 school students through outreach activities, and started a new collaboration with the Science and Technology Facilities Council (STFC) at the Oxfordshire Advanced Skills facility, with 16 apprentices in the first cohort.
- **UK scientific and research achievements:** In Financial Years 2022/23 to 2024/25, UKAEA increased its scholarly output by 11% compared to Financial Years 2019/20 to 2021/22. UKAEA researcher attendance at conferences nearly doubled over that same time period. 51 PhD students started during 2024/25 from 19 universities.
- **UK value generation:** via intellectual property and know-how, UKAEA's research and innovation is increasingly generating value in the UK economy. Since 2019, UKAEA has submitted 166 invention disclosures and filed 27 patents, including 14 from the Spherical Tokamak for Energy Production (STEP) programme. These cover a wide range of technologies, from remountable superconducting magnets and advanced tritium handling systems to novel robotic platforms and repair methods for next-generation materials. The number of identified economic sectors into which UKAEA's fusion technologies could be applied doubled between 2021 and 2024.
- **Commercial and inward investment into UK fusion:** UKAEA is increasing commercial and foreign investment into its programmes and activities. UKAEA received £9.5M of direct commercial investment during 2024/25 and agreed a commercial partnership with Italian multinational energy firm Eni to build the H3AT facility.



Contributes to UN sustainability goals:

Measuring Performance

The scientific and economic benefits of fusion R&D arise from the collective impact of UKAEA's programmes and activities over time. Ongoing measurement of UKAEA's performance is based on UKAEA's five strategic goals. Each year, UKAEA sets itself a set of stretching targets, known as 'Corporate Performance Measures' (CPMs). CPMs are aligned to these five goals and distributed across programmes and activities, in line with budgetary allocations. The 2024/25 CPMs were agreed within the organisation, led by the executive team, then approved by the executive committee and board in March 2024. The overall level of completed 2024/25 CPMs is used to determine UKAEA's corporate bonus. CPMs are reviewed and signed off by Internal Audit as independent verification.

From 1st November 2024, responsibility for delivering some of the CPMs was transferred to UKIFS. The responsibility for several other CPMs was shared between UKAEA (the Public Sector Research Establishment) and UKIFS.

As in previous UKAEA Annual Reports, the remainder of this section describes UKAEA's performance against the five strategic goals. It sets out the number of CPMs met, partially met or missed, and provides further detail on some key CPMs. These particular CPMs have been selected as they are illustrative of how UKAEA is working towards its strategic goals and provide examples of performance highlights over the reporting year.

STRATEGIC GOALS	28	Fully achieved	17	Partially achieved	8	Missed

Goal 1 8 4 3

Solving Science & Engineering Problems

Solve challenges of sustainable fusion energy - from design through to decommissioning - with world-leading science and engineering.

Goal 2 8

Product

Enable partners to design, deliver, and operate commercial fusion power plants.

Goal 3 7 2 2

Prosperity

Drive UK economic growth and a thriving industry that exports fusion technology around the world.

Goal 4 1 2 1

Place

Create clusters that accelerate innovation in fusion and related technologies.

Goal 5 1 2 1

People

Develop the talented, diverse people needed to deliver fusion energy.

3 7 1

Enabling Goal

Corporate performance

For 2024/25, we targeted 53 milestones; 28 Fully Achieved, 17 Partially Achieved and 8 Missed. The milestones are set to be stretching. Each milestone has defined measures of success which determine the degree of completion. This year's 85% achievement (full and partial combined) is consistent with the 80-90% range achieved in the previous 6 years. Many of the partially completed milestones saw the accomplishment of the majority of their respective targets, falling short on only a few due to outside factors. A summary of the key successes and impact of partial/missed milestones follows.

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Contributes to UN sustainability goals:

13 CLIMATE ACTION
TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

Goal 1:
Solving Science & Engineering Problems

Performance Against Targets: **Solving Problems**

Solve challenges of sustainable fusion energy, from design through to decommissioning, with world-leading science and engineering.

UKAEA is committed to addressing the scientific and engineering challenges pertinent to fusion. In advancing scientific knowledge through research, and in developing first-of-a-kind engineering solutions, there are several key subject areas which are vital in enabling the realisation of fusion power plants.

This includes developing tritium and plasma capabilities, as well the study and development of materials that must withstand severe conditions. Additionally, UKAEA looks to advance the frontiers in computing, maintenance, and decommissioning; each of which plays a fundamental role in the delivery of sustainable fusion power.

UKAEA collaborates on fusion challenges with industry, universities, and international partners. Experimental campaigns undertaken provide valuable data for improving models and simulation which are critical for optimising the design and performance of fusion reactors. Working together with leading institutions and organisations worldwide allows the leveraging of a diverse range of expertise and resources, enhancing the impact of UKAEA's research efforts.

8 4 3 **8 achieved - 4 partially achieved - 3 missed**

For 2024/25, against Goal 1, UKAEA set itself 15 Corporate Performance Measures (CPMs) comprising 27% of the total weighted CPMs.

The CPMs that were partially met faced delays stemming from agreeing the necessary collaboration and commercial agreements but nevertheless saw significant progress.

3 CPMs were missed. Progress has been made on the CHIMERA project, most noticeably with the magnet manufacture, the magnet yokes and the vacuum vessel. It was not possible to fully re-baseline the system integration so this objective was missed. In MAST-U, progress has been made in the installation of systems required for the EBW heating system, however, some aspects are still outstanding, which has delayed demonstration of successful operation.

This section will explore the relevant context for 3 of the CPMs. They relate to the cross-cutting EPSRC-funded UK Fusion Research Programme, the experimental campaign on MAST-U, and R&D within the JET Decommissioning and Repurposing Programme. They illustrate some of the success UKAEA has seen over this reporting year.

1. Progress momentum on EPSRC interdisciplinary projects – partially achieved.
2. Study the impact of lower divertor cryopumping on MAST Upgrade plasmas, including but not limited to core and pedestal confinement and plasma exhaust – fully achieved.
3. Enact a Sample Retrieval Campaign to obtain scientific data on activation levels and tritium uptake and use that information to inform future decommissioning planning – fully achieved.

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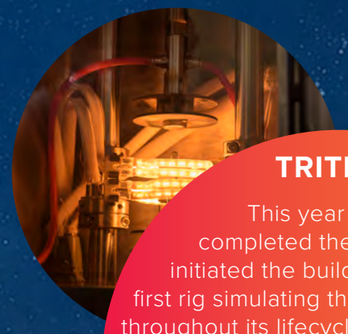
OUR RESEARCH PROGRAMME

The fusion research programme focuses on solving the integrated scientific and engineering challenges that are inherent in fusion. The programme is supported by research grants, with the majority funded by the Engineering and Physical Sciences Research Council (EPSRC), and it spans multiple disciplines that represent the key areas in scope across the lifecycle of a fusion power plant.

PLASMA

Recent results from the MAST Upgrade tokamak have substantially improved our understanding of the process of managing the heat and particles ejected from a tokamak, also known as the plasma exhaust. These results, along with those from EUROfusion TCV tokamak, are being used to improve tokamak design models for STEP and future machines. Fundamental research in innovative diagnostic development has allowed UKAEA to attract work from partners including the United States Department of Energy and fusion companies.



TRITIUM

This year UKAEA completed the design and initiated the build of the world's first rig simulating the control of tritium throughout its lifecycle in a fusion power plant and enabling the development of critical monitoring and analytical tools (HERA). In parallel, experimental operations of the ex-JET fuel cycle provide a unique opportunity to test and improve both individual subsystems and the fuel cycle as a whole.

COMPUTING

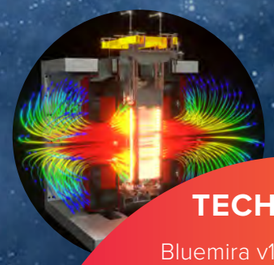
UKAEA has developed a publicly available fusion data service called FAIR-MAST, currently supporting historical MAST data and due to integrate MAST-U and JET data. The UKAEA's dataset now includes highly curated and cleaned 'Level 2' data, which will be instrumental in work on UKAEA Artificial Intelligence (AI) and Machine Learning (ML) projects. EPSRC research funds were leveraged to set up the Fusion Computing Lab (FCL) with STFC Hartree Centre, aiming to develop a digital twin to a fusion power plant and to accelerate future development.

OVERCOMING CHALLENGES

Research at UKAEA faces the challenge of achieving efficient integration of efforts across multiple teams in the specification, design, assurance, engineering and commissioning of experimental rigs and technology. As the organisation has grown, ensuring synergy and timeliness has required the implementation of stronger protocols and an even more collaborative culture. All teams share this goal and embrace continuous improvement with integrity and goodwill.

MATERIALS

Materials research in neutron-resilient steels has led to the creation of a £12M, 4-year, national programme across 14 enterprises for advanced steel development for high temperature nuclear applications (NEURONE). In 2024/25 the programme delivered a world first 5.5 tonne ingot of reduced-activation ferritic martensitic alloy (a steel that reduces nuclear waste), representing a proto-supply chain for future fusion builds in the UK and internationally.



TECHNOLOGY

Bluemira v1.0, a whole plant design framework code, has been developed and open-sourced. It is being actively used internationally, supporting world-leading fusion power plant demonstration design activities, including the UK's STEP powerplant prototype. Notable broadcasting and leadership were demonstrated at the 30th Symposium Of Fusion Engineering (SOFE) where UKAEA staff were the chairs and technical chairs for the conference committees. Over 30 presentations and papers resulting from the EPSRC programme grant were presented at this internationally renowned conference.

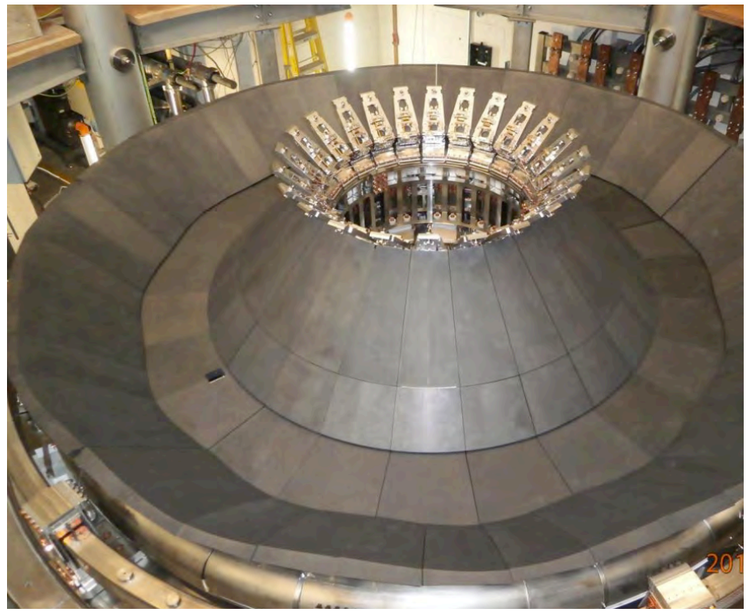
ROBOTICS

Investigation into the benefits of leveraging AI and ML for automation tasks has led to a ML-empowered visual system analysing nonlinear bending dynamics (characterised by complex, unpredictable behaviour) of flexible large payloads (the information being transmitted). This system is suitable for non-nuclear large industry installations. A control framework, which integrates digital twin, teleoperation, automated manipulation, force-compliant control, and computer perception, has been designed. This enables non-destructive disassembly and reassembly tasks, relevant to high hazard industrial users beyond fusion.

MAST Upgrade Harnessing Extremes: Using Ultra-Cold Cryopumps to Sustain Hot Fusion Plasmas

From September 2024, MAST Upgrade started flowing cryogens through the cryopump in its lower divertor, allowing hotter, higher performance plasmas and opening up new research possibilities. Magnetic confinement fusion devices rely on strong heating and fuelling to sustain the plasma, and strong pumping to remove the spent fuel and maintain the purity of the plasma.

The cryopump sits in the lower chamber of the machine, known as the divertor, which is where the plasma cools and is expelled. The cryopump works by cooling surfaces to enable the gas, which is present in the machine, to stick to these cold surfaces. The gas is then trapped on the surface and no longer travels around the inside of the machine, effectively pumping it out of the plasma.



The lower divertor cryopump on MAST Upgrade as the device was under construction.

As a result, MAST-U can now create more relevant power plant plasma conditions, which include a massively increased temperature at the divertor surfaces. MAST-U was in part built to study techniques to mitigate for this huge power loading on divertor components with sophisticated real-time measurements, and this latest milestone enables these studies.

This includes research on how the power leaves the plasma and how effective the MAST-U's Super-X divertor is at controlling it (a magnet arrangement which sweeps the plasma across the divertor surface).

The ITER and STEP facilities plan to inject fuel gas and impurities into the divertors to cool the plasma, but there has been a lack of suitable machines to develop this research. Now, this new capability of MAST-U expands the range of plasma conditions that can be reached, towards the higher temperatures expected in future high-power tokamaks, and will keep MAST Upgrade at the forefront of fusion research.

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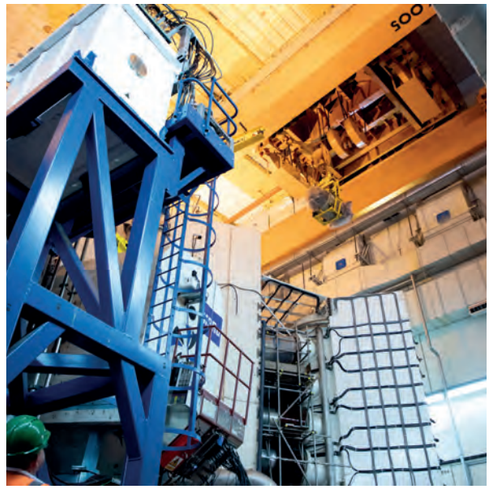
JDR and Robotics



JET DECOMMISSIONING AND REPURPOSING (JDR)

The JDR programme is designed to discharge the UK's liability for JET decommissioning in a cost-effective manner, using innovative cost saving methods, and reducing nuclear hazards.

- To minimise waste streams and maximise tritium recovery.
- To develop, implement and prove new technologies which will position the UK for future international markets.
- To repurpose JET facilities for UK science and innovation where there is a clear case to do so.
- To enable the growth of the fusion cluster by regenerating land released from JET.
- To retain and build on the key UK skills base gained through hosting and operating JET, including within the supply chain.

Following the end of JET operations in December 2023, UKAEA is now at the end of a two-year period of transitioning into repurposing and decommissioning.

JET AS A TEST BED FOR NEW AUTOMATED DECOMMISSIONING PROCESSES

UKAEA and the University of Oxford Robotics Institute (ORI) have achieved a first-ever autonomous robot deployment in a fusion facility. The 35-day trial took place in the JET facility. JET provided the ideal opportunity to test the ORI's autonomy platform, 'AutoInspect', which controls a Boston Dynamics 'Spot' quadruped robot in an environment still hazardous after high-powered deuterium-tritium experiments. This deployment demonstrates that autonomous robots can enhance safety and cut costs. These next generation solutions are becoming ready to use in other industrial facilities such as nuclear decommissioning, environmental clean-up, and disaster relief. Crucially, the results from this project will assist planning during tranche 2 for the next stages of JDR.

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JET SAMPLE RETRIEVAL – USING ROBOTIC TECHNOLOGY TO GATHER UNIQUE IP FOR THE UK

The JDR Sample Retrieval project which was completed in 2024 enabled and managed the removal of components from inside the JET tokamak. These were then processed into material samples for analysis by UKAEA and external stakeholders. Unique robotic operations were conducted by upgrading JET legacy equipment. The team gained experience in operating in a highly-tritiated environment, training new operatives, and developing new processes. The result is a set of samples which gives the UK a world-first data set from a large scale DT fusion machine. Samples will be used to plan decommissioning and test new processes for removing tritium (detritiation). The robotics team will use tranche 2 of the JDR programme to prepare the robots for dismantling JET.

ROBOTICS AT UKAEA

UKAEA recognition of the need to embrace robotics and AI (RAI) to deliver sustainable fusion energy led to the creation and delivery of both RACE (Remote Applications in Challenging Environments) and RAICo (RAI Collaboration). In addition, examples of collaborative RAI programmes include LongOps (Japan-UK collaboration) and the recently awarded EPSRC funded project to create a nuclear RAI cluster linking Cumbria and Oxfordshire. These are focused on efforts to research advances in robotics to deliver faster and safer fission and fusion decommissioning.

Benefits and outcomes of UKAEA's work in this area to date include costs and schedule savings from deployments, scientific leadership and capability development, technology demonstrators, supply chain development and skills pipeline development.

Major achievements include playing a critical role in JET science success and now in JET decommissioning, hosting the ITER Robotics Test Facility, supporting the ITER Hot Cell development with 15 people seconded to ITER, leading EU-DEMO remote maintenance, delivering the UKRI funded Robotics and Artificial Intelligence in Nuclear (RAIN) hub which initiated an enduring collaboration with the University of Manchester, and delivery of the European Spallation Source Active Cell Facility. JDR's work with robotics has built on this UKAEA RAI success, leveraging the knowledge, technology, skills and talent developed across UKAEA.

Goal 2:
Product

Performance Against Targets: **Product**

Enable partners to design, deliver, and operate commercial fusion power plants.

UKAEA Group is committed to enabling the development of commercial fusion power plants. This goal involves creating the necessary technologies, systems, and frameworks to support the transition from experimental fusion reactors to commercially viable power plants. UKAEA focuses on developing and refining solutions that are expected to be essential for commercial fusion power plants, including advancements in plasma control, heat management, and fuel cycle systems. Collaborating with industry partners helps to ensure that these solutions are scalable and deliverable, and can bridge the gap between research and commercial application. These efforts come together in the STEP programme, which aims to deliver a UK prototype fusion power plant by 2040. The programme is intended to pave the way for UK industry to play a central role in the delivery of future commercial fusion power plants. Beyond STEP, UKAEA is also working with commercial and international partners in the design and development of alternative concepts for prototype fusion power plants.

Key milestones in 2024/25 for this goal included the commencement and progression of whole plant partner dialogue for the STEP programme, the establishment of UKIFS governance, and the development of an agreed concept design and plan for STEP. UKAEA Group successfully accomplished the STEP site characterisation to reduce risk and support a clear development plan.

Why STEP?
The STEP mission is to "Deliver a UK prototype fusion energy plant, targeting 2040, and a path to commercial viability of fusion". To design and build a full prototype fusion energy plant, the STEP programme will bring UK industry into fusion at scale, in order to accelerate both the shift from research to commercialisation in the technical work as well as the sourcing and development of every aspect of what will be needed in a viable fusion supply chain. It drives suppliers to focus on commercially relevant products, many of which have broader applicability across many fusion programmes and other adjacent technologies - generating spin-offs. The UK's STEP programme is globally recognised by by peers and competitors for its ambition and its successes so far.

8 **8 were fully achieved**

For 2024/25, against goal 2, UKAEA set itself 8 CPMs comprising 16% of the total weighted CPMs

This section details the context for 3 of these CPMs relating to the STEP concept design, whole plant partner procurement, and the establishment of UKIFS:

1. STEP to commence and progress Whole Plant Partner (WPP) dialogue as agreed and approved by DESNZ and Cabinet Office – fully achieved.
2. STEP to formally stand-up UKIFS governance and transfer programme control to a new SRO and effective programme delivery organisation – fully achieved.
3. STEP to agree concept design and development plan that underpins the Tranche 2a FBC – fully achieved.

UK Industrial Fusion Solutions Ltd (UKIFS)

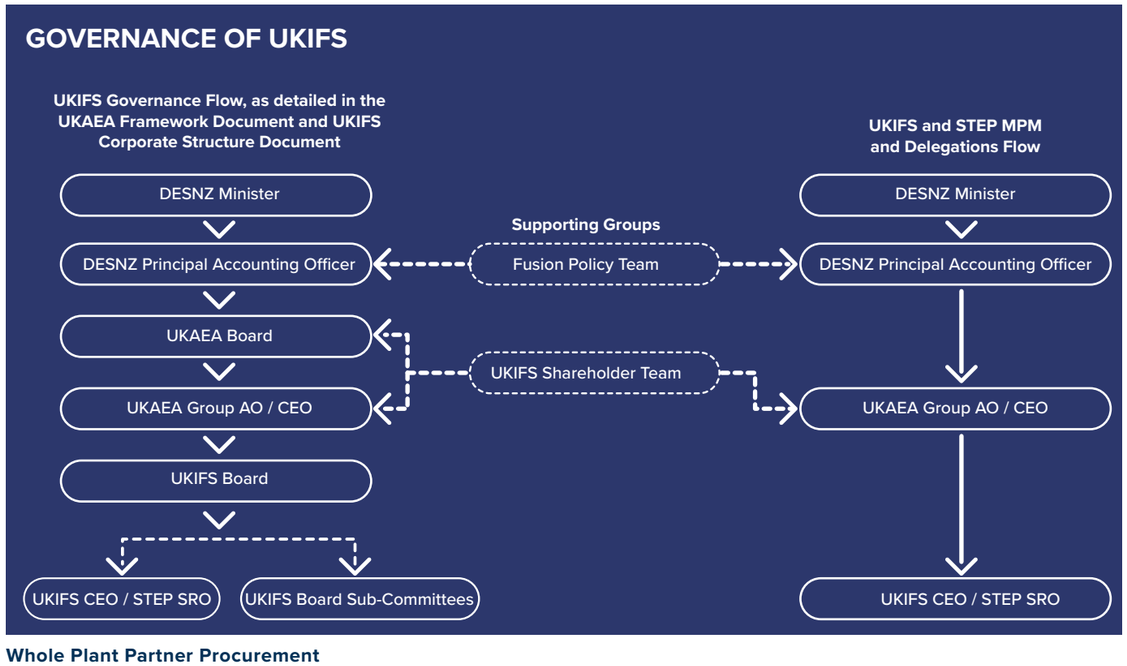
On 1st November 2024 UKIFS, as a wholly owned subsidiary of the UKAEA Group, had responsibility transferred to it to lead a public private partnership to design, build and operate the STEP prototype plant at the West Burton site in Nottinghamshire. This endeavour will stimulate a fusion industrial sector with the UK positioned in a leading role.

STEP will combine UKAEA's public sector fusion knowledge with the capabilities of industry, through onboarding of private engineering and construction contractors, known as Whole Plant Partners (WPP), in 2025-26. Involving WPPs at this early stage will support the development of a credible design and drive new industry capability, especially in areas where the UK can lead internationally. This will both increase the chances of success and provide greater stimulation to the fusion supply chain. Once all suppliers have entered into contracts, an Integrated Delivery Team will be formed under UKIFS leadership.

Four Main Roles of UKIFS:
- Governance and Assurance – accountability for delivery of STEP, and assurance to shareholder (UKAEA) and Programme Sponsor (DESNZ).
- Programme Integration – defining the overall STEP programme, including plant design, to achieve the whole programme objectives agreed with the Sponsor.
- Delivery – delivering substantial elements of the programme, acting together with other partners.
- Intelligent Client – sourcing and integrating partners into an effective overall Integrated Delivery Team with defined ways of working; managing and evolving those relationships to ensure delivery, set requirements, and oversee and accept work performed by partners.

Evolution of the Operating Model
In preparation for the November 2024 transition, detailed work took place across UKAEA, UKIFS and central government to develop a bespoke Target Operating Model (TOM) for the delivery of STEP. Transition Milestone 2 of 4 was achieved in 2024/25. The TOM sets out the organisation and arrangements through which an integrated team comprising public and private sector will deliver STEP. It draws on lessons from a range of complex major programmes, adapts those for the unique first-of-a-kind context of STEP and for the aim of developing industrial capability as well as a technical solution. Development of the TOM is ongoing and work continues to ensure readiness to take on the management of all Whole Plant Partners in 2025-26, and to ensure that the Integrated Project Teams are ready to take on management of work packages by October 2026.

Governance of UKIFS and STEP
Governance of UKIFS covers the arrangements through the Shareholder Organisation (UKAEA) and DESNZ. UKAEA is ultimately accountable for the operation of UKIFS and DESNZ is the Sponsor of the STEP Programme.

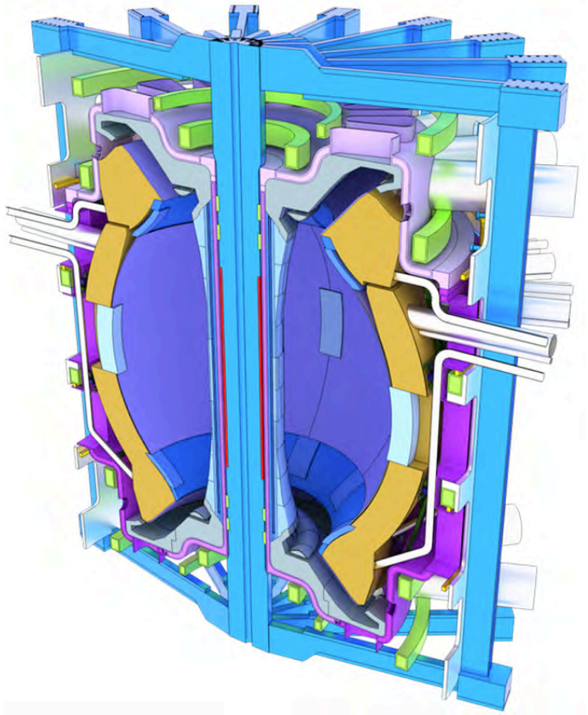


Whole Plant Partner Procurement
On 22nd May 2024, following ministerial approval from the Cabinet Office, UKAEA launched the competition for Whole Plant Partners for STEP. The selection process continues. Further phases will develop the long-term collaboration that will build progressively with the programme.

STEP Concept Design

Over the reporting period, the STEP concept design has focussed on implementing updates of the baseline captured and published in a ***Royal Society Journal Special Edition*** released in August 2024.[1] This involved revisiting the breeding blanket solution, the system responsible for producing the tritium fuel required for fusion, and the tokamak machine size. To implement these design pivots, a series of iterative baseline updates have been delivered over 2024/25, each of which build a greater design fidelity and consider a wider integrated solution for the STEP Prototype Powerplant (SPP).

Design parameters considered include magnet technology choice, primary maintenance approach, and plasma scenario for the resized machine.



STEP Concept Design: showing the spatial layout of major systems including the field magnets and breeder blankets.

The latest STEP concept design, in which major 3D architectures for the tokamak systems were selected, was released in March 2025. Reducing plant complexity has remained a key focus in the decision making around these architectures.

Over the next programme tranche of work for STEP (Tranche 2A, 2025-2029), the technical programme will continue to build the fidelity of the SPP design point, but also build confidence in the selected system designs. Highlights include testing of high temperature superconducting magnets, which aims to demonstrate the technology for use in the intended STEP application, and a materials irradiation testing campaign which seeks to characterise candidate structural material properties for use within the anticipated STEP operational environment.

As well as the work taking place within the STEP programme in UKIFS, collaborations with UKAEA programmes are critical to building confidence in the SPP design.

An example of collaboration lies in the capability provided by the ***Lithium Breeding Tritium Innovation (LIBRTI) programme***[2] with the intended STEP breeder blanket and fuel cycle designs.

The Spherical Tokamak Optimisation for Remote Maintenance (STORM) project has commenced trials to demonstrate remote handling capabilities of service connections and magnet joint technologies relevant to the STEP configuration.

[1] The Royal Society. Philosophical Transactions of the Royal Society, Volume 382, Issue 2280. [Online] October 2024. ***https://royalsocietypublishing.org/toc/rsta/2024/382/2280***.
[2] Press release - LIBRTI: Multi-million-pound investment to advance fusion fuel development. [Online] January 2025. ***https://www.gov.uk/government/news/multi-million-pound-investment-to-advance-fusion-fuel-development***.

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Goal 3:
Prosperity

Performance Against Targets: **Prosperity**

Drive UK economic growth and a thriving industry that exports fusion technology around the world.

UKAEA is supporting UK economic growth by advancing fusion technology and innovation. While commercial fusion power remains a long-term goal, the programme is already delivering social, scientific, and economic benefits. UKAEA is focused on transferring fusion-derived innovation and expertise to adjacent sectors, supporting industry through its extensive capabilities.

Fusion development is creating high-skilled jobs in engineering, research, and manufacturing, while innovation clusters around research facilities attract businesses, startups, and academia—fostering collaboration and economic momentum. R&D activities generate valuable intellectual property, enhancing the UK's technological leadership and competitiveness. Building a strong supply chain through partnerships with suppliers and manufacturers ensures access to critical components and materials.

Key achievements in 2024/25 include:
- Securing an agreement with Eni S.p.A for the H3AT project.
- A significant increase in commercial revenue compared to 2023/24.
- Growth in income from industry and international collaborations.

7 achieved - 2 partially achieved - 2 missed

For 2024/25, against goal 3, UKAEA set itself 11 CPMs comprising 22% of the total weighted CPMs.

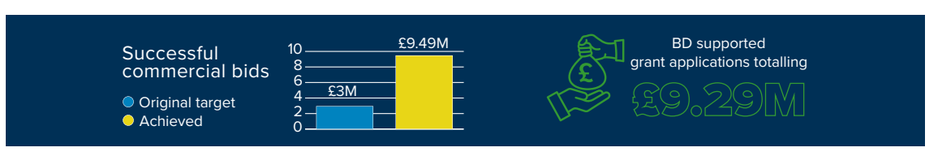
UKAEA has engaged domestically and internationally to develop collaborations with industry and research partners. Although a significant number of agreements have been signed, delays to securing contracts was the primary reason for partially achieved and missed CPMs.

This section provides context for 2 of these CPMs that relate to UKAEA's partnership with Italian energy firm Eni S.p.A and UKAEA's successes in business development:
1. Complete a signed partnership or collaboration agreement securing financial or in-kind support for the H3AT Tritium Loop – fully achieved.
2. Increase income into UKAEA from industry and overseas – fully achieved.

Business Development

Business Development (BD) actively supports UKAEA's Goal 3 of driving UK economic growth and a thriving industry that exports fusion technology around the world. Via BD's support for the UK Fusion Cluster, it also supports efforts towards UKAEA's Goal 4 of creating clusters that accelerate innovation in fusion and related technologies. The Fusion Cluster membership reached over 400 during FY2024/25.

FY2024/25 HIGHLIGHTS



UKAEA and Eni S.p.A partnership to develop the H3AT Tritium Loop Facility

The CPM to "complete a signed partnership or collaboration agreement securing financial or in-kind support for the H3AT Tritium Loop" was fully achieved with the signing in December 2024 of a collaboration agreement between UKAEA and Eni S.p.A (Eni), a global technology-driven energy company.

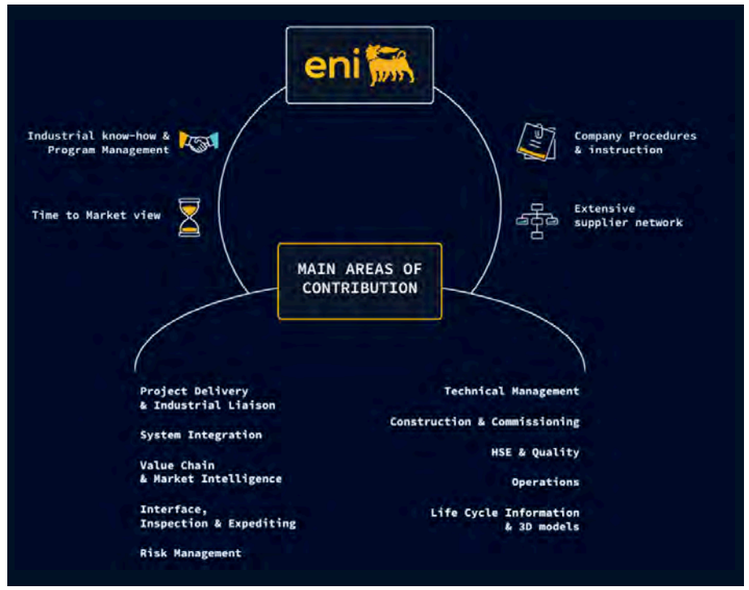
The UKAEA- Eni H3AT Tritium Loop Facility, at Culham Campus, will demonstrate a closed, continuous fuel cycle at pilot plant scale, which will be the world's largest and most advanced tritium fuel cycle facility. Understanding how tritium can be recovered and recycled is vital to support the development of future fusion power plant technology for wide-scale use.

This collaboration brings together UKAEA's deep scientific and engineering expertise in understanding the tritium fuel cycle with Eni's expertise in building, commissioning and operating large plants. The combination of a national research organisation and an industry partner provides a powerful integrated team to successfully deliver this first-of-a-kind facility.

The project is now entering the final stages of detailed design and build work.

UKAEA will host 11 secondees from Eni on site in Culham where they will gain direct experience of working as part of a national lab on the design, construction, commissioning and operations of this novel world leading facility. UKAEA will support Eni secondees to develop in their roles to deliver the H3AT facility, and they will benefit from first-hand experience and knowledge of seeing the H3AT Tritium Loop facility commissioned into operations.

Eni are providing secondment resource, and in-kind support to the project to complete construction of the facility by 2028. The image to the right illustrates the breadth of contributions that Eni will make to the project, utilising the organisation's strengths:



Contributes to UN sustainability goals:

- 4 QUALITY EDUCATION — ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL
- 8 DECENT WORK AND ECONOMIC GROWTH — PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE — BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

Goal 4:
Place

Performance Against Targets: **Place**

Create clusters that accelerate innovation in fusion and related technologies.

UKAEA is building a world-leading fusion cluster centred on Culham Campus in Oxfordshire, while expanding its presence elsewhere in the UK to support national socio-economic growth. We strive to be a leading example of sustainable development as we drive towards net zero at our sites.

The focus is on fostering collaboration and driving advancements in fusion technology. This includes creating shared spaces for knowledge exchange and forming partnerships with universities, industry, and government to support R&D and attract top talent.

Key milestones include engaging a Culham Campus development partner and increasing commercial tenancy revenue from Culham site tenants. This reporting year saw the completion of several Fusion Foundations projects, including the main gate, nursery, central support facility, and Materials Research Facility hot cells.

Developing state-of-the-art research facilities supports cutting-edge fusion research, attracting top talent and providing the infrastructure needed for advanced experimentation. UKAEA also forms innovation partnerships and engages local communities through education and outreach, promoting awareness of fusion's potential. These efforts ensure a collaborative, innovative environment that drives fusion progress and contributes to the UK's economic and technological leadership.

1 2 1 1 was achieved - 2 were partially achieved - 1 missed

For 2024/25, against goal 4, UKAEA set itself 4 CPMs comprising 6% of the total weighted CPMs.

This section will look at new activity at the West Burton STEP site, the ongoing development at UKAEA's Culham Campus, including Fusion Foundations Programme, and facility development for the LIBRTI programme.

The following sections will cover context relating especially to 2 CPMs:

1. Complete Fusion Foundations projects scheduled for 31st March 2025 completion, including main gate, nursery, central support facility and MRF hot cells – fully achieved.
2. LIBRTI facility development – partially achieved.

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Our sites

Create clusters that accelerate innovation in fusion and related technologies

Cumbria – RAICo

Home to **<10 employees**

Size of site **1,000m² / 0.001km²**

The first of a network of Robotics and Artificial Intelligence Collaboration (RAICo) hubs to support decommissioning of nuclear sites. Opened at the end of March 2023, RAICo contains facilities required to support the development of robotics and artificial intelligence solutions for nuclear decommissioning and fusion engineering challenges.

Culham – UKAEA HQ

Home to **>2,000 employees**

Size of site **600,000m² / 0.6km²**

Culham has been a major international fusion research centre since the 1960s. It has hosted more than 60 different fusion experiments over the years, and whilst decommissioning of JET begins, MAST-U continues to pioneer research.

Culham Campus is one of the three large internationally significant science and business centres in south Oxfordshire, underpinning the county's economic growth, and is the base for the majority of UKAEA activities and tenants.

Most of our facilities are located at Culham, and investment in the site is focusing on creating a hub for UK fusion and growing a fusion ecosystem with industry.

South Yorkshire – Fusion Technology Facility

Home to **>60 employees**

Size of site **2,230m² / 0.00223km²**

Strategically placed at the heart of the UK's advanced manufacturing region, our site in South Yorkshire enables UKAEA to engage industry in commercial fusion development. South Yorkshire hosts several test facilities addressing key technical research areas for power plant design.

West Burton, Nottinghamshire – UKIFS STEP

Home to **<20 employees**

Size of site **3,600,000m² / 3.6km²**

The future home of STEP opened its first dedicated offices on-site, reflecting the growth of the programme in the region and increasing on-site STEP activity. EDF continue to decommission the former coal-power station. Significant geotechnical and environmental characterisation to understand the baseline conditions has completed, alongside wider biodiversity considerations. The UKIFS team has expanded significantly to progress these key works, delivered through a growing range of local, regional and national contractors.

Borehole drilling and drone capture to characterise the site

Local public engagement and events with county councils, regional mayors, MPs, schools and parish councils has continued, further strengthening existing broad and deep community support and helping shape the STEP site master plan and vision.

There is growing coordinated support for STEP and fusion across the region, with key organisations, including devolved authorities, providing the resources and convening power essential to maximise benefits for the region and beyond.

Into 2025/26 STEP will continue the site master planning and wider characterisation, enabling an internal decision on the location of the tokamak on-site, and engagement with local stakeholders through public and industry involvement in STEP planning.

All employee numbers on the page are correct as of 31st March 2025

Culham Campus 2024-25 Highlights

RACE
1,000m² reconfigurable assembly and test area to develop robotic systems for fusion and adjacent technologies. In September 2024 RACE delivered the Radiological Safety System Site Acceptance Test for the European Spallation Source facility in Sweden, required for operating permission from the regulator.

H3AT
Construction of the world's largest tritium fuel cycle facility to begin in 2025, crucial to make fusion technology fuel-efficient.

Materials Research Facility
MRF £9M hot cell extension completed March 2025 increasing capacity to fabricate and test irradiated materials.

Culham Fusion Cluster Development
Culham 400 kV substation: Principally serving JET until 2023, repurposing and reconfiguration to supply future power users at Culham began in 2024 with completion due in Spring 2026. A new supergrid connection agreement unlocks 200 MW available for the site.

Central Support Facility
CSF completed in March 2025 with 1,200 m² of UKAEA workshops and office space.

JDR/LIBRTI
The JET repurposing programme began clearance and decommissioning of JET buildings in autumn 2024 to allow a cutting-edge lithium breeding experiment (LIBRTI) to be built, vital to fuel future tokamaks. Building handover is expected in autumn 2025.

AI Growth Zone
Culham Campus was named as one of the first sites to host the UK Government AI growth-zone initiative. Details to be confirmed during 2025/26.

MAST Upgrade
The UK's largest operating tokamak began its fourth campaign in October 2024, designed to maximise plasma pressure and temperature and optimise plasma exhaust technologies and plasma control required by future power plants.

Strategic Investment Partner
Culham Campus is seeking an investment partner to continue the development of the site and create a public and private fusion cluster.

Hornbill Building and car park
9,870 m³ of specialist engineering research and office space and 262 space multi-storey car park completed in spring 2025. Providing a significant increase in A-grade commercial capacity at Culham Campus.

Fusion Foundations
New reception, visitors centre and nursery completed. Roadworks and landscaping commencing in 2025, including A415 road improvements to reduce traffic.

LIBRTI Facility Development

Because tritium (a heavy isotope of hydrogen) is scarce and expensive, a key challenge in commercialising nuclear fusion is to close the fuel cycle by creating tritium within a fusion machine, thereby achieving the goal of future fusion power plants to be self-sufficient in the production of tritium. The fusion reaction creates a neutron which upon interacting with lithium compounds will give up its energy as heat. This allows for power generation and creates a new tritium atom to allow propagation of the energy-producing reaction. In fact, the decay rate of tritium (~5% per year), and the need to produce sufficient fuel for an emerging fleet of fusion power plants, means that the required generation rate of tritium is significantly in excess of one per fusion reaction. The LIBRTI programme aims to develop the science and engineering of this phenomenon to facilitate future power plants.

The LIBRTI programme will create a world-first facility to allow testing of tritium breeder components at scale, while simultaneously pushing the scientific understanding of how neutrons and tritium move through these components and materials. The inclusion of a digital element to the programme will create world-class simulation capability.

In addition to these technical objectives, the purpose of the LIBRTI programme is to disseminate knowledge, thereby creating a cluster of technology and skilled personnel in the UK.

Successes
In the past 12 months, the programme has successfully delivered a concept design for the facility (HERO picture from RIBA report – image below right). It has awarded £9M in funding for 11 research and development projects to kick-start the development of breeder technologies and digital models to create a pipeline of larger experiments for when the facility is ready in the late 2020s.

The SHINE TECHNOLOGIES neutron generator.
Image acknowledgement: Science, Vol 385, July 2024.

Awardees included local companies (Tokamak Energy, Oxford Sigma, Astral, and Digilab), international partners (Commonwealth Fusion Systems, Kyoto Fusioneering and IDOM), and multiple UK universities (Lancaster, Manchester, Edinburgh, Bangor and Birmingham).

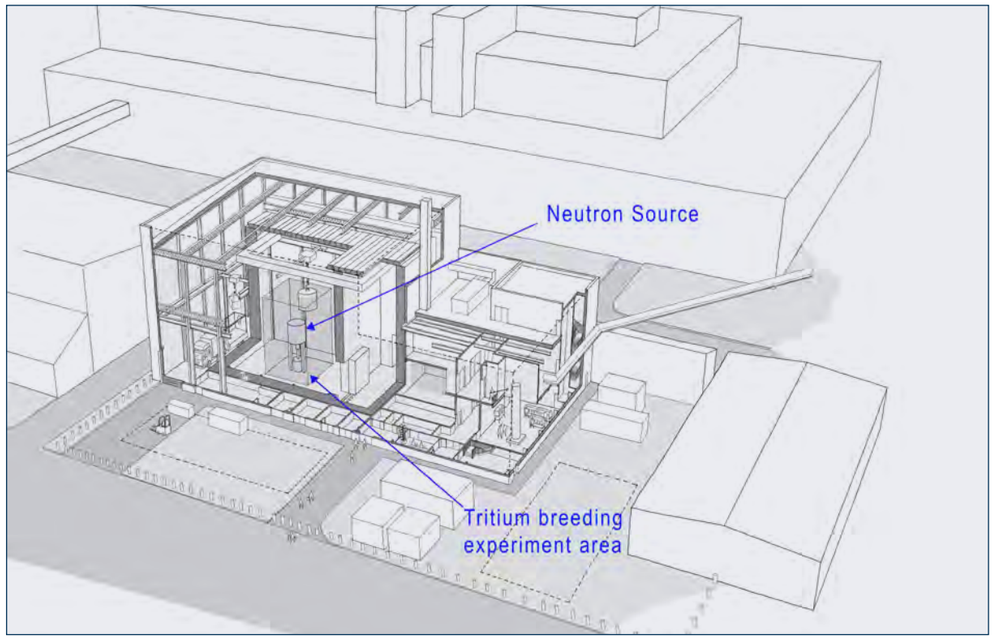
A neutron source has been procured from SHINE Technologies Inc. in the US. Work is ongoing to ensure that it can be integrated into the facility at Culham.

LIBRTI is sponsoring a structural steel development sub-programme called NEURONE. This 4-year circa £12M endeavour is a UKAEA-led consortium involving a dozen partners from academia and industry to develop high temperature, reasonable cost, sovereign steel for fusion over four years. It aims to provide a grade of steel that can be tested on LIBRTI.

The programme has started to engage with future customers for large experimental builds and recently signed a memorandum of understanding with Commonwealth Fusion Systems, a US private company pursuing commercial fusion power plant development, to develop a molten salt-based breeder test campaign.

The digital component of LIBRTI has been developing science simulation capability, combining the power of specialist software and mathematical modelling into a platform for predicting performance of breeder materials and configurations.

Measuring Success
The LIBRTI programme achieved partial success on the facility development CPM in 2024/25, fully completing 2 out of 3 milestones set against the CPM. In the first half of the year, it completed an extensive international market engagement exercise, drawing in positive expressions of interest from over 50 organisations spanning large companies, fusion commercial enterprises, and SMEs in digital and materials development. The neutron source procurement (in excess of £30M) and associated Central Government approval were successfully achieved. The programme missed the deadline for placing a building contract due to a lack of detailed information on the neutron source. This was the result of the tender award being delayed due to misalignment in engineering compliance standards between UK and international bidders.



Schematic of the UK's Lithium Breeding Tritium Innovation (LIBRTI) facility, where 14.1 MeV neutrons will be used to breed tritium in a range of candidate tritium breeding materials.

Contributes to UN sustainability goals:

Goal 5:
People

Performance Against Targets: **People**

Develop the talented, diverse people needed to deliver fusion energy.

UKAEA is committed to building a skilled, diverse workforce to lead the future of fusion energy. This includes attracting talent from varied backgrounds, offering early career opportunities, and fostering an inclusive, high-performance culture.

Through internships, apprenticeships, and secondments, UKAEA provides hands-on experience in fusion research and technology. Ongoing professional development—via training, workshops, and mentorship—enhances employee skills and supports career growth. Promoting diversity and well-being helps create a collaborative and productive environment.

Key 2024/25 milestones:
- 31 research secondments and 9 operational placements with international partners.
- Full achievement of Futures Skills programme targets.
- Progress in mental health support and inclusive workplace initiatives.

These efforts ensure UKAEA develops the talent needed to drive the UK's fusion future.

1 2 1 1 achieved - 2 partially achieved - 1 missed

For 2024/25, against goal 5, UKAEA set itself 4 CPMs comprising 8% of the total weighted CPMs.

UKAEA is implementing initiatives to upskill its workforce and develop an inclusive, high performance learning culture.

Work relevant to the following 2 CPMs is addressed in the following sections, highlighting achievements over the past year:
1. Developing an inclusive, high performance, learning culture – partially achieved.
2. Fusion Futures Skills – Developing the skills of fusion's next generation through programmes such as FOSTER, Oxfordshire Advanced Skills and the West Burton Training Facility – fully achieved

People and Culture

UKAEA continues to be committed to being an employer of choice with an inclusive culture, which recognises the value of everyone in creating a successful organisation, and to ensuring that our workforce and people planning is in line with the skills that we need for future success.

In support of that ambition, we continue to work on the development and delivery of a new Equality, Diversity, Inclusion and Wellbeing strategy, which will help ensure we further develop an inclusive and enabling culture that values and invests in people. In 2024 we placed a greater emphasis on mental health with 5 Mental Health First Aid training courses delivered, and 60 Mental Health First Aiders now qualified across the Culham, South Yorkshire and Cumbria sites. We have teamed up with 'Tough to Talk', a charity dedicated to reducing male suicide, to raise awareness and train 80 colleagues in suicide awareness. We also delivered an Accessibility Plan and Neuro-Diversity Framework.

As an organisation, we are always striving to create an environment that enables our people to deliver on UKAEA's mission. This year, we have begun a full-scale review of our People policies and procedures to ensure that we respond to changes in best practice, keep up with newly announced legislation, and meet employee and business expectations. We are prioritising transparency, accessibility in language, and the modernisation of working conditions while working closely with our colleagues in Prospect, UKAEA's recognised trade union.

We are also pleased to report that we received agreement from Government for our pay case. Following positive negotiations and agreement from Prospect colleagues we have commenced our implementation of the pay awards, and initial work on the development of a new grade structure to enable better career progression.

Who We Are
UKAEA is a multicultural organisation, with a third of all global nationalities represented within our workforce: that is people from 68 different countries.

Talent Acquisition
UKAEA's Talent Acquisition team is actively promoting gender diversity in roles through publications and initiatives. Such initiatives include changes to job adverts to ensure gender-neutral language and reducing unnecessary essential requirements for advertised positions that could deter people from applying. In addition, internal recruitment training has been revised to embed reasonable adjustments and ensure effective support for disabled applicants and those with support needs. Of those recruited in 2024/25, 34.5% were not male, 30.58% were not white, 12.34% were not heterosexual and 8.97% were disabled people.

UKAEA have succeeded in reducing the number of days from role creation to offer acceptance by 15% and have increased the offer acceptance rate by 4%. Staff turnover rate was also reduced by just over 8%.

The early careers schemes at UKAEA are recognised as an important way of growing the future talent of the organisation, with over 10% of employees currently on an early careers scheme and approximately 25% of our workforce having progressed through such schemes. These schemes actively aim to increase diversity and have succeeded in narrowing the discrepancy between the number of male and female early career employees, particularly in STEM. Female graduates make up 34% of the current graduate cohort and, year on year, we have increased the number of female apprentices recruited into the organisation.

FOSTER Programme

UKAEA's Fusion Opportunities, in Skills, Training, Education & Research (FOSTER) skills programme has been designed to grow and develop the fusion sector's next generation as part of the UK Government's Fusion Futures investment. Its mission is to provide training to people by working with business to increase the number of apprentices and graduates, universities to increase the number of postgraduate and PhDs, and international partners to increase post-doctoral training opportunities within fusion.

Need for FOSTER
The UK Fusion Skills Council estimates a need for 2,000-3,000 more trained individuals in the current decade to deliver the goals and objectives of the UK's fusion programme. In response to this, FOSTER seeks to reduce barriers to entry into the fusion industry through initiatives spanning various educational levels and new training programmes. All of this is delivered with support from, and on behalf of, the entire breadth of the UK's fusion sector.

FOSTER Achievements in 2024/25

FOSTER has completed its first year of delivery. Within this year the programme has

- Supported 31 PhDs from across Industry, UKAEA, and the Fusion Power Centre for Doctoral Training.
- Developed and piloted a new Fusion Engineering Academy, an 8-day practical course for external participants, delivering training to 26 industry professionals in fusion engineering.
- Secured partnerships with two leading UK universities to expand the provision of Masters-level training for fusion in the UK.
- Formed a new Fusion Engineer Centre for Doctoral Training in partnership with the Universities of Manchester, Sheffield, Birmingham, and Liverpool ready to recruit its first doctoral candidates in 2025.
- Started a new collaboration with the Science and Technology Facilities Council (STFC) to improve engineering apprentice training in fusion and quantum skills at the Oxfordshire Advanced Skills (OAS) facility, with 16 apprentices in the first cohort.
- Identified and launched recruitment for the first FOSTER international fellows in partnership with Nanyang Technical University and A*STAR in Singapore.
- Engaged 49,812 school students through outreach activities.
- Hosted 70 KS4 teachers at the new Annual Fusion Teachers Conference and a mobile Fusion Teachers Workshop.
- Identified partners within the fusion industry to formalise a new, collaborative training programme for employees.

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Contributes to UN sustainability goals:

Enabling Goal:
Corporate Performance

Performance Against Targets: **Corporate Performance**

The enabling goal focuses on supporting the delivery of UKAEA's strategic goals through effective management, collaboration, and resource allocation. Developing and implementing strategic plans that align with UKAEA's mission and vision involves setting clear objectives, timelines, and performance metrics.

The delivery of our mission and goals is only possible because our people work within a culture of safety, security, and commitment to quality. This is achieved through effective governance and with a focus on the wider enabling environment for fusion in the UK.

This includes UKAEA's commercial, financial and legal functions which are specialised in supporting value-generating collaborations and procurements.

Key milestones include maintaining compliance with legislative and statutory standards, improving the quality performance of the organisation, and increasing the safety culture maturity across the organisation. The successful completion of audit actions and the implementation of enhanced reporting across relevant UKAEA programmes and projects are significant achievements.

Ensuring the efficient allocation of resources to support research and development activities includes managing budgets, facilities, and personnel. Engaging with stakeholders to build support for UKAEA's initiatives involves working with government bodies, industry partners, and the public to promote fusion energy. Monitoring and evaluating the performance of UKAEA's projects and programmes helps identify areas for improvement and ensures that strategic goals are being met.

3 **7** **1** **3 achieved - 7 partially achieved - 1 missed**

In 2024/25, against the enabling goal, UKAEA set itself 11 CPMs comprising 18% of the total weighted CPMs.

The majority of these CPMs were partially met. Reasons for this include challenging stretch targets on higher rates of training and improved quality and audit processes; and insufficient reductions in corporate services spend over the reporting year. One CPM was missed due to limited capacity and challenges in data management affecting benefits and impact reporting.

This section focuses on some of the corporate areas that have been central to UKAEA's achievements this reporting year; our Communications team, and UKAEA's commercial function. 2 relevant CPMs are:

1. Use Communications to increase understanding of and support for fusion – partially achieved.
2. 70% of competitive tenders on the published pipeline commence in accordance with the tender release date advertised on the published pipeline – fully achieved.

Communications: Telling the Story of Fusion

As the voice of UKAEA, our Communications team plays a central role in telling the story of fusion energy; clearly, credibly, and compellingly. The team is responsible for marketing, internal communications, public engagement, high-level stakeholder visits and broader outreach, using every tool available to generate interest in and support for fusion.

Highlights of the Year:

Starmakers – the sequel
Production of the sequel to the acclaimed documentary Star Makers, completed in 2024. This is a behind-the-scenes documentary following the lives of the scientists and engineers at the Joint European Torus (JET) during its final year of deuterium-tritium operations.

RACE LongOps Showcase
Collaboration with our advanced robotics team to deliver a major two-day showcase at Culham for the £12M UK-Japan LongOps Project. Attended by 70 global experts, the event was followed by a summary report highlighting its impact and the collaboration between UKAEA, UK Research and Innovation (UKRI), the Nuclear Decommissioning Authority (NDA), and Japan's Tokyo Electric Power Company (TEPCO).

FUSION24 Conference
Holding our biannual fusion energy conference, FUSION24, at the Science Museum, welcoming 444 delegates from 12 countries. The event featured 50 expert speakers and panel discussions across two main stages, covering key topics including power plant siting, design and construction, funding strategies, and the role of the supply chain.

Stakeholder Engagement
Organising many site visits from No.10, the Cabinet Office, DESNZ Secretary of State Ed Miliband MP, DSIT Secretary of State Peter Kyle MP, Minister for Investment Baroness Gustafsson, TEPCO President Tomoaki Kobayakawa, and DESNZ's Green Industrial Strategy team. We also hosted delegations from fusion institutes, developers and suppliers in Canada, China, Japan, Korea, and Singapore.

Ongoing outreach
Exhibiting at nine UK science festivals and hosting over a hundred visits to Culham Campus for schools, universities and other parties. We also launched the inaugural three-day 'Fusion Teacher's Conference' for 35 physics teachers from around the country to explore fusion's integration into classroom.

Our Impact
82% of stakeholders surveyed (2024) rated the clarity of UKAEA communications as 'Excellent' or 'Good'.

The team's efforts drove a 101% surge in LinkedIn followers, adding 86,095 new followers.

Work by Communications is reflected in the DESNZ Public Attitudes Tracker (Spring 2024):

Overall awareness for fusion energy continues to rise (currently at 67% of population)

Overall support for fusion energy has risen (currently at 49% of population)

Over half of those surveyed (52%) agree that fusion energy will make an important contribution to a more environmentally responsible global energy supply.

HOW WE PERFORMED

Commercial

Overall Commercial Function
UKAEA's commercial function is responsible for effective and efficient management of external expenditure, commercial agreements and development of a dynamic supply chain that meets current and future needs. The vision is to enhance the commercial capabilities of UKAEA, resulting in positive outcomes and delivering a supply chain fit for the future and the realisation of fusion.

The commercial function acts in line with public procurement regulations, professionally demonstrating the core principles of:

- Delivering value for money: ensuring an appropriate mix of economy, efficiency and effectiveness while considering the community it serves.
- Maximising public benefit: considering social value and environmental benefits that the contract can achieve.
- Sharing information: embedding a 'transparency by default' approach to enable access to clear, accurate information that is understandable to all.
- Integrity: executing good management and control of processes, preventing misconduct, fraud and corruption, and ultimately gaining trust with suppliers and the public.
- Equal treatment: treating all suppliers in the same way, preventing unfair advantage or disadvantage to one supplier over another.
- Having regard to small and medium enterprises: considering requirements from the perspective of a small/medium enterprise and reducing disproportionately burdensome processes.

These core principles are in place to support best practice.

Successes in 2024/25
UKAEA recognises the pivotal role that market engagement plays in delivering sustainable fusion energy and maximising its economic benefit. We have therefore been adopting a continuous and consistent market engagement strategy from the earliest stages to strengthen relationships, instigate collaboration and foster growth in the fusion industry. This activity is supported by the publication of the UKAEA Commercial Pipeline quarterly which outlines upcoming procurement opportunities.

- In 2024/25 UKAEA has developed a tool to commence Fusion market mapping. The tool has developed and grown and now captures supplier market capability information across 220 categories, products and systems.
- Over 1,400 delegates attended UKAEA supplier events during 2024/25 from 190 SMEs and 130 larger organisations.
- UKAEA commenced more than 90% of competitive tenders in accordance with the published pipeline, a significant achievement exceeding the 70% target which was set based on previous years' achievement.

Forward Look
The forward look of commercial activities for UKAEA has developed over the last 12 months and the accuracy of data has significantly improved. The commercial pipeline is a live tool, and the ambition is for UKAEA to publish information about procurement activities that it reasonably expects to undertake in the next 3-5 years. The accuracy of data has enabled the function to have sufficient information to support planning and resource to deliver against the pipeline.

PERFORMANCE OVERVIEWS

Managing our risks

Risk landscape

This year has seen a marked change in both the external and internal environment facing UKAEA. The creation of UK Industrial Fusion Solutions (UKIFS) as a Limited Company transitioned UKAEA into a wider group structure consisting of multiple components and subsidiaries. These include the Public Sector Research Establishment (PSRE), UKIFS, and other entities. The UK Government committed £410 million to the UK Fusion Project, with £403 million awarded to UKAEA for the 2025/26 financial year through the Spending Review exercise. This represents a significant uplift in the funding profile to deliver key advances in fusion research and development and to strengthen the industry capability required to deliver fusion on a commercial basis. The uplift in funding does however bring with it increased expectation to deliver key benefits in line with the UK Government's clean energy and industrial strategies.

The safety and wellbeing of our staff remains a top priority for the group, the previous year has seen increasing maturity with Construction and Design Management (CDM) regulations on UKAEA sites, with key expertise delivering awareness and support directly to those involved in activities requiring adherence to CDM. Incidents and near misses are managed effectively, with key lessons learned and corrective actions delivered swiftly to prevent reoccurrence.

The PSRE top risk area remains the capacity and capability of its staff, with additional support has matured significantly, and as technological development and demonstration progress, confidence will continue to grow.

UKAEA have not been able to participate in ITER through the Fusion for Energy (F4E) agreement. UKAEA possesses relevant skills and expertise, particularly in the area of plasma science and there is a risk this expertise may be lost. To mitigate this risk, UKAEA continues to establish alternative partnerships, both globally and within the UK, increasing opportunities for UK based researchers within plasma science to ensure that it continues to attract, retain and develop staff.

The Fusion Futures portfolio is approaching its third year of delivery, with key focuses on strengthening the UK fusion industry, building key skills within the sector and the delivery of the LIBRTI facility to enable tritium breeding for future power plant operation. There are challenges with the delivery of these programmes in the timescales required by the UK Government alongside the existing portfolio of significant programmes. We continue to manage delivery through in-depth planning and scheduling whilst maintaining a P3M reporting approach to deliver confidence and flag any potential issues for resolution early.

Cyber Security remains a key risk for the UKAEA Group; the enhanced capabilities of hostile states as well as lone actors mean that maintaining effective defences is a costly and time-consuming activity. UKAEA remains committed to reducing the likelihood of successful cyber-attacks and mitigating the impact of any potential issues through effective resourcing and participation in government security initiatives.

requirements for UKIFS in areas such as commercial and finance potentially putting additional pressure on functions that are already difficult to resource. Careful management of the fusion partner agreement should prevent the competition for hard-to-hire resources and maintenance of the close relationship between the PSRE and UKIFS is pivotal to managing this risk.

UKIFS commenced operating as a company on 1st November 2024. A capable and effective UKIFS organisation is central to the successful delivery of the STEP programme. The key STEP programme risk remains achieving a viable technical solution, and prototype plant design remains a key risk area for UKIFS to manage. The concept design baseline

Our Risk Appetite

AVERSE	MINIMALIST	CAUTIOUS	OPEN	BOLD
Avoidance of risk is a priority	Preference for very safe options with minimal risk tolerated where reward is not a key driver	Preference for safe delivery options where only low level, managed risk is tolerated in pursuit of objectives	Willing to consider all potential options, including those of a higher risk if appropriately controlled, where benefits far outweigh impacts	Eager to be innovative and choose activities offering potentially very high rewards even if activities are very high risk
Safety and Health of People	Security	Budget	Business Development	Scientific and Engineering Innovation
Fraud and Financial Compliance	Information Management and Scientific Integrity	Operations	Policy Compliance	
Business Conduct		Property		
Compliance with Legislation		Programme Management		
		Commercial		
		Protection of the Environment		
		Intellectual Property		
		Reputation and Public Relations		
		Compliance with non-legislative requirements		

Our Principal Risks

SOLVING PROBLEMS
Solve challenges of sustainable fusion energy - from design through to decommissioning with world-leading science and engineering.

PRODUCT
Enable partners to design, deliver, and operate commercial fusion power plants.

PROSPERITY
Drive UK economic growth and a thriving industry that exports fusion technology around the world.

PLACE
Create clusters that accelerate innovation in fusion and related technologies.

PEOPLE
Develop the talented, diverse people needed to deliver fusion energy.

RISK DESCRIPTION	STRATEGIC PRIORITY	RISK APPETITE	MITIGATIONS	ANNUAL RISK TREND
THE FOLLOWING STRATEGIC RISKS HAVE BEEN INTRODUCED IN 2024/25				
Failure to obtain a viable technical solution for STEP.		Bold	Primary strategic risk for the STEP programme in UKIFS. Design and engineering workstreams are working towards producing a viable technical delivery solution for the future power plant which will be supported by whole plant partners.	↔
If there is insufficient investment in maintenance and Suitably Qualified and Experienced Personnel (SQEP), then there is a risk of critical breakdown of MAST-Upgrade.		Cautious	This risk replaces the previous MAST-U enhancements programme focussed risk. The plasma sciences division engages with funding streams and collaboration partners to maintain SQEP. As the sole device on the Culham site, the maintenance is important to retain the UK knowledge base in fusion science.	↔
If governance, resources, prioritisation, processes and/or systems are not fit for purpose THEN there is a risk that UKAEA is unable to fulfil its obligations as STEP Fusion Partner.		Bold	The Public Sector Research Establishment (PSRE) as the fusion partner for STEP needs to ensure that it has the necessary procedures and resource in place to provide effective support.	↑
Failure of UKAEA to deliver the Fusion Futures portfolio alongside existing commitments, supply chain capacity, and the global fusion landscape.		Bold	The Fusion Futures Portfolio is in the business case submission and acceptance phase for funding for the third year of delivery in 25/26. Since UKAEA has not been able to participate in ITER, the portfolio has had to pivot a large part of the delivery strategy away from ITER.	↓
OPERATIONAL RISKS CARRIED FORWARD INTO 2025/26				
Staff capability and capacity is insufficient to meet objectives.		Cautious	This remains the UKAEA Group's highest risk area, with challenges in both recruitment of specialist skills amidst a changing fusion landscape and the retention of key skills, knowledge and abilities. Knowledge and Information Management programmes, as well as a new People and Culture strategy and operating model are under development to mitigate this risk.	↔
Loss of critical information from, or significant disruption to, the business of UKAEA from threat actors (internal or external) who take control of, disrupt, or damage digital and/or operational systems.		Minimalist	Work is underway to align to the new GovAssure process, and to undertake the Cyber Assessment Framework assessments on external firewalls.	↔
Current heightened geopolitical risk from countries in conflict leads to increased cyber-attacks, further impacts to the global supply chain, and impacts to UKAEA programme with rising fuel, energy, and material costs.		Minimalist	UKAEA continues to operate in line with UK government policy and guidance. There is increased due diligence being conducted on the use of international suppliers. UKAEA is confident that it has no current contractual relationships with Russian entities.	
OPERATIONAL RISKS CARRIED FORWARD INTO 2025/26				
Failure of UKAEA to adopt new asset management practices (operating model, tools, techniques) and embed the change required (new behaviours) results in serious health and safety events, and reputational damage.		Averse	The asset management process and systems continue to see positive engagement throughout the organisation allowing increased maintenance and quality assurance checks to reduce the risk of component failure or safety incident.	↓
Lack of adherence to compliance standards at UKAEA.		Averse	UKAEA takes regulation and standards very seriously, and has integrated compliance with them into the working processes and policies of the organisation. The risk has seen an increasing trend following instances of behavioural non-compliance which is being addressed through provision of several awareness sessions. There is confidence that this risk will see a reduction in the near term on completion of these actions.	↔
Current provision of utilities prevents the successful delivery of property development plans.		Cautious	The site power enhancement project has worked to make the power available to site fit for purpose and at the level required for the current and future state of the campus. Close liaison with the power supply company has been ongoing to ensure that there continues to be sufficient capacity to allow for further growth.	↓
THE FOLLOWING STRATEGIC RISKS PRESENTED IN 2023/24 HAVE BEEN RETIRED OR MODIFIED IN 2024/25				
Failure to effectively manage people (internal and external), processes, and related budgets during transition from JET science operations to decommissioning.		Cautious	This risk has reduced as the transition from JET science operations to decommissioning has been completed in most cases. This is no longer considered a substantial strategic risk to the organisation.	↓
Failure to secure a spending review settlement sufficient to deliver on UKAEA strategic goals.		Cautious	This risk has now pivoted to focus on the multi-year spending review - the previous iteration of the risk centred on the ability to secure a suitable settlement for the FY 25/26.	↔
MAST-U enhancements budget is insufficient to deliver the capabilities promised within the agreed timescales.		Cautious	This risk has been retied and replaced - the MAST-U enhancements programme has now been subsumed into operational activities as projects complete.	RETIRED
Failure to deliver CHIMERA facilities with required capabilities on time and cost.		Bold	The risk is trending upwards as it was not possible to fully re-baseline the system integration in 2024/25. The previous iteration of this risk included the delivery of the H3AT facility, which has seen a decrease in risk exposure.	↑

Sustainability and waste

Sustainability report

Overall operational performance

During 2024/25, UKAEA's overall greenhouse gas emissions decreased significantly compared to the previous years due to lower energy usage. Water use has also seen a similarly significant decrease, whilst waste has increased. All these changes are linked with JET moving into Decommissioning.

As part of JET Decommissioning, supporting plant and equipment are being progressively shut down and disposed – reducing energy demand throughout the year, and increasing waste volumes. The cooling towers and site water loop are no longer required as decommissioning progresses, which has decreased water usage.

FTE staff increased by 5% on last year, which may have led to a slight uplift in emissions. However, due to the decommissioning of JET, this expected uplift was offset by the significant decreases in energy and water use. This is illustrated by the Per Capita value decreasing by almost half compared to last year.

Summary of financial and non-financial sustainability information

Area		2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Greenhouse gas emissions (1,000 tCO_2e)		15.37	15.60	22.11	17.60	17.27	15.52	18.74	10.19
Estate Energy	Consumption (mill kWh)	36.10	49.75	77.82	68.70	74.59	70.63	81.60	46.79
	Expenditure (£k)	4,055	5686.00	9345.00	7248.55	10020.00	14605.00	16340.50	8860.54
Estate Waste	Amount (tonnes)	503.04	659.20	643.79	297.89	861.58	861.20	719.65	780.50
	Expenditure (£k)	310	371.27	319.05	124.37	202.02	161.56	197.60	182.26
Estate Water	Consumption ('000 m^3)	62.70	97.95	92.89	98.61	102.09	107.12	108.04	34.96
	Expenditure (£k)	144	279.00	206.29	276.26	233.84	370.45	357.29	195.83

Emissions per capita

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Emissions tCO2e	15,370	15,600	22,110	17,600	17,270	15,520	18,740	10,188
Average number FTE staff/contractors	1,130	1,249	1,461	1,818	2,087	2,306	2,441	2,574
Per Capita	13.60	12.49	15.14	9.68	8.28	6.73	7.68	3.96

Estate Energy and Greenhouse gas emissions

Greenhouse gas emissions		2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Non-financial indicators (1,000 tCO_2e)	Total emissions (Scope 1-3)	15.37	15.60	22.11	17.60	17.27	15.52	18.74	10.19
	Gross emissions Scope 1 (direct)	1.45	1.20	1.32	1.76	1.65	1.90	1.98	2.21
	Gross emissions Scope 2 & 3 (indirect)	13.92	14.40	20.79	15.84	15.62	13.62	16.76	8.66
Related energy consumption (million kWh)	Electricity: Non-Renewable	29.80	44.74	72.02	62.00	66.95	64.00	73.93	37.67
	Electricity: Renewable	-	-	-	-	-	-	0.24	0.65
	Gas	6.33	5.01	5.80	6.70	7.64	6.63	7.43	8.47
	LPG	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-
Financial indicators (£k)	Expenditure on Energy	4,055	5686.00	9345.00	7248.55	10020.00	14605.00	16340.50	8860.54
	CRC Licence expenditure	294.00	330.00	-	-	-	-	-	-
	Expenditure on accredited offsets	-	-	-	-	-	-	-	-
	Expenditure on official business travel	569.00	677.00	655.00	42.00	451.00	1058.95	1205.68	1635.27

NOTE: The greenhouse gas emissions were calculated (from the raw data) using DEFRA conversion factors: ***https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting***. The emissions categories we currently report under Scope 3 are: energy transmission and distribution emissions and business travel. Electricity consumption data is aligned with GGC scope of UKAEA owned and operated m^2. From 23/24 FY electrical financials have been amended to more accurately align with this scope.

Waste Disposal

Waste			2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Non-financial indicators (tonnes)	**Total waste disposed of**		**503.04**	**659.20**	**643.79**	**297.89**	**861.58**	**861.20**	**719.65**	**780.50**
	Hazardous waste	**Total**	**24.48**	**19.89**	**30.49**	**16.87**	**40.28**	**49.02**	**20.86**	**2.76**
	Non-hazardous waste	Landfill	13.36	56.36	40.30	18.81	26.48	16.30	40.24	35.82
		Reused/ Recycled (inc. ICT)	270.94	409.16	394.20	200.03	594.05	625.30	477.65	467.28
		Composted (inc. food)	37.36	33.84	36.72	7.04	18.35	8.84	15.62	55.88
		Incinerated (energy recovery)	100.10	99.04	102.32	40.29	147.35	129.20	129.35	163.06
		Incinerated (no energy recovery)	0.07	0.03	0.00	2.36	0.08	0.26	1.11	2.68
		Total non-hazardous waste	421.83	598.43	573.54	268.53	786.31	779.90	663.97	724.72
	Radioactive	Produced	40.94	50.05	49.81	31.46	57.50	46.55	37.40	97.99
		Disposed	56.73	40.88	39.76	12.49	34.99	32.18	34.82	53.02
	OSR (see note below)	Produced	36.49	9.81	25.63	7.55	16.16	1.63	16.52	0.00
	Total Radioactive / OSR waste disposed of		**56.73**	**40.88**	**39.76**	**12.49**	**34.99**	**32.28**	**34.82**	**53.02**
Financial Indicators (£k)	Total disposal cost		309.50	371.27	319.05	124.37	202.02	161.56	197.60	182.26
	Hazardous waste disposal cost		24.00	16.50	25.20	19.77	57.70	45.78	30.98	5.53
	Non-hazardous waste disposal costs	Landfill	2.00	4.00	16.50	3.83	7.47	8.78	13.40	8.26
		Reused/ Recycled	5.00	30.00	64.43	12.21	(8.96)	(23.75)	(11.63)	(59.00)
		Composted	1.50	1.30	1.59	1.95	0.84	-	2.91	6.30
		Incinerated (energy recovery)	21.00	20.47	24.33	8.58	40.32	37.56	36.25	21.89
		Incinerated (no energy recovery)	-	-	-	-	-	0.12	-	-
	Radioactive	Disposed	256.00	299.00	187.00	78.03	104.65	93.07	125.69	199.29

NOTES:
1. The figure for 'Composted' includes food waste sent for anaerobic digestion.
2. Out of Scope of Regulations (OSR) waste is material where the activity is low enough to fall below the threshold set by the Environmental Permitting Regulations to be classified as radioactive waste, so it is disposed of through non-radioactive routes.

Finite Resource Consumption

Finite Resource Consumption			2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Non-financial indicators ('000m3)	Water consumption (whole site)	Supplied	62.7	97.95	92.89	98.61	102.09	107.12	108.04	34.96
		Abstracted	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Supply per FTE	0.06	0.08	0.06	0.05	0.05	0.05	0.04	0.01
	Average number FTE staff/ contractors		1,130	1,249	1,461	1,818	2,087	2,306	2,441	2,574
	A4 paper reams equivalent		4,800	5,200	9,200	200	3,200	1,600**	1,200	1,000
Financial indicators (£k)	Water supply costs (whole site)		144	279	206	276	234***	370	357	196
	Paper supply cost*		7.00	8.00	12.00	<1	3.20	9.50	8.90	6.79

* note this does not include print room publication paper supply.
** previously counted at 10 reams per box in error, 22/23 onwards 5 reams per box
*** previously reported as £245k

Business Travel

Scope 3 Business Travel Emissions			2022/23	2023/24	2024/25
Domestic Travel	Distance Travelled (km)	Hire vehicles	478,671	515,688	544,010
		Taxi	49,388	71,467	39,316
		Bus / Coach	42,298	61,264	70,298
		Rail	344,972	452,797	553,143
		Flight	55,371	58,892	44,837
	Emissions (tCO2e)	Hire vehicles	81.70	86.02	90.80
		Taxi	7.35	14.87	8.18
		Bus / Coach	1.31	1.95	2.15
		Rail	12.24	16.06	19.61
		Flight	7.20	9.48	7.22
Other Travel	Distance Travelled (km)	Short Haul International	1,381,413	1,554,607	965,871
		Long Haul International	2,392,668	2,274,300	3,498,130
		International (non-UK)	262,592	494,858	369,628
		Rail - Eurostar	24,676	39,449	15,046
	Emissions (tCO2e)	Short Haul International	112.13	170.60	105.99
		Long Haul International	244.24	350.77	539.52
		International (non-UK)	25.49	51.35	38.36
		Rail - Eurostar	0.11	0.18	0.07
	Emissions with RF factor* (tCO2e)	Short Haul International	212.09	238.68	179.57
		Long Haul International	462.00	439.14	913.99
		International (non-UK)	48.22	90.87	64.98

* Air travel CO_2 emissions are multiplied by the Radiative Forcing (RF) factor, to account for the higher global warming potential from emissions released at higher altitudes.

NOTE: That this is the third year of reporting business travel emissions and we hold no prior data.
International (non-UK) travel denotes flights for which neither the origin nor the destination is the UK.

Consumer Single Use Plastics (CSUP)

CSUP	2022/23	2023/24	2024/25
Total quantity of CSUP	273,183	294,865	292,378

NOTE: That this is the third year of reporting Consumer Single Use Plastic (CSUP) and we hold no prior data

Greening Government Commitment (GGC)
UKAEA is exempt from Greening Government Commitment operational targets because the nature of our experiments is such that safe, technically, and financially feasible energy efficient measures cannot be adopted to the extent required for meeting the commitments. However, for transparency purposes we report our emissions, waste, and resource consumption data together with our strategy and objectives for reducing our impact. In line with GGC requirements we also report the actions we take for biodiversity, sustainable procurement, climate change adaptation, and sustainable construction. Rural proofing is not applicable to UKAEA, and this is therefore not included.

UKAEA is currently engaged in discussions with the Department for Energy Security & Net Zero (DESNZ) and the Department for Environment, Food & Rural Affairs (Defra) regarding the forthcoming revised GGC targets through to 2030. These discussions will help determine the appropriate scope of application for UKAEA, and we will continue to refine our metrics and targets in response to any agreed requirements or evolving best practice.

Biodiversity and Nature Recovery Plans
At Culham, all our new developments have to maintain and improve biodiversity on site in line with Local Authority biodiversity net gain requirements as a minimum. For example, we are striving to retain and enhance tree canopy cover and vegetation throughout the campus and along the boundaries. This biodiversity strategy adopts a sequential mitigation approach; starting with on-plot mitigations, and if this is not practicable, we consider off-site mitigation and payment to local council biodiversity processes.

Sustainability Strategy

This section sets out how UKAEA performed this year against the goals in our current Sustainability Strategy.

Running fusion experiments is a highly energy-intensive activity which represents a short-term emissions cost as an investment in a much longer-term sustainable future. For this reason, fusion related emissions are excluded from our sustainability strategy so as not to impact the development of fusion energy. In addition to the energy used directly by our fusion experiments, energy used for the running of our buildings, as well as energy used in the making of the products and services we buy, represent our most significant sources of greenhouse emissions. Therefore, our strategy is focused on reducing impact from our buildings and supply chain (as reflected in the three goals below).

The existing strategy was published in 2023 and is due to be updated in 2026. Targets and objectives for the next five years up to 2030 will look to align with the new revised GGC targets where possible.

GOAL 1
NEW BUILDINGS AND INFRASTRUCTURE
Design and construct new buildings with a focus on sustainability

As detailed in previous reports, all the new construction projects completed at our Culham site over the last few years have been awarded Excellent by the Building Research Establishment Assessment Method (BREEAM) and have worked towards net-zero operational carbon and low embodied carbon targets. Detailed sustainability requirements are in place for all other upcoming future building projects.

GOAL 2
EXISTING ESTATE
Improve the energy performance of the existing estate

This year we have continued our efforts to improve the sustainability of the existing estate, building on work from previous years. The solar photovoltaic installation programme continued, and we have improved energy monitoring to be able to track live data and carbon footprint reduction. We also transitioned electricity supply to green energy tariffs to further reduce the impact of any remaining consumption.

GOAL 3
SUPPLY CHAIN
Promote sustainability in our supply chain

Environmental standards and sustainable procurement are integrated as part of the tender process for our key contracts. We also observe the Government's buying standards for sustainable procurement in the areas relevant to our activities.

UKAEA must go further than simply considering sustainability within our procurement process. We must actively promote change and sustainability in our growing supply chain. To this end, we have adopted a scope 3 emission measuring tool this year, and we are training and encouraging our key suppliers to use this to disclose their emissions. This will increase transparency in our supply chain, allow us to identify hotspots and to work collaboratively with our suppliers to drive improvements.

Waste

UKAEA's activities on the Culham Campus create a varied range of waste streams. Some of these waste streams are complex and require extensive input from experts to ensure UKAEA complies with its legal obligations under the waste duty of care and code of practice, amongst other relevant legislation. The duty of care legislation makes provision for the safe management of waste to protect human health and the environment. The code of practice sets out practical guidance on how to meet waste duty of care requirements. It is issued under section 34(7) of the Environmental Protection Act 1990 in relation to the duty of care set out in section 34(1) of that act.

The former JET project has continued its transition into decommissioning and repurposing. Some of the JET assets which have no further use have been repurposed or disposed of. One such project is the clearance of building J4, for future use by a new fusion-related project. Another significant project was the removal of the JET portacabins situated to the south of the main JET building. This land will be repurposed in support of the main JET decommissioning activities. The introduction of a major sustainability initiative is now seeing waste laptops recycled by 'Green Machine', a company that sells the laptops at low-cost to those in need instead of them going to landfill.

Waste types

UKAEA, its tenants, and contractors working on-site produce in the region of 1000 tonnes of waste per year (excluding building and demolition wastes). The majority of the waste can be streamed into five categories: controlled, hazardous, radioactive, water, and gaseous discharge.

Controlled

Controlled waste is routine office and industrial waste which is not contaminated with hazardous materials or radioactivity. We segregate all controlled waste into material types, sending 90% for recycling or energy capture, minimising the amount of waste going to landfill.

Hazardous

Hazardous waste includes materials or substances which are harmful to humans or the environment. Our dedicated on-site hazardous waste storage facility segregates the different types of hazardous materials to prevent cross contamination, and is disposed of by licensed carriers only.

Radioactive

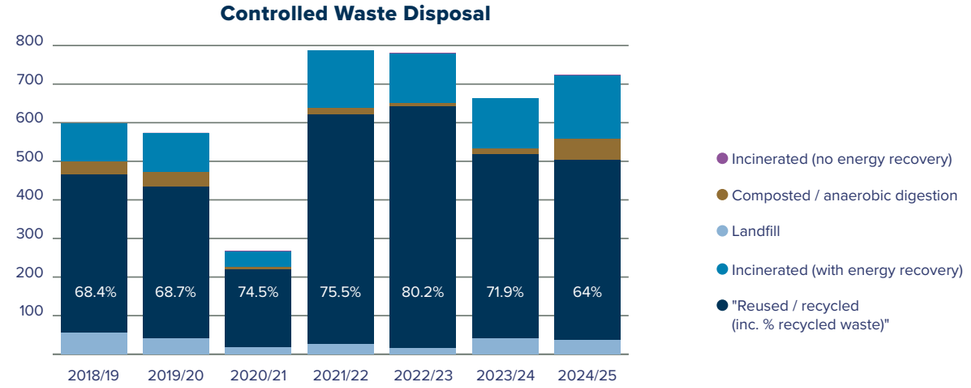
The majority of radioactive waste on site is of low activity/contamination. Only small volumes of intermediate waste are produced, which is carefully managed to minimise the amount requiring disposal. Processing waste, such as the thermal treatment of solids, allows for down categorisation and releases tritium which can be recycled for future use within our research facilities. We manage all radioactive waste in accordance with the UKAEA environmental permits issued by the Environment Agency (environmental permitting regulations permit EPR/LB3330DP). We select the most appropriate waste routes in accordance with the best available techniques and waste acceptance criteria.

Water

Aqueous waste comes from a number of sources on site: general washing in bathrooms and kitchens, water from operational areas, foul drainage, and radioactive water from some research facilities. Uncontaminated water (primarily from kitchens and bathrooms) is disposed via the Thames Water sewage system. The remaining non-radioactive water is discharged via a dedicated trade effluent system under controlled conditions to comply with the UKAEA Environment Agency permit. Low level radioactive water, produced within our research facilities, is discharged via a dedicated radioactive drain system to the trade effluent system under an Environment Agency permit.

Gaseous discharges

Non-radioactive gas discharges are controlled where applicable under the relevant legislation, such as greenhouse gases. Our radioactive gaseous discharges (tritium being the main isotope of importance) are regulated, monitored, and discharged under an Environment Agency permit. All of our exhaust stacks have in-line monitoring systems, and there are tritium alarms in and around the operational areas. Where higher levels of tritium are found, such as in the JET vessel, the air is passed through an abatement system which removes the tritium for storage, processing, and recycling.

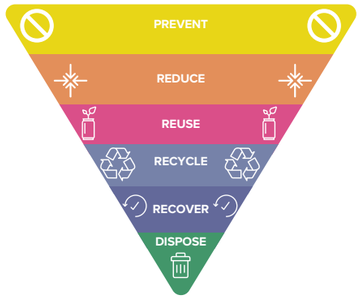


Note: Source data from waste disposal table (page 57)

The significant increase in waste arising in recent years is mainly attributed to the enabling works and site clearance for major construction projects on the Culham Campus.

Waste management

As well as ensuring UKAEA meets all its legal obligations relevant to waste activities, it also vigorously applies the principles of the waste hierarchy.



Prevent

UKAEA's waste teams are regularly consulted on various projects at the conception stage, advising on waste minimisation techniques.

Reduce

From materials research for future fusion power plant design, to reducing the waste burden, to promoting reusable coffee cups at our favourite coffee outlets, waste reduction is at the heart of most of UKAEA's activities.

Reuse

UKAEA has been proactive in offering redundant plant and equipment for reuse by different facilities on-site, or by other organisations. We have also applied for permits to allow the reuse of construction waste on-site, such as soil removed during excavation works.

Recycle

UKAEA has a recycling rate of 64% for its controlled waste streams, diverting hundreds of tonnes of waste from landfill.

Recover

The materials detritiation facility on Culham Campus has been operating with great success for several years now and is able to recover tritium from hard materials. Recovery methods like this will be crucial during the decommissioning of JET, substantially reducing the quantity of intermediate level waste.

Dispose

With some of the more complex waste streams we perform best available technique studies to ensure that all possible options are considered in advance of disposal. We carry out compliance monitoring of the disposal contractors and disposal sites to ensure that all legal and environmental obligations are fulfilled.

Professor Sir Ian Chapman
Chief Executive and Accounting Officer
11th July 2025

Task Force on Climate Related Financial Disclosures (TCFD)

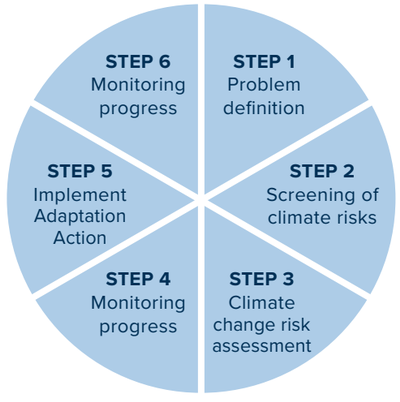
Compliance Statement
The UKAEA Group (which includes both UKAEA and UKIFS) has adopted the TCFD framework. This report includes details specific to UKAEA. For UKIFS please refer to UKIFS Annual Report submitted to Companies House in autumn 2025.

UKAEA recognises the critical importance of addressing climate-related risks and opportunities in alignment with the goals of TCFD. We are pleased to confirm that we achieved full compliance with the TCFD's Phase 2 requirements in the current reporting year as part of our commitment to transparency, accountability, and sustainable operations.

In line with TCFD Phase 2 expectations, UKAEA has taken significant steps to integrate climate-related considerations into our governance, risk management, metrics and targets. We are now reporting against all recommended disclosures, demonstrating our proactive approach to managing the implications of climate change for our organisation and stakeholders.

Governance
Governance of TCFD is through the Sustainability Committee, which is responsible for overseeing the UKAEA's strategy for sustainability and carbon reduction initiatives, including climate related risks and adaptation actions. This Committee reports into Corporate Development Committee, with regular sustainability reporting to Audit & Risk Assurance Committee and UKAEA Group Board.

Risk Management
UKAEA has embedded climate-related risk identification and assessment into our enterprise risk management framework. We have assessed relevant risks using the **Estates Adaptation Framework** provided by the Government's property function. We have followed the 6 steps laid out in the framework:



Below is a summary table of the top risks identified for our main site (Culham Campus) and the key mitigation actions that have been planned and taken.

Following the initial risk screening and scoring exercise, these are the risks that scored the highest when assessed based on magnitude and likelihood of impact for our site. This considers baseline scores which are determined using current magnitude and likelihood of events. Scoring was also done for medium-term and long-term scenarios to assess how the impacts are likely to change in the future. It is expected that due to climate change, the same main categories of risks will be seen, but their severity is likely to increase both in magnitude and frequency of events.

Climate forecast data was used from the Met Office and the Environment Agency to assess the expected weather changes for our geographical area. A 'medium-high' emission scenario was assumed, which is the closest to the current Paris Agreement pledges.

Climate Risk Category	Description	Impacted Areas	Mitigations
Storms and high winds	Risk from moisture, wind and driving rain	• Building fabric • Operations and equipment	Improve the resilience of the older buildings Protect vulnerable & critical equipment
Flooding	Risks from surface water and river flooding	• Buildings and operations • People and communities	Specify sustainable drainage and maintain the current drainage system, factoring in contingency costs for emergencies and ensuring business continuity plans are up to date and address climate related scenarios
Cascading	Indirect risks from climate events happening in nearby areas or nationally	• Transport infrastructure • Energy and ICT services • Power and water supplies • Supply chain operations	Identify critical services on site and in the supply chain and focus on putting in place mitigations for these, ensuring business continuity plans are up to date and address climate related scenarios
Transitional	Business risks/ opportunities from changing regulations and changing demand for goods & services	• Business compliance • Funding opportunities • Reputation	Continue to deliver against sustainability strategy and objectives, aligning with the latest policy and regulatory changes

These risks and mitigations are in the process of being integrated with our enterprise risk management framework to capture, track and report on these aspects. Risks relevant to each Division and Programme will feature on their respective risk registers and be owned at the appropriate levels. Lower-level risks are linked to a top corporate-level climate-related risk for ease of reporting to senior management and the overseeing committees described in the Governance section.

Metrics
UKAEA is committed to transparent and meaningful environmental reporting in alignment with the TCFD recommendations. Although we are exempt from Greening Government Commitment (GGC) operational targets due to the specialist and experimental nature of our work, we voluntarily report on a wide range of environmental data and initiatives.

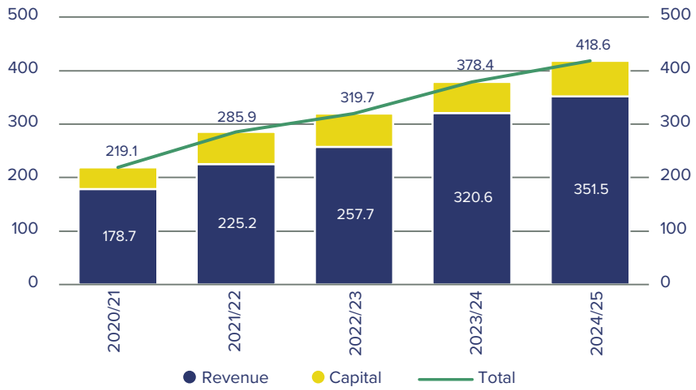
In line with the GGC framework and consistent with TCFD principles, UKAEA currently reports on:
- Greenhouse gas emissions (scopes 1, 2, and selected scope 3 categories)
- Energy use and efficiency efforts
- Waste generation and resource consumption
- Biodiversity and nature-positive actions
- Sustainable procurement practices
- Climate change adaptation planning
- Sustainable construction standards

We also publish our strategies and objectives aimed at reducing environmental impact over time, even where formal GGC targets do not apply. This reflects UKAEA's strong commitment to continuous improvement and alignment with national and global climate goals.

Financial review

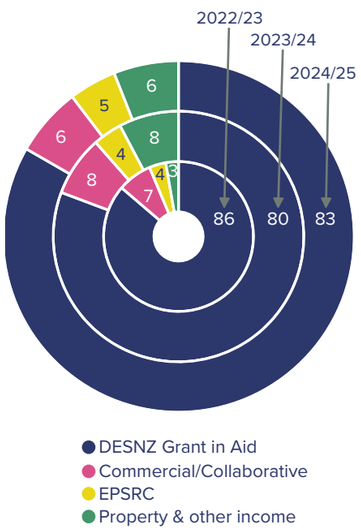
UKAEA Group incorporates the results of United Kingdom Atomic Energy Authority, UK Industrial Fusion Solutions Ltd, AEA Insurance Ltd and UKAEA's share of trading results and net assets of the Harwell Science and Innovation Campus Joint Venture. The Annual Accounts on ***pages 118 - 152*** provide financial statements and further information. The key highlights are presented below.

Total funding profile over last 5 Years (£m)



Funding Profile
Over the last five years, funding has increased to enable the growth in science, research and operational funding for the experimental fusion programmes, and investment in facilities. It has increased by 11% since the previous year and by 91% over the past 5 years.

Income by source (excluding capital) (%)



In addition to the income shown here, funding was received for depreciation and other below the line non-cash costs.

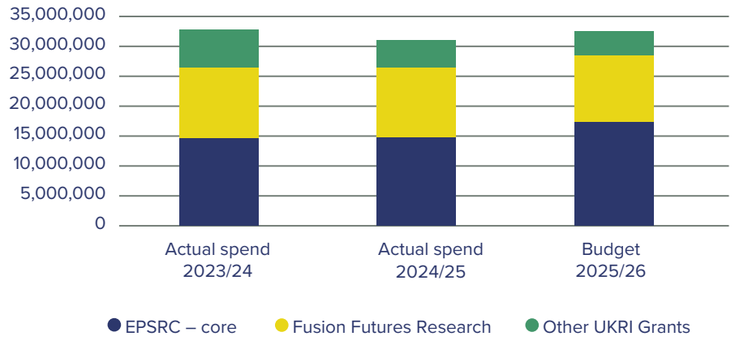
Income £419M
Most of UKAEA Group's income was from our sponsoring department, DESNZ, at £361M. This was in respect of a series of major ongoing projects to develop the UK fusion capability – including STEP, H3AT, Fusion Technology, LIBRTI and decommissioning of the JET experiment in Culham, as well as UKAEA Group's other running costs and facilities. Grant in Aid (income from our sponsoring department) accounted for 87% of total income.

Of the income received £351m was revenue and £67m was capital, with all the capital funding coming from DESNZ. Revenue income was from a variety of different sources.

EPSRC maintains responsibility for Fusion Research, which has remained broadly flat over the three years, as has UKAEA involvement in collaborative projects including the European Spallation Source.

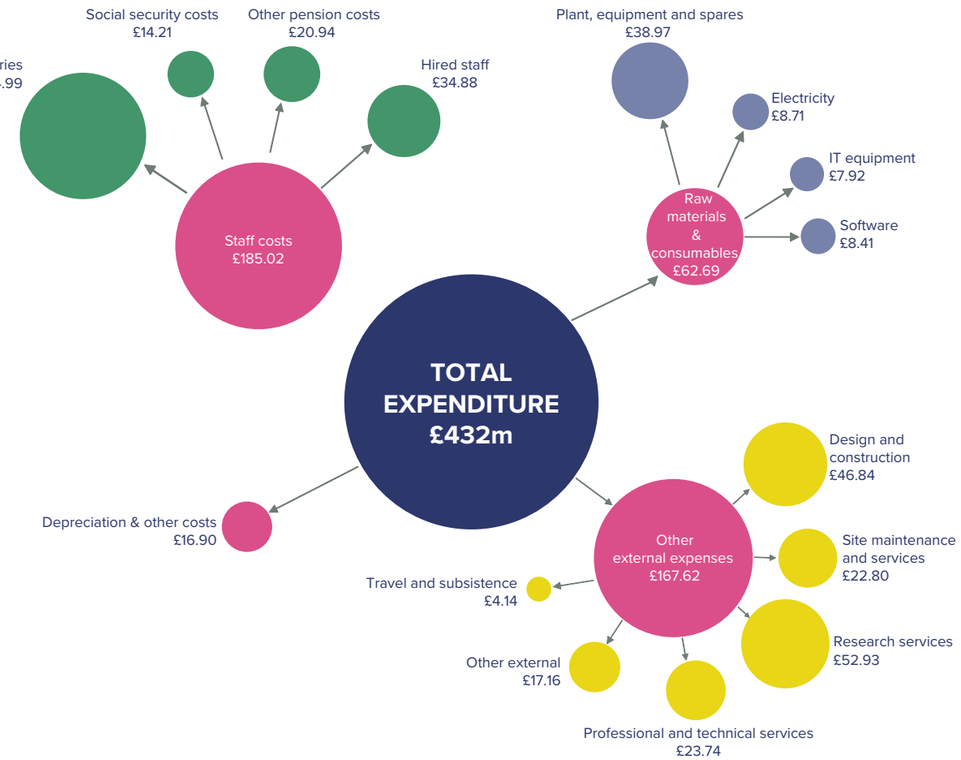
The proportion of commercial & collaborative and property income is increasing in line with UKAEA's mission to maximise the scientific and economic benefit of fusion. There is a focus on improving Culham Campus to attract fusion businesses and to collaborate with other national and international fusion partners.

Research Finance outside JDR, LIBRTI, Industry Capability and STEP Programmes



Research Funding
UKAEA's foundational research is funded in various ways.

Wider applied research is covered by UKAEA's JDR, LIBRTI, Industry Capabilities and STEP programmes, which together contribute in excess of £1M per annum to Research & Development.

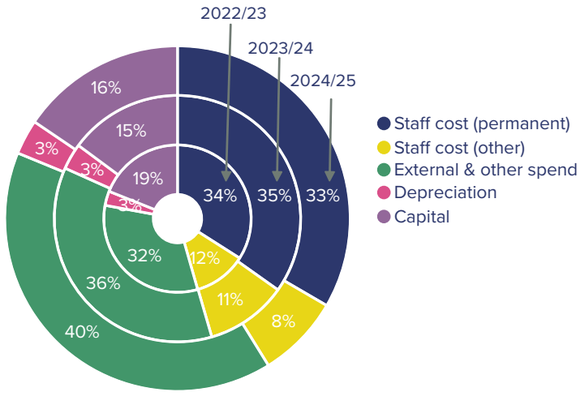


Expenditure
UKAEA's largest single item of expenditure is on people, both permanent staff and contingent labour. These are predominantly engineering and operations people who are operating our facilities and programmes. Over the past three years, as UKAEA facilities and research has grown, the proportional spend on staff, operating expenditure and capital has remained consistent. The depreciation is mainly in respect to the buildings on the Culham site that are utilised by UKAEA. The balance of spend is external, encompassing utilities, plant and equipment, site services and construction. There has been an increase in external spend in 2024/25 and this reflects the increasing size of the fusion programme.

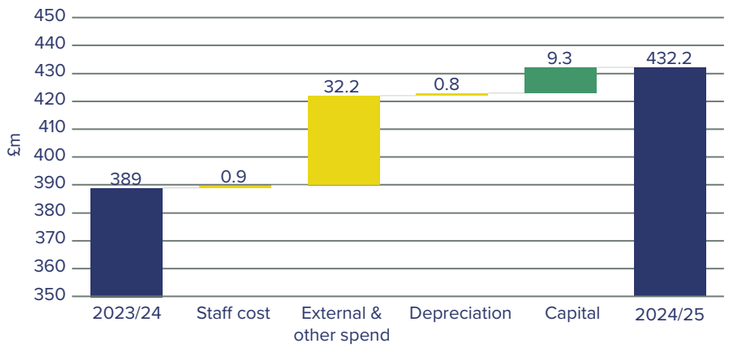
Total expenditure by type

Total expenditure in the year was £432M, £42M higher than in 2023/24 with the increase mostly from an increase in external expenditure of £30M. The increase is driven by programmatic growth, with external expenditure growing more than staff due to new programmes such as the Fusion Industry Programme, which are focussed on industry engagement, thereby having higher external spend and lower internal UKAEA costs. This is a deliberate strategy to grow industry, motivated by our goal to drive UK economic growth and a thriving industry that exports fusion technology.

Total expenditure by type (including capital) (%)



Revenue and Capital Expenditure vs last year (£m)



Note: this table includes below the line costs

Staffing

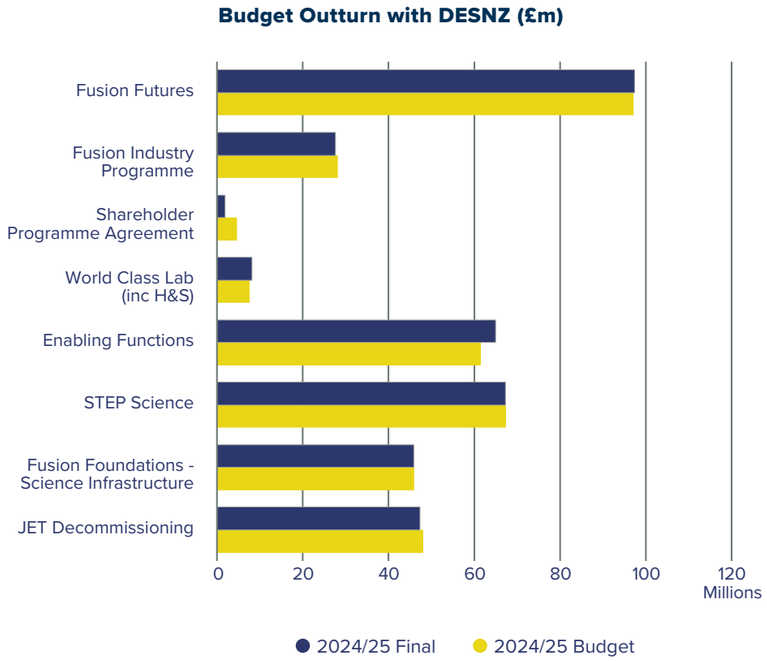
Staff Full Time Equivalents have increased steadily year-on-year, driven by the expansion of programmes such as STEP and Fusion Futures. Temporary staff have started to decrease in the past year, driven by a focus on attracting permanent staff, and the end of JET operations, as well as a change of focus to preparations for the delivery of sustainable fusion energy.

People full time equivalents

How did UKAEA perform compared to the funding budget provided by DESNZ as Grant In Aid?

The part of UKAEA's expenditure not covered by external income, is subject to budgetary control by DESNZ. The majority of UKAEA budget is funded from the Capital Departmental Expenditure Limit (CDEL), the budget was set at £361M for 2024/25. This includes £7.5M of additional budget which was transferred later in the year. There were some over and under spends within individual projects, due to small changes to the timelines of programmes, but UKAEA spent its overall budget in full. Enabling functions had a slightly higher spend than initial budget due to an accelerated programme on MAST-U projects meaning additional spend on facility operations was required.

Budget Outturn with DESNZ (£m)



Overall outturn

As the majority of our funding is from government via Grant in Aid or external grants, UKAEA aims to balance income and expenditure (excluding depreciation) at an operational level. This was achieved in 2024/25 with £2.3M of commercial profits also being utilised in the year.

Provisions

What is the JET Life-time Plan?

A key item on UKAEA's balance sheet is the provision for site restoration: UKAEA hosted the Joint European Torus (JET) facility at Culham, which ceased scientific operations in December 2023 after 40 years. The site restoration provision represents the estimated costs of decommissioning this facility and restoring the site upon which it sits. The JET Lifetime Plan, compiled in collaboration with the Nuclear Decommissioning Authority (NDA), was developed to provide an accounting provision to return the JET estates to brown-field status. It contains three major activities:

1. Decommissioning the JET experimental tokamak fusion machine.
2. Storing, processing, and disposing of radioactive wastes.
3. Demolishing structures, including buildings, and restoring the ground – once their use for decommissioning is complete.

The JET Lifetime Plan is set out as a costed project plan. DESNZ, as sponsoring department, provides UKAEA with a Letter of Comfort that it will cover the cost of decommissioning JET.

UKAEA therefore recognises a corresponding receivable. Due to the nature of fusion experiments, the fuel types used, and the advanced remote handling systems which will for the first time be used for decommissioning, this decommissioning project will be of great scientific and technical importance. The JDR programme is therefore following an alternative decommissioning programme to reduce public liability through repurposing (instead of decommissioning) of building and assets where possible, and development of de-tritiation

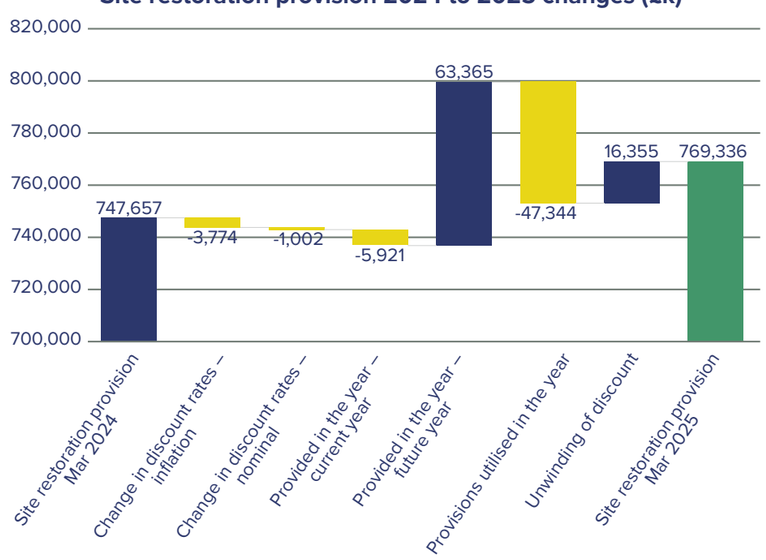
technologies to reduce long term waste. It is estimated the alternative strategy could cost 9% less than LTP, dependent on FBC options. This is a substantial programme (circa 17 years) and will be approved in tranches; funding was approved for financial years 2023-2026 with the tranche 2 (FY2026/27-FY2029/30) Full Business Case (FBC) requiring approval from DESNZ and HMT in late 2025.

This year's utilisation
UKAEA had an outturn of £47M on site restoration activities previously provided for. The provision is aligned to the strategy approved in the business case.

The current assessment of the Lifetime Plan is that a provision of £769M (2024/25: £748M) is required – including inflation and discounted to current value.

An additional £63M has been provided for future years, primarily as the nominal cost estimate has increased due to updates to electricity usage and realised inflation on staff, indirect and direct costs. However, these changes are negated by the activity that has taken place during the year and the combined effect of inflation and discount rates (for further detail on rates used and potential impacts of rate changes, please see note: 19.1).

Site restoration provision 2024 to 2025 changes (£k)



The unique facilities at Culham will enable UKAEA to use novel detritiation (tritium removing) techniques to reduce Intermediate Level Waste (ILW) from JET whilst also generating Intellectual Property benefiting operational and decommissioning costs across the UK and internationally. These novel techniques will also deliver the assumed cost savings in processing, packing, transport and long-term decay storage. Although the techniques are novel, UKAEA has conducted research to confirm that a significant number of the materials present in the machine can be detritiated. However, there is an uncertainty in the estimates, validity of assumption and risk of errors in the methodologies used in preparation of the estimate, which is being mitigated by regular reviews of the assumptions and use of reference class forecasting to benchmark contingency.

2022/23-2024/25 Spending Review
2024/25 marks the end of the three-year Spending Review period announced in 2021 and commenced from 2022/23. Over that period, grant in aid allocations to UKAEA based on that Spending Review have represented an average of 84% of UKAEA's overall budget.

On top of the ongoing operational costs of UKAEA's research facilities and the ongoing development of new facilities H3AT and CHIMERA, the major elements of this funding included the following programmes:

- STEP (years 3-5 of Tranche 1)
- Fusion Foundations (years 3-5 of the five year programme)
- The first full year of the JET Decommissioning and Repurposing programme, following the end of JET operations in December 2023
- The first phase of the Fusion Industry Programme

Professor Sir Ian Chapman
Chief Executive and Accounting Officer
11th July 2025

ACCOUNTABILITY REPORT

Accounting Officer's Statement

Section 4(3) of the Atomic Energy Authority Act 1954 requires the United Kingdom Atomic Energy Authority (also referred to as 'the Authority') to prepare a statement of accounts for each financial year in the form, and on the basis set out by HM Treasury. The financial statements are prepared on an accruals basis and must give a true and fair view of the state of affairs of the Authority and of its income and expenditure, Statement of Financial Position, and cash flows for the financial year.

In preparing these financial statements, the Accounting Officer must comply with the requirements of the Government Financial Reporting Manual, particularly to:

- Observe any additional guidance issued by HM Treasury, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis.
- Make judgements and estimates on a reasonable basis.
- State whether applicable accounting standards as set out in the Government Financial Reporting Manual have been followed and disclose and explain any material departures in the financial statements.
- Prepare the financial statements on a going concern basis.
- Confirm that the Annual Report and Accounts is fair, balanced, and understandable.
- To take personal responsibility for the Annual Report and Accounts and the judgements required for determining that it is fair, balanced, and understandable.

The Accounting Officer of the Department for Energy Security & Net Zero (DESNZ) has appointed the Chief Executive as Accounting Officer of UKAEA. The responsibilities of an Accounting Officer for keeping proper records and for safeguarding the Authority's assets, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, are set out in Managing Public Money published by HM Treasury. These include:

- Ensuring that the resources are used for the purposes intended.
- Providing assurance that UKAEA exercises the highest standards of probity in the management of public funds.
- Having personal accountability for the economic, efficient and effective use of resources.
- Accounting accurately and transparently the financial position and transactions.
- Delegating financial, and other, authority and accountability to senior colleagues.

UKAEA has a wholly-owned subsidiary, UKIFS Ltd., and the same Accounting Officer responsibilities extend to this subsidiary.

As the Accounting Officer, I have taken all the steps that I ought to have taken to make myself aware of any relevant audit information and to establish that UKAEA's auditors are aware of the information. So far as I am aware, there is no relevant audit information of which the auditors are unaware.

Directors' Report

The following items, required as part of the Directors' report, are included:

- Composition of the UKAEA Board on ***page 84***.
- Disclosure of personal data-related incidents on ***page 101***.

Future Outlook and Going Concern

The commitment to fusion research from political parties remains strong and there has been significant funding over recent years to deliver the expansion of programmes at UKAEA.

UKAEA has a pipeline of major investment, with a budget of £403M from DESNZ and a total budget of £469M in 2025/26. In addition, the business cases for STEP, JDR, and Fusion Futures are either approved or are in the process of being so.

The JET facility ceased scientific operations at the end of 2023. UKAEA is leading the preparation of the decommissioning programme, which enables this to be integrated with repurposing and regeneration of the JET site, and to explore the opportunities for research and technical development in the decommissioning of a fusion device for the first time. UKAEA's Statement of Financial Position includes a provision of £802M primarily for decommissioning, site restoration and historic organisational restructuring costs. Matching reimbursement receivables are recognised for most of these liabilities based on assurances from our Sponsoring Department that it will continue to accept responsibility in principle for these costs and will provide for them in their departmental resource accounts. These assurances are re-confirmed annually and there is therefore no effect on UKAEA's ability to operate as a going concern. The financial statements have consequently been prepared on a going concern basis.

I have reviewed all evidence provided to support the annual Governance statement. My conclusion is that UKAEA's overall governance and internal control structures are generally sound and fit for purpose.

Professor Sir Ian Chapman
Chief Executive and Accounting Officer
11th July 2025

Efficiency Overview

UKAEA delivers the most comprehensive package of fusion energy capabilities in the world. The UK fusion programme is acknowledged internationally as paving the way from strategy to delivery, not only in R&D and innovation but across the supporting landscape of regulation, skills, societal engagement and public-private partnerships.

UKAEA is actively progressing initiatives to work in conjunction with private partners, where there may be opportunities to meet costs that would otherwise fall to the Government. Examples include:

- Culham Campus has been confirmed as the first AI Growth Zone as part of the Government's AI Opportunities Action Plan. This will attract significant private investment, create local jobs and strengthen the UK's AI leadership.
- UKAEA is seeking to repurpose assets as part of the JET Decommissioning and Repurposing Programme (JDR). Working with a private partner, UKAEA is exploring whether the JET flywheels can be repurposed to provide inertial services to the grid. If successful, this will reduce decommissioning liabilities and generate rental revenue.
- UKAEA entered into a collaboration agreement with Eni S.p.A to jointly conduct research and development activities in the field of fusion energy. This will enable the transfer of skills and has reduced costs to UKAEA.

The People and Culture department has been instrumental in supporting UKAEA's workforce, enhancing employee engagement, and fostering a culture of inclusivity and development:

- UKAEA has implemented strategic measures aimed at reducing dependency on contingent labour, which presently represents 22% of the workforce. UKAEA is enhancing internal talent and recruitment processes to improve workforce stability and reduce costs.
- UKAEA aim to reduce contingent labour levels to below 20% by FY 2026/27. This would result in at least £1.25M annual savings.

UKAEA's Property Management team is deeply committed to sustainability, recognising its critical role in delivering long-term environmental benefits and operational efficiencies:

- UKAEA has all new buildings built to BREEAM 'Excellent' standards.
- Recent efficiency and sustainability saving measures include solar panel installations and LED lighting.

Effective financial management is crucial for sustaining UKAEA's growth and operational efficiency:

- UKAEA has a good record of delivering unqualified annual accounts pre-recess and won the PwC Building Trust Award for its 2023/24 Annual Report and Accounts by demonstrating a commitment to timely, transparent, and high-quality reporting.
- Over the last five years funding has increased. This has been managed without a significant investment in the finance team.

The commercial and procurement function has undergone significant changes to support UKAEA's operational needs efficiently:

- UKAEA benchmark well against Government Commercial Functions, with over 50% of third party spend via Crown Commercial Services (CCS) Frameworks.
- UKAEA has expanded its supplier engagement activities, hosting multiple events to foster collaboration and improve relationships with key suppliers. UKAEA has seen an 18% increase in companies tendering for work, with added competition driving better pricing.

The Internal audit service transitioned away last year from a hybrid arrangement with an external provider and the in-house Group Head of Internal Audit. Most audit work in the prior arrangement was delivered by an outsourced contract. The decision was made to transition to a new model whereby the full internal audit service for the Group is now provided by the in-house Group Internal Audit team. Benefits of this transition include a modest cost saving, the use of internal expertise of the business, extended scope coverage of the business and one combined internal audit programme covering the Group and its subsidiaries.

The Portfolio Management Office has been integral to UKAEA's transformation. Efficiency measures implemented have led to significant cost savings, improved project delivery timelines, and enhanced organisational effectiveness:

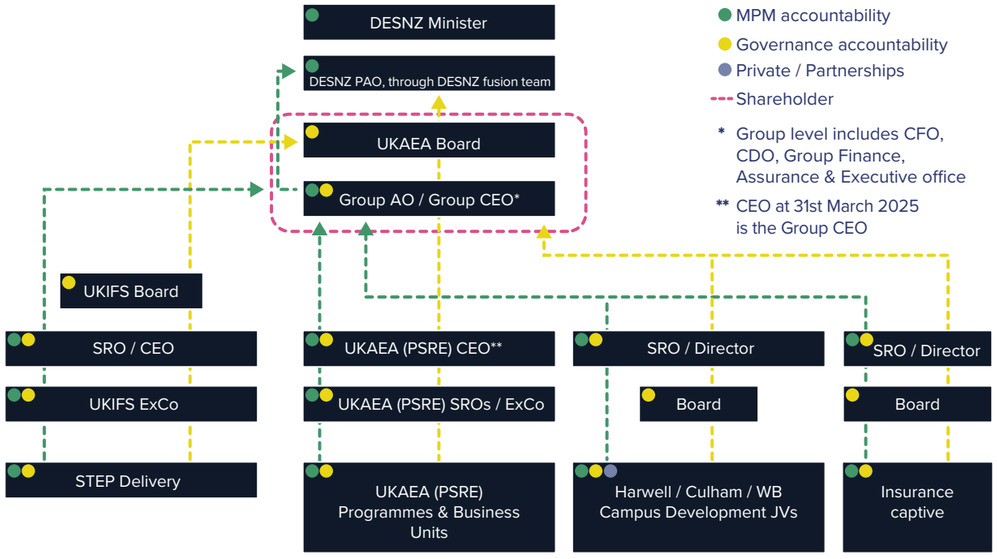
- **Delivery Life Cycle framework P3M reporting tools** streamline project initiation and execution phases, leading to faster project delivery times and reducing time-to-market for key initiatives.
- A formal, **continuous improvement framework** encourages employees to identify inefficiencies and propose solutions. Regular feedback loops will be integrated into the project lifecycle to drive ongoing enhancements.

Governance statement

Scope of Responsibility and Purpose of the Governance Statement
As Accounting Officer, I have responsibility for maintaining a sound system of governance and internal control that supports the achievement of the United Kingdom Atomic Energy Authority's policies, aims and objectives, whilst safeguarding the public funds and assets for which I am personally responsible, in accordance with the responsibilities assigned to me in Managing Public Money.

The Governance Statement, for which I am personally responsible, sets out how I have discharged my responsibility to manage and control UKAEA's resources during the year. It also sets out the governance framework and control structure of UKAEA, its stewardship and corporate governance, and the framework in place to evaluate the effectiveness of the risk management process.

Corporate structure
UKAEA is a non-departmental public body sponsored by the Department for Energy Security and Net Zero (DESNZ).



Framework Document
The Framework Document between DESNZ and UKAEA sets out the overall governance framework and the formal operating relationship. It was last updated and published in January 2025. The Framework Document acts as a central reference point for everyone involved between the sponsoring Department and UKAEA; it supports them in making strategic, policy, and financial decisions and agreements with confidence.

UKAEA Group
In November 2024, UK Industrial Fusion Solutions Ltd (UKIFS) was stood up as a company limited by shares; a wholly-owned subsidiary of UKAEA with its own board, directors and governance arrangements. UKIFS was set up to deliver a prototype fusion energy plant at West Burton in Nottinghamshire, working together with industry to deliver the prototype plant by 2040. The UKIFS Corporate Structure Document sets out the overall governance framework and formal operating relationships between UKIFS and the UKAEA Group in its role as shareholder. It establishes the company's core responsibilities and establishes a reference point to support both UKIFS and UKAEA in how they make key decisions. The Delegated Authority Letter from the UKAEA Group's Accounting Officer to the UKIFS CEO further sets out the transfer of formal delegated spending authorities and budget allocations within specific limits and guidelines. The UKIFS Delegation Framework delegates these authorities within UKIFS, with financial and commercial approvals underpinned by system controls.

The UKAEA Group has 50% control of a joint Public Sector Limited Partnership (HSIC PubSP), the public-sector partner in Harwell Science and Innovation Campus Ltd Partnership (HSIC), which is responsible for the development of the Harwell Campus. Both HSIC PubSP and HSIC have appropriate and fully documented governance arrangements in place. These cover such matters as membership of, and decisions made by, their boards of directors, appointment and removal of directors, funding and confidentiality. Our Chief Financial Officer is on the board of HSIC PubSP, and our Chief Development Officer was on the boards of both HSIC PubSP and HSIC.

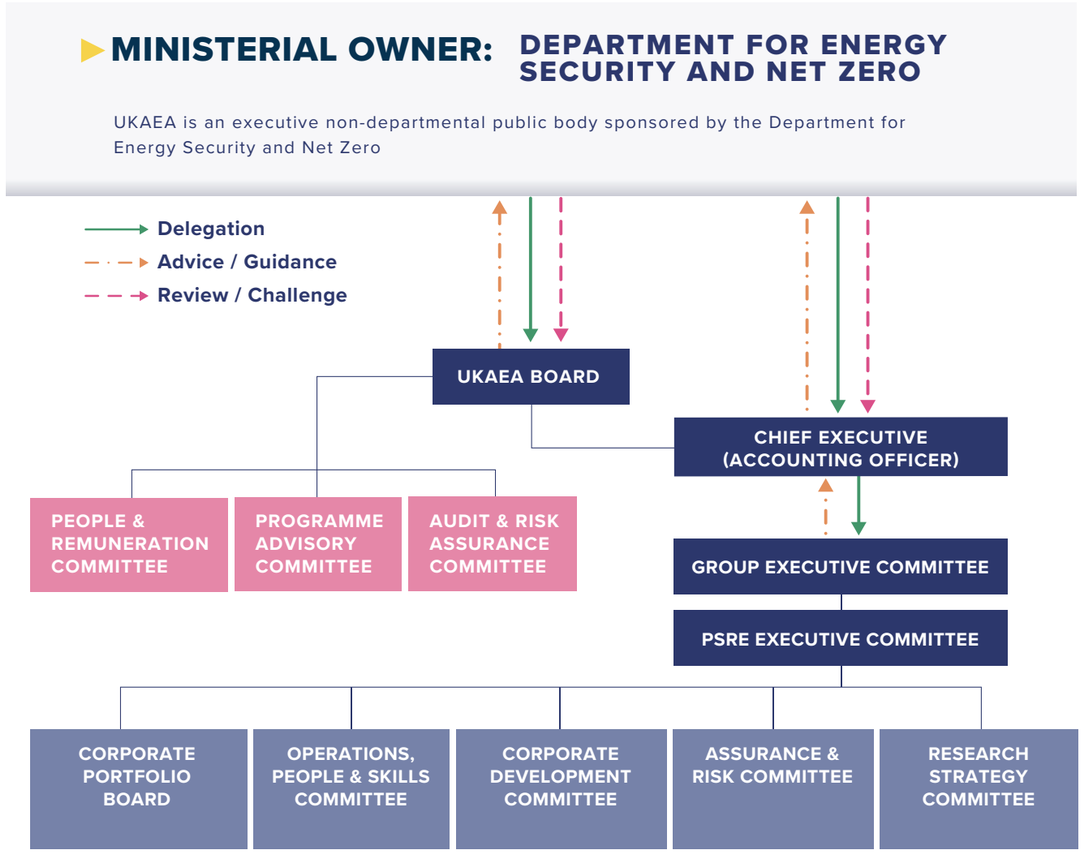
UKAEA's subsidiary, AEA Insurance Ltd, has appropriate governance arrangements in place. These are formally reviewed and updated as necessary by its Board of Directors, on which UKAEA is represented by the Head of Pensions and Insurance. A compliance and company secretarial summary is tabled for review at each board meeting. A risk register and provisions for an annual internal audit of controls and risks are also in place.

The UKAEA is responsible for the management of the Combined Pension Scheme (CPS) and related pension schemes, which are for eligible UKAEA employees and other participating employers. The CPS is an unfunded, final salary defined benefit scheme. A Pensions Oversight Board, chaired by UKAEA's Chief Financial Officer, was established in 2024 to provide additional assurance to UKAEA. A separate annual report and accounts is prepared for the pension schemes and published on gov.uk.

UKAEA has dormant registrations at Companies House for UK Fusion Solutions Ltd and UKAEA Ltd.

Following changes to governance arrangements with the establishment of the Group Executive Committee in the 2023/24 reporting year, our efforts to enhance our governance arrangements continue, with a Board Effectiveness Review completed in January 2025. [Further details on ***page 86***]

Governance model



The membership and purpose of the Board, Executive Committee, and sub-committees is outlined in the following pages

Changes to Board Sub-Committees
Following the implementation of a refreshed governance structure which included the creation of a Corporate Development Committee (CDC) as an Executive Committee sub-committee, it was agreed in November 2024 that the Property Sub-Committee, established in May 2020, could be retired. The CDC provides executive focus on Property Strategy and associated matters. All Board-level strategic and significant decisions (previously in scope of the Property sub-committee) will continue to be tabled at UKAEA Board.

The Programme Advisory Committee is now chaired by a Non-Executive Director member of the Board and has become a sub-committee of the Board. A full report on this Committee, and all other committees, are included in the 'Governance' section of this Accountability Report.

Risk management

An integrated system of risk management is in place across the organisation; see 'Our Principal Risks' in the Performance Report for a summary of the key risks facing UKAEA.

Risk Assurance Framework
Our assurance framework comprises three key areas: governance, risk management, and internal control. All processes are assured through the UKAEA 'three lines of assurance' model, which provides the Board with an appropriate level of comfort that we are managing risks effectively and have a sound system of internal controls in place.

For illustration purposes only, see Stakeholder section for further information.

UKAEA continuously matures the assurance mechanisms it utilises to assess the effectiveness of its governance and control arrangements within the 'three lines of assurance' model by following the guidance, principles, and best practice from the Government's 'Orange Book' as well as industry innovation.

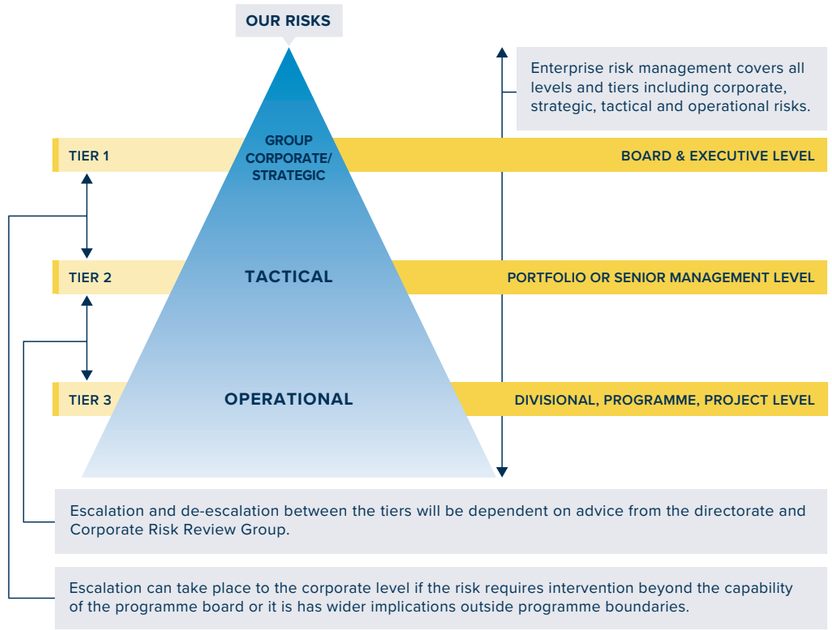
UKIFS contributes to the risk and assurance frameworks by reporting strategic and escalated risks through the Group Executive Committee and Group Board governance lines. UKAEA continues to support UKIFS while the risk and assurance function is matured within the subsidiary. We are mapping assurance measures to identify key strengths and potential gaps while developing realistic and proportionate action plans where appropriate as we mature towards a fully-integrated governance, risk, and assurance framework.

The implementation of a fully-integrated governance, risk and compliance platform is key to the ability of risk, assurance and audit processes to drive one another in a more efficient and effective manner.

Our CEO, as Accounting Officer, is responsible for reviewing the effectiveness of the risk management and internal control systems. This review of the effectiveness of these systems is informed by the work of senior managers within UKAEA, who have responsibility for the development and maintenance of the internal control framework (an internal audit function), feedback from the external auditors which includes the management letter, and other reports.

The assurance framework allows the Accounting Officer to be confident that key regulatory and safety risks are being controlled and that we have demonstrable compliance with the standards set by regulatory and government bodies.

Our Enterprise Risk Management Process
The early identification and effective management of risk is fundamental to achieving our mission, goals and strategic objectives. Our approach encompasses risk management across our broad range of activities at operational, tactical and strategic levels. Risk registers are held at each level of the risk hierarchy including operational project risk registers and tactical portfolio risk registers which can be escalated to the corporate / strategic risk register if appropriate. The Board provide a view and strategic guidance on the top risks recommended by the Executive Committees.



UKAEA operates a mature Enterprise Risk Management (ERM) process embedded at all levels of the business. Effective risk management drives decision making through our transparent and open positive risk culture. The ERM process is compliant with best practice laid out by the Institute of Risk Management, the Treasury's 'Orange Book', and ISO31000. The risk process ensures that:

- Interconnected risk management operates at all levels of the business and our people are empowered to escalate their risks and concerns.
- Significant risks, associated mitigations and control effectiveness are tracked, challenged and moderated by programme / project boards and the corporate risk review group. Senior management also actively engage through the Executive Committees, Audit and Risk Assurance Committee, and the Board.
- The risk appetite is endorsed by the Board, and risks are assessed against the risk appetite in balancing innovation and enabling opportunities against the need for greater focus on reducing risk.

Risk appetite is a key part of our ERM framework, helping us to find the right balance between innovation and caution, without exposing the organisation to irrecoverable damage or stagnation. The UKAEA Board has overall responsibility for our group risk appetite, determining the amount and type of risk that we are willing to take in pursuit of our strategic objectives and the amount of risk that we can bear while supporting effective decision making. Our risk appetite is set to reflect the evolving risk landscape of the entire group structure and encompasses a wider range of appetites to encompass the differing needs of each constituent part. Operational risk appetite is maturing to further enhance the quality of risk information supporting decision making. Our CEO is accountable to Government for ensuring that all risks are managed effectively.

Tactical and operational risks are owned by relevant senior managers or subject matter experts. Our robust governance structure enables the review and escalation of risks as appropriate. The Corporate Risk Review Group, which meets quarterly, provides oversight of enterprise risk including corporate, programme and major project risks. The group reviews the status and progress of mitigations identified by the risk owners, and the effectiveness of the controls. The Audit and Risk Assurance Committee, on behalf of the Board, formally reviews key risks on an ongoing basis in conjunction with UKAEA's risk appetite statement, reporting and/or escalating to the Board as required. Performance of programmes and major projects, including status, risk, and financial metrics, is reviewed monthly by the PSRE Executive Committee.

The executive Assurance and Risk Committee provides a key stage in the reporting of risk and assurance matters, providing leaders in the organisation with the opportunity to review and comment on strategic risks and mitigation plans prior to reporting to the Board's Audit and Risk Assurance Committee.

Quantitative cost and schedule risk analysis for major projects and programmes provides greater insight on the effect of uncertainty on a programme's budget and milestones. This allows senior leadership to develop controls and mitigation plans to increase the probability of project success, and to increase the maturity of the contingency process within UKAEA.

Risk management processes

Our framework for managing risk is embedded across the organisation and benefits from the ongoing commitment and participation of leadership. Risks are regularly reported to the Board via Audit and Risk Assurance Committee, and quarterly to UKAEA's sponsoring government department

RISK GOVERNANCE		ENTERPRISE RISK MANAGEMENT FRAMEWORK
Standards	Orange Book ISO 31000, 9001, 14001 & 45001	Risk strategy/ Policy/Appetite
Review	Corporate Risk review Divisional Risk review Project / Programme Board Risk review	Risk architecture/Roles and reporting structure
Approval	PSRE Executive Committee	
Oversight	UKAEA Board Audit and Risk Assurance Committee Sponsoring government department	Risk protocols/System

Assurance

Group Internal Audit

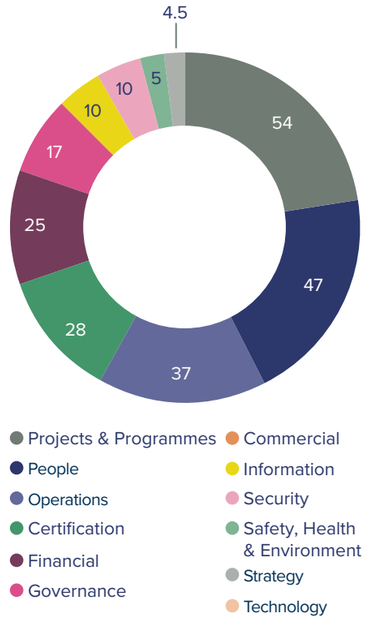
UKAEA has an internal audit function which operates across the UKAEA Group in accordance with the Government Functional Standard GovS009: Internal Audit. It provides assurance on the adequacy and effectiveness of UKAEA Group and subsidiary risk management, control, and governance frameworks driven by the strategic objectives, risk appetites, and potential risk exposures of UKAEA Group and its subsidiaries.

Operating in line with the UKAEA Internal Audit Charter and UKIFS Internal Audit Charter, approved by the UKAEA Accounting Officer and the ARAC of UKAEA and UKIFS respectively, Group Internal Audit executes their responsibilities through the delivery of a 3-year rolling programme that extends across multiple audit disciplines, and reports progress regularly to the UKAEA and UKIFS ARACs.

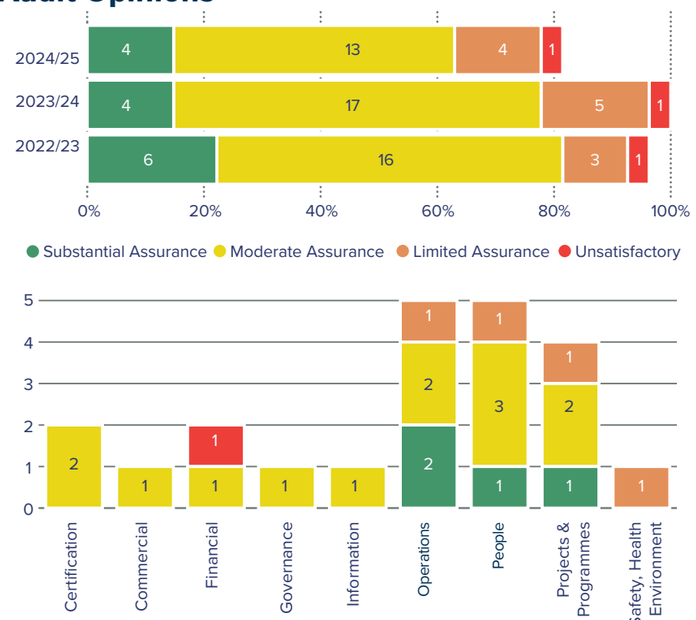
The breadth of the internal audit function extends to the management system audit programme focused on operational safety, health, environment, and quality performance, and monitoring adherence to ISO 9001, 14001 and 45001. This provides a holistic view of assurance across operational and functional areas to the UKAEA Accounting Officer and UKAEA and UKIFS ARACs.

Focusing assurance on the top corporate risks, key controls, and significant changes faced across UKAEA Group in 2024/25, this year's audit plan delivered audit engagements across the following areas:

Group Internal Audit Days 2024/25



Audit Opinions



The proportion of audit results with a limited assurance opinion has remained consistent over the past 2 years, this is partly attributed to:

- The Internal Audit programme being executed by in-house auditors since September 2024 who have a deeper understanding of UKAEA Group, the control framework and associated risks.
- Continuation of a revised Management System Audit programme that utilises both process and vertical auditing to increase coverage of operational safety, health, environment, and quality assurance.
- Sustained maturing of risk management processes and culture providing improved risk information and identifying areas of concern.

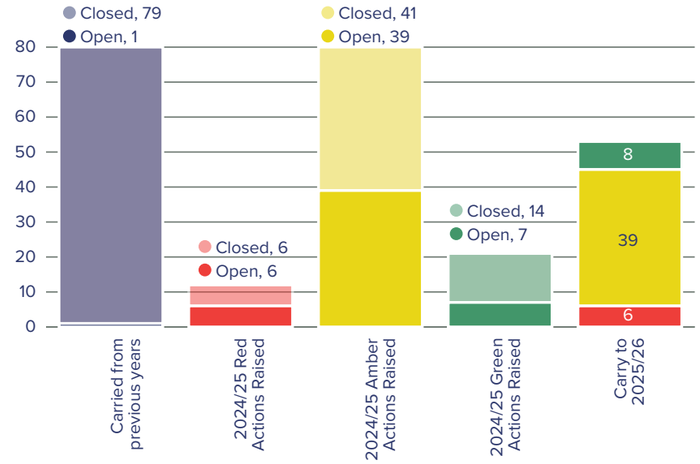
Further analysis on the overall opinion of the UKAEA internal control, governance and risk management framework is provided by the Group Head of Internal Audit as part of the Annual Opinion on ***page 81***.

The audit results highlighted the following areas requiring improvement:

Financial	Operations	People	Projects & Programmes	Safety, Health & Environment
Travel & Subsistence Travel processes and the associated contract management activities were found to be inadequate and inefficient. Immediate corrective controls have been identified to strengthen arrangements and a longer-term end-to-end review is underway to develop an overarching travel framework aligned to the audit recommendations and best practice.	**Export Control** Export control arrangements are legally compliant, however, there was a lack of awareness of requirements and a high level of errors in documentation submitted by process users. An extensive training and awareness campaign has been conducted and further preventative controls are being implemented within peripheral processes.	**Skills** Governance forums are in place to manage training provision from OAS, however, there were weaknesses in defining roles and responsibilities, risk management and performance monitoring arrangements. All recommendations have been implemented to enhance governance and ensure that training meets the UKAEA technical demands.	**LIBRTI** Effective governance structures and processes have been established to oversee the programme and achieve the objectives. However, the Programme Management Plan has not been finalised and approved and whilst there are individual programme and project plans in place these have not been consolidated and baselined.	**Emergency Planning** Weaknesses were identified in emergency preparedness and response arrangements at both site and facility levels. Significant changes to emergency arrangements have been implemented with further activities identified to enhance consistency, strengthen effectiveness and improve governance.

Improvements were identified in management system audits of operational areas demonstrating effective operating structures and enhanced adherence to UKAEA policies and procedures in those areas. Project and programme management frameworks continue to be effectively evidenced by the Fusion Futures Industry Capability Programme demonstrating adequate governance and reporting with no recommendations raised.

Audit Actions Status by Severity at 31st March 2025



Audit Actions
All audit recommendations raised were accepted with timely responses from management and robust action plans provided. There were 113 actions arising from the 2024/25 audits and 80 carried across from previous years. In 2024/25, 82% of actions were completed within the agreed timescales, and three green actions were overdue at year end, these related to the strengthening of the procedure and tool used for managing Corporate Performance Measures and the conducting of a joint lessons learnt exercise following the handover of the H3AT Research Hall to UKAEA.

Group Internal Audit Annual Opinion

Based on the audit work undertaken for the year and considering all available evidence, in my opinion, I can provide moderate assurance that there is a generally sound system of internal control, governance and risk management within UKAEA Group for the 2024/25 year. This represents a modest improvement from the previous year; however, there remain significant control weaknesses requiring management's immediate attention.

In forming this opinion, the following has been considered:

- All audits undertaken in the year with revised changes approved by UKAEA ARAC;
- 100% of the agreed audit programme has been completed;
- Substantial audit opinions from the Fusion Futures Industry Capability Programme, Computing Division and RACE Division audits;
- 22% of internal and management systems audits undertaken received Limited or Unsatisfactory assurance. including:
  - o Unsatisfactory audit opinion from the Travel and Subsistence Audit highlighting inadequate travel contract management and processes;
  - o Limited assurance opinion from the Emergency Planning Audit where weaknesses were found in emergency preparedness and response arrangements at both site and Facility levels; and,
  - o Limited assurance opinion in the Export Control audit which highlighted a lack of awareness across the organisation and resourcing issues.
- 100% of audit recommendations accepted by management from completed audits with robust and timely action plans in place.
- There is continued support from management to ensure that audit actions are completed on time with 82% completed on time with only 3 low priority actions overdue at year end;
- Observations from the payroll assurance board, and the U4BW change advisory board embedded assurance which show good control and monitoring; and,
- UKAEA risk culture is continuing to improve across the organisation, the top risks are reported regularly to the PSRE Executive and the UKAEA Audit and Risk Assurance Committee and the audit programme is reviewed quarterly against existing and emerging risks. Risk appetite is embedded in the risk management system and has been reviewed by the UKAEA Board.

Government Functional Standards
UKAEA has continued to implement the requirements of the Government Functional Standards across thirteen applicable functions. Progress of implementation is reviewed quarterly, with most functions now meeting the baseline requirements. Clear and actionable improvement plans continue to be refined, and implementation owners have been set aims for continuous improvement where the assessment frameworks allow measurement.

Oversight of progress is monitored quarterly with function owners reporting on progress of compliance with the standards. Additionally, external peer reviews have been carried out for several functions and it is probable that this type of activity will apply to other functional standards as the government assessment framework matures.

Self-Assessment
UKAEA continues to utilise a number of self-assessment tools supplied via our Sponsoring Department or Cabinet Office that are based on government standards and maturity models. These provide a valuable insight and measure of assurance to UKAEA management. However, reporting continues to present some challenges as not all functions have the self-assessment tools. Functions without self-assessment tools have had these tools developed in-house to provide 'like-for-like' assurance insights. We have seen a slight drop in compliance with those standards which have seen significant updates, i.e. GovS007 and GovS009. However, we have developed in-depth and costed action plans to enhance compliance in 2025/26.

During 2023, a Public Body Review was conducted: ***UK Atomic Energy Authority: public body review 2023 - GOV.UK*** and 12 recommendations were made across the four key areas of Efficacy, Efficiency, Governance and Accountability. All but one of the recommendations have now been actioned. A summary can be found below:

Action	Status	Action	Status
1. Develop the long-term strategic plan for UKAEA's core Research and Development	●	7. Liaison with the Cabinet Office on efficiency benchmarking tools	●
2. Standardise and simplify performance reporting	●	8. Deliver the Counter Fraud continuous improvement plan	●
3. Capturing the interim benefits of fusion programmes	●	9. Undertake an internal Board Effectiveness Review	●
4. Maintain close links with DSIT	●	10. Agree the new Framework Document	●
5. Capturing continuous improvement and efficiency activity	●	11. Develop the process for Board succession planning	●
6. Undertake Harwell Joint Venture Review	●	12. Annual chair's letter (aligned to the appointment of the new Chair)	●

● underway
● complete

Other control and governance structures

Decommissioning provision review
UKAEA, with reference to the Nuclear Decommissioning Authority, have completed a review of the Lifetime Plan which underpins the decommissioning provision, the impact of which is included in the Financial Statements (see note 19.1). This has followed the principles set out in 'The Aqua Book', a good practice guide published by the Government for assurance of financial analysis. Further explanation of the key components and scope of the life-time plan is included in the section on Financial Performance.

Whistleblowing Policy
UKAEA has an established whistleblowing policy, which is available for all workers. Two whistleblowing concerns were reported in 2024/25, compared to six in 2023/24. An investigation was carried out for both cases and neither of the concerns were upheld. For one of the concerns raised further investigations led to lessons learned which have been actioned.

Declaration of outside interests
UKAEA has a detailed declaration of outside interest policy. Board members and the Executive Committee are required to complete an annual declaration of interests. At the commencement of Board meetings, the Chair requests for members to confirm any conflict. A ***Board Register of Interests*** is published on gov.uk.

We have strengthened our advice, guidance and training materials in the areas of Corporate Governance, such as 'Declaration and Management of Outside Interests' and 'Gifts and Hospitality', to ensure impartiality, integrity and transparency in the work that we do. An internal register is maintained to ensure activities do not constitute a conflict of interest and is not detrimental to the reputation and good standing of UKAEA.

Alexander Tax Review
UKAEA is compliant with the requirements of the Alexander Review (2012). All senior staff and non-executive members are paid via UKAEA payroll. In all cases, this results in appropriate tax contributions being deducted at source.

During the year under review, UKAEA reviewed the tax arrangements of its off-payroll appointments. All contractors within scope of this exercise have been required to provide evidence of tax compliance.

Cabinet Office Controls
UKAEA complies with the suite of Cabinet Office controls.

Freedom of Information
As a public authority, the UKAEA has a legal obligation to provide information through an approved publication scheme and in response to requests. All requests must be responded to within 20 working days of receipt.

Any FOI requests are directed, by the staff receiving the request, to be made in writing and are forwarded or sent directly to foienquiries@ukaea.uk. The email account is published on the UKAEA website which also receives FOI enquiries directly and is monitored by the FOI officers.

UKAEA follows the Information Commissioner's Office guidance. An acknowledgement is issued to each original FOI, the aim is to acknowledge the request within 1-2 working days of receipt. Each request is tracked and responded to within a 20-working day timeframe, beginning on the first working day after the request has been received.

In 2024/25, UKAEA received and processed 53 FOI requests, increasing from 39 received in the previous year. The compliance rate for response within 20 days was 98%, compared to 79% for the previous year.

Governance of Knowledge and Information Assets
The CFO is the executive lead for information security and the Chief Development Officer (CDO) is the executive lead for knowledge assets. Following the publication of the Government draft standard in April 2021 ('The Rose Book: Knowledge asset management in government'), the CDO led a review of the UKAEA process; the 'UKAEA Knowledge Asset Management Strategy' (KAMS) was released for publication in February 2025 in line with recommendations and guidance from 'The Rose Book' and 'Knowledge Asset Management Strategies: guidance for public sector organisations'.

Counter Fraud
During the past year, we have progressed against the annual plan and continued to implement actions in line with the Government Counter Fraud Standard GovS 013. Our Internal Audit service can access Accredited Counter Fraud Specialists as required.

Better Payment Practice
UKAEA supports the Better Payment Practice Code in its treatment of suppliers with the aim of paying undisputed invoices as soon as possible. The key principles are to settle the terms of payment with suppliers when agreeing the transaction, to settle disputes on invoices without delay, and to ensure that suppliers are made aware of the terms of payment and abide by those terms.

During the year, UKAEA has achieved a 95% success rate for payment of suppliers in accordance with terms, the same as in 2023/24. The average number of payment days from invoice date was 6.73 days, compared to 5.68 days in 2023/24. These statistics are reported for all invoices received; we do not distinguish whether the invoice was valid or not.

UKAEA Board Report

Overview and Key Duties

The Board, which met seven times during the last year, has a schedule of matters reserved for its approval. This includes:

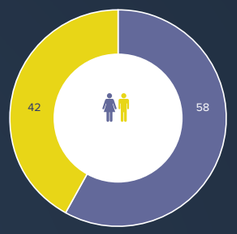
- Establishing the overall strategic direction of UKAEA within the policy and resources framework agreed with the responsible government minister.
- Reviewing UKAEA's corporate objectives, goals, and performance.
- Oversight of UKAEA's subsidiaries.
- Approving the annual accounts, budget, and corporate plan.
- Reviewing and approving proposals to start new activities or to discontinue existing activities.
- Ensuring that high standards of corporate governance are always observed.
- Reviewing corporate risks, and reviewing the safety, environmental, and security performance of UKAEA.

In addition to routine business and updates, issues covered at Board meetings throughout the year included:

May 24	Securing Value from Fusion Board Governance Spending Review RACE update
July 24	Harwell Joint Venture Tritium Fuel Cycle Investment Landscape UKIFS update
September 24	International Fusion Landscape Security brief LIBRTI overview Tritium Facility Industry Partnership
November 24	Tritium Fuel Cycle Collaboration Culham Data Centre Campus Development Strategy HMG Industrial Strategy
January 25	UKIFS Governance Arrangements Independent Board Effectiveness Review Fusion Futures update CHIMERA project UKAEA Budget 2025/26 and Spending Review Computing update
February 25	Interim arrangements for CEO
March 25	UKIFS Business Plan Board Effectiveness Review Action Plan Materials update Investment Partner for Culham Campus and Data Centre Terms of Reference review Spin Out Business Case

Board Diversity

Gender diversity



As at 31st March 2025

Tenure in role

The Board delegates responsibility for day-to-day and business management control to the CEO who is assisted by senior management. During 2024/25, UKIFS was stood up as a limited company. As a subsidiary of UKAEA Group, the UKIFS Board reports to UKAEA Group Board, including on reserved matters within strategy and management, financial reporting and control, Board composition and other appointments, pension entitlement, land, and in relation to share capital.

Board Composition

The Directors' biographical details demonstrate the diverse range of experience from positions at the highest level in the UK scientific and business community. The composition of the UKAEA Board is in line with other bodies that report to DESNZ. An audit of skills represented on UKAEA Board was completed in 2024/25; key skills to be recruited against over the coming years were identified.

Biographies and Attendance

Non-Executive Director		Executive Member	
Bernard Taylor, Chair	6	***Ian Chapman***	6
Eithne Birt	4	***Ruth Elliot***	6
Luc Bardin	6	***Tim Bestwick***	6
Stephen Hillier	6	***Lee McDonough*** DESNZ	4
Richard Hookway	6	**Board Attendee**	
Sue Gray	6	***David Gann***, UKIFS Chair	6
Robin Grimes	4	***Justin Kingsford***, COO	6
Mary Ryan	5		

Changes to the Board since March 2024

Bernard Taylor was appointed as UKAEA Chair commencing on 29th April 2024. He took over from the Interim Chair Lady Eithne Birt.

Directors' Independence
The Non-Executive Directors constructively challenge and help develop proposals on strategy, and bring strong and independent judgement, knowledge, and experience to the Board's deliberations. The independent directors are of sufficient calibre and number that their views carry significant weight in the Board's decision making. The Board considers all its Non-Executive Directors to be independent in character and judgement.

No Non-Executive Director:
- Has been an employee of UKAEA within the last five years.
- Has, or has had within the last three years, a material business relationship with UKAEA or its former or current subsidiaries.
- Receives remuneration from the Authority other than a director's fee and expenses incurred in carrying out their duties.
- Has close family ties with any of UKAEA's advisers, directors or senior employees.
- Holds cross-directorships or has significant links with other directors through involvement in other companies or bodies.
- Has served on the Board for more than nine years.

Evaluation of Board Performance
A Board effectiveness review was undertaken during the latter part of 2024 via an independent review led by Sir John Parker. One- to-one interviews with UKAEA Board members and other external parties were undertaken as well as an anonymous survey issued to all members. Several recommendations were presented in January 2025, identifying where effectiveness could be improved further. These covered structure, processes, people and the Board's performance in delivering its duties. Recommendations from the review were adopted and actions are underway. Key recommendations included:
- More information on the external landscape and its relationship to UKAEA's strategic choices and challenges to be provided to the Board, allowing for informed ongoing discussions regarding future options and decisions.
- Further enhancement of the relationships between the chair, non-executive and executive directors.
- Development of a Group Communication programme in relation to the UKAEA / UKIFS unique journey, building strong relationships internally as well as externally to enhance the level of engagement with the Cabinet Office.
- Continuing to develop a robust pay case which seeks approval for retention and succession of key skills.

External Review
In addition to the formal Board sub-committees, external advice is a key element of the corporate governance process. The Programme Advisory Committee, which is now chaired by a non-executive director and is included as a sub-committee in the governance structure, is made up of experts with backgrounds in fusion and industry. The committee provides external scrutiny of UKAEA programmes and strategy, and reports directly to the Board. The key role of the committee is to review the UKAEA scientific programme and provide guidance and advice to the Executive on the implementation and planning for these, as well as independent assurance to the Board that the whole UKAEA programme is soundly-based and achievable.

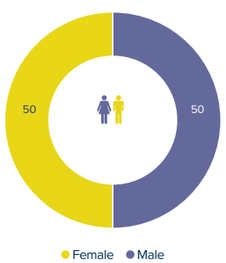
Compliance with the Corporate Governance Code
UKAEA Group's corporate governance arrangements are kept under review to ensure that they are compliant, where applicable, with the provisions of corporate governance in central government departments: Code of Good Practice April 2017. The Chair and Non-Executives are appointed by our sponsoring department.

UKAEA Group Executive Committee Report

UKAEA Group Executive Committee	
Terms of Reference	Last reviewed and approved in January 2025
Overview	UKAEA Group Executive Committee (GEC) provides oversight of performance, delivery, good governance and sound reporting of the Group. This includes the Group's subsidiaries, taking account of material issues of strategic risk and opportunities for the organisation, alongside generating recommendations for the UKAEA Group Board, including on strategic direction. GEC also provides oversight of the UKAEA Combined Pension Scheme on behalf of DESNZ.
Roles and Responsibility	The Group Executive Committee is the overall oversight and decision-making body for performance and delivery of the UKAEA Group. It delivers the UKAEA strategic direction on behalf of the UKAEA Group Board, bringing together all aspects of business. It has accountability for ensuring that the activities of the UKAEA Group are run effectively to meet its agree objectives within budget. The scope of the committee includes: • Setting the strategy for the Group and driving its delivery on behalf of the UKAEA Group Board. • Providing oversight of delivery performance of the UKAEA Group subsidiaries, AEA Insurance Ltd and UKIFS Ltd, to achieve that strategy. • Providing oversight of key corporate plans and strategies, including property, people, and spinouts. • Reviewing the UKAEA Group financial performance and major funding requests. • Reviewing the risk landscape. • Considering and reviewing corporate governance/assurance matters and approval of major policy changes. • Providing oversight of the management of the UKAEA Combined Pension Scheme and Harwell Science and Innovation Campus Ltd Partnership (HSIC). • Approving the annual Group Internal Audit programme. • Making and reviewing submissions to the UKAEA Group Board. • Ensuring cohesion of culture across entities within the Group.
Chair	Ruth Elliot, Chief Financial Officer and Director of Corporate Services
Number of Meetings	6

Membership

Gender diversity

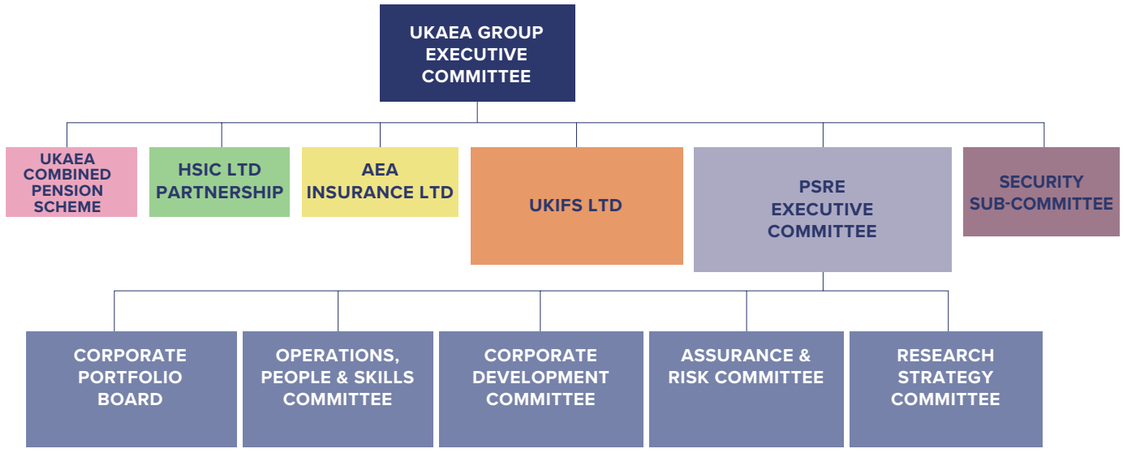


As at 31st March 2025

Ruth Elliot, Chief Financial Officer and Director of Corporate Services	6/6
Nicola Barber, Group Director of QSHE, Risk, and Assurance	6/6
Tim Bestwick, Chief Development Officer and Deputy CEO	5/6
Alli Brown, Director of Finance and Business Systems (until November 2024)	4/4
Ian Chapman, Chief Executive Officer and Accounting Officer	6/6
Jill Evans, Director of Finance and Business Systems (from January 2025)	2/2
Grazka Kazmierska, Finance Director of UK Industrial Fusion Solutions Ltd (GEC member from November 2024)	3/3
Justin Kingsford, Chief Operating Officer	6/6
Paul Methven, Chief Executive Officer of UK Industrial Fusion Solutions Ltd	5/6

Matters covered	During reporting year 2024/25, in addition to routine business and updates, the matters covered included: • Harwell Science and Innovation Campus Ltd Partnership (HSIC) Review recommendations. • Culham Campus investment approach. • West Burton Training Facility. • Corporate Risk and Assurance. • Corporate Performance Measures progress reports. • Corporate Policy Manual update. • Review and approval of key governance documents for the transition to UKIFS Ltd, including the Fusion Partner Inter-Company Agreement. • Insurance review. • Delegations Manual update approval. • Approval of timeline for corporate planning and reporting documents. • UKIFS Business Plan for recommendation to UKAEA Group Board. • UKAEA Group budget for recommendation to UKAEA Group Board. • Spin out for recommendation to UKAEA Group Board.

As part of the Group reporting structure, the subsidiaries, delivery organisations and the Public Sector Research Establishment (PSRE) Executive Committee report into the GEC.



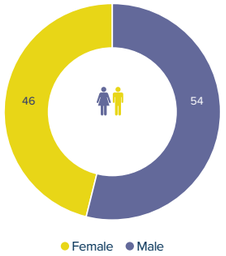
- UKAEA Combined Pension Scheme – managed on behalf of DESNZ.
- Harwell Science and Innovation Campus Ltd Partnership (HSIC) – Harwell Science and Innovation Campus Public Sector General Partner Ltd (UKAEA and UKRI are equal partners) as the public sector partner has 50% control of the Joint Venture.
- AEA Insurance Ltd – subsidiary of UKAEA.
- UK Industrial Fusion Solutions Ltd – wholly owned subsidiary, a company limited by shares.
- Public Sector Research Establishment Executive Committee.
- Security Sub-Committee – responsible for providing direction and oversight of security resources to deliver security risk mitigation, and for enhancing operational effectiveness and strategic decision-making to protect UKAEA's strategic advantage in Fusion Technology. Ensures that appropriate governance, policies, processes, procedures, and practices are in place to protect UKAEA's assets in fusion technology. Assets include people, information and know-how, physical infrastructure, and equipment.

Public Sector Research Establishment (PSRE) Executive Committee Report

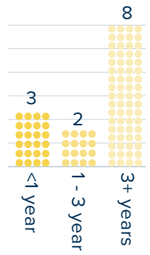
PSRE Executive Committee	
Terms of Reference	Last reviewed and approved in March 2025
Roles and Responsibility	The PSRE Executive Committee is chaired by the CEO and has responsibility for decision-making and oversight of the activities of the PSRE. It analyses performance and operational delivery of Divisions and Programmes and assesses material issues of risk and opportunity. It has accountability for ensuring that the activities of the PSRE are run effectively and efficiently to meet agreed objectives within budget, as well as setting the behaviours of the organisation to embed a strong delivery culture. The committee meets monthly.
Chair	Ian Chapman, Chief Executive Officer and UKAEA Group Accounting Officer
Number of Meetings	12

Membership and Attendance

Gender diversity



Tenure in role



As at 31st March 2025

Ian Chapman, Chief Executive Officer and Accounting Officer	12/12
Nicola Barber, Group Director of QSHE, Risk, and Assurance	12/12
Tim Bestwick, Chief Development Officer and Deputy CEO	11/12
Alli Brown, Director of Finance and Business Systems (to November 2024)	7/7
Rob Buckingham, Executive Director for Robotics, Repurposing & Decommissioning	7/12
Ruth Elliot, Chief Financial Officer and Director of Corporate Services	12/12
Jill Evans, Director of Finance (from January 2025)	3/3
Justin Kingsford, Chief Operating Officer	10/12
Heather Lewtas, Head of Innovation (from March 2025)	1/1
Fulvio Militello, Executive Director of Plasma Science & Fusion Operations	12/12
Joe Milnes, Executive Director for Engineering, Computing, and STEP Partner	12/12
Amanda Quadling, Executive Director of Materials, Blankets and Research	11/12
Sharon Taylor (Director of People and Culture) (from December 2024)	2/4
Steve Wheeler, Executive Director for Fusion Technology, Fuel Cycle and ITER Components	11/12

Accountability report
GOVERNANCE

Matters covered	During reporting year 2024/25, the matters covered included: • Reports from sub-committees (see below) – standing item. • Programme and project quarterly updates, covering: JDR, LIBRTI, Futures-Industry Capability, FOSTER (skills), H3AT and CHIMERA projects – standing item. • Divisional and operational quarterly updates, covering: Materials, Tritium & Technology, RRDD, Plasma, Computing, QSHERA, Innovation & Business Development, Integrated Engineering and STEP (Fusion Partner) – standing item. • Finance reporting – standing item. • Risk reporting – standing item. • Commercial and supply chain updates - standing item. • Fusion Safety Authority updates - standing item. • People and culture updates. • Spending review updates and decisions. • How the UK can secure economic value via UKAEA technical capabilities.

To assist the Executive Committee, five sub-committees report into it, alongside specific programme boards responsible for the governance of UKAEA programmes and major projects.

- **Corporate Portfolio Board** is responsible for providing assurance that UKAEA's programmes are delivering their objectives and targeted benefits, and that they are well-governed with sufficient controls in place to demonstrate responsible use of public funding.
- **Research Strategy Committee** is responsible for maintaining the strategic positioning of the UKAEA research programmes, considering the advice of the Fusion Advisory Board, Programme Advisory Committee, and UKAEA's obligations to international collaborations. The committee identifies, proposes, and assesses new research opportunities and provides assurance to the Executive on research governance processes.
- **Operations, People and Skills Committee** is responsible for the effective management and oversight of operational services delivery and cross-cutting activity that impacts on the operational outputs of UKAEA PSRE's divisions and programmes. It sets and monitors Key Performance Indicators for People, Quality, Safety, Health, Environment, Risk & Assurance (QSHERA), Office of the Chief Engineer and UKAEA's waste strategy on behalf of PSRE.
- **Corporate Development Committee** is responsible for UKAEA's strategic partnering and collaboration across the fusion sector and monitors UKAEA's activities around innovation, investment, communication, and supply chain development. The Committee also has oversight of strategic planning for Campus development and property assets and driving UKAEA's Sustainability Strategy.
- **Assurance and Risk Committee (ARC)** is responsible for assuring the Executive that UKAEA's activities and processes have sound systems of internal control. It has oversight of enterprise risk and ensuring the effectiveness of the risk management framework.

Performance
Accountability
Annual Accounts

KEY

G Group Executive Committee (GEC) E PSRE Executive Committee

Ruth Elliot
Chief Financial Officer and Director of Corporate Services

Experience:
See ***page 85*** for Ruth Elliot's bio.

Professor Sir Ian Chapman
Chief Executive Officer and Accounting Officer

Experience:
See ***page 85*** for Ian Chapman's bio.

Dr Tim Bestwick OBE
Chief Development Officer and Deputy CEO (Interim CEO from July 2025)

Experience:
See ***page 85*** for Tim Bestwick's bio.

Justin Kingsford
Chief Operating Officer

- Operations
- High performing teams
- Major Programme and Project delivery

Justin joined UKAEA in May 2023 from the Army and brings a wealth of experience in operations, major project management, and team building. He was commissioned into The King's Royal Hussars in 1996 and deployed on operations to Bosnia, Kosovo, and Northern Ireland. He also spent two tours in American Headquarters on operations in Afghanistan and Qatar. More recently, he spent five years as Programme Director for two programmes in the Government Major Projects Portfolio, and a further two years in the Defence Infrastructure Organisation.

Nicola Barber
Group Director of QSHE, Risk, and Assurance

- Governance
- Leadership
- Assurance
- Enterprise risk management

Nicola joined UKAEA in 2022 and is a Fellow of the Institute of Risk Management. Nicola has worked in a number of disciplines within the nuclear industry for the last 16 years. This includes holding senior roles in risk and assurance across a number of nuclear sites. Nicola's previous experience also includes leading planning teams in the Rail and Oil & Gas industries and project management in the Utility industry.

External appointments:
Member of the Nuclear Special Interest Group Steering Group for the Institute of Risk Management.
UKAEA appointed Board member of RADSAFE CLG.

Sharon Taylor
Director of People and Culture
Joined November 2024

- Human Resources
- Leadership
- People strategy
- Organisation design and development

Sharon was appointed as Director of People and Culture in November 2024 and has worked in Human Resources for the majority of her career. She has extensive experience in many different sectors including Policing, Airline, Insurance and more latterly in the Civil Service where she worked internationally. Sharon joined UKAEA from the Home Office where she partnered with Border Force and was based at Heathrow airport.

Sharon was born in Yorkshire and studied in Leeds and Manchester. She continued her learning at Cranfield, Roffey Park and Ashridge focussing on leadership, People strategy, and organisational design and development. She is a Fellow of the Chartered Institute of Personnel and Development.

Jill Evans
Director of Finance and Business Systems
Joined January 2025

- Business systems and assurance
- Finance operations and shared services
- Business planning

Jill joined UKAEA in 2025. Jill has senior experience across public sector finance from a variety of roles in central and local government organisations.

Her role encompasses all aspects of finance with overall responsibility for the core business system enabling HR, Procurement, and Finance.

Jill is a Fellow of the Chartered Institute of Management Accountants.

Professor Rob Buckingham
Executive Director for RACE, RAICo and JET Decommissioning and Repurposing

- Robotics and design for remote operations
- Innovation-led change

Rob was appointed Executive Director in March 2023, with responsibility for RACE, RAICo and JDR.

He was lead author of the UK's Robotics and Autonomous Systems 2020 Strategy (2014) and The Cyber-Physical Infrastructure (2022). Before joining the UKAEA, Rob co-founded and was Managing Director of OC Robotics which developed and commercialised snake-arm™ robots. He is a Fellow of the Royal Academy of Engineering and a Fellow of the Institute of Engineering and Technology. Rob received an OBE for services to robotics engineering in the 2021 New Year Honours.

External appointments:
LuffyAI Non-Executive Director, UK Robotics Growth Partnership, and NDA Future Challenge Board.

Professor Fulvio Militello
Executive Director of Plasma Science & Fusion Operations

- Fusion science and technology
- Leadership
- Science programme management

Fulvio was appointed Director of Tokamak Science and MAST-U in December 2021, following a career as a research scientist and manager at UKAEA in 2008. Before joining the Authority, he worked in Italy, France, and the United States as a plasma physicist, authoring 100 scientific papers and a book on plasma boundary physics.

Fulvio led the EUROfusion programme for alternative divertors, he has been Adjunct Professor of Physics at Chalmers University (Sweden) and is Visiting Reader at Imperial College London.

Dr Joe Milnes
Executive Director for Engineering, Computing, and STEP Partner

- Project delivery
- Operations
- Technical leadership

Joe joined UKAEA in 2000. His background is in engineering, and he has a PhD in thermal-hydraulic modelling. Joe has held a variety of engineering and management roles across JET, MAST-U and ITER. As well as leading operations on JET, he also chairs and advises reviews of fusion facilities worldwide. Joe served as interim Chief Operating Officer / head of JET operations between November 2022 and May 2023.

Dr Amanda Quadling
Executive Director of Materials, Blankets and Research

- Collaborative R&D
- Laboratory operations
- Science innovation

Amanda is a mineralogist with a PhD in Materials Science and Engineering. She has spent the last twenty years creating and managing laboratories, incubators, commercial service divisions, and Centres of Excellence focused on products and services in the energy sector and head industry. She was previously on the Technology Advisory Board of global corporate Morgan Advanced Materials and Technical Director for UK manufacturer Mandl Materials. In 2019, Amanda was named 10th most influential woman in UK engineering 2019 (Financial Times). She is now UKAEA's Director of Materials and focused on delivering a Fusion Materials Roadmap for the UK.

External appointments:
Amanda was previously a Board member for the British Ceramic Confederation. She currently represents UKAEA on the Governing Board of The Henry Royce Institute (for Materials), Chairs the Advisory Board for Bangor University's Nuclear Futures Institute, and is a member of NIRAB (the Nuclear Innovation and Research Advisory Board) to BEIS.

Stephen Wheeler
Executive Director for Fusion Technology, Fuel Cycle and ITER Components

- Operations management
- Project governance
- Leadership
- Operational growth

Stephen joined UKAEA in 2015 following a career in industry first in engineering design and later managing advanced production facilities in Europe and North America. He successfully established the RACE business unit operation and over five years delivered five-fold growth. In April 2020 he was appointed Director of Fusion Technology.

Heather Lewtas
Head of Innovation (and Interim Chief Development Officer from May 2025)

- Research and Innovation
- Commercialisation and Intellectual Property
- Leadership

Heather joined UKAEA in 2016. She was appointed to take on the role of interim Chief Development Officer from May 2025 and has been Head of Innovation since 2022. Innovation supports all areas of UKAEA to effectively develop commercial opportunities arising across the fusion programme and helps deliver that impact. Previously she was on STEP Executive as Strategic Operations Manager and was Technical Lead for Research and Development for STEP. Prior to joining UKAEA she worked in the defence and aerospace sectors running technology programmes on materials and structures and in spacecraft instrumentation having received her PhD in Physics.

Retirements from the Committees during the reporting year

Alli Brown Director of Finance and Business Systems - Member until November 2024

- Business systems and assurance
- Finance operations and shared services
- Business planning

Alli joined UKAEA in 2017 with broad senior experience across different sectors including scientific research, manufacturing, and telecoms.

UKIFS Board

UKIFS	
Terms of Reference	Approved in March 2024
Roles and Responsibility	The UKIFS Board provides strategic oversight of the Company ensuring delivery of the Company's Strategic Objectives, in accordance with the purposes as set out below, regulatory and common law duties, and responsibilities under the UKIFS Corporate Structure Document. The Company's strategic objective is to lead and integrate the capability and knowhow to deliver the commercial fusion energy plants of the future, through leading the design, build and operation of a cost-effective UK prototype and to develop capacity and capability in the supply chain to support and service such activities.
Chair	Professor David Gann CBE
Number of Meetings	5

Membership and Attendance	**Non-Executive Directors**	**Attended / Due**
	Professor David Gann	5/5
	Dr Luc Bardin	5/5
	Professor Sir Ian Chapman	4/5
	Julie Nerney	5/5
	Kaveh Pourteymour	4/5
	John Staples	4/5
	Professor Charlotte Valeur	5/5
	Executive Member	**Attended / Due**
	Paul Methven	4/5
	Grazka Kazmierska	5/5
	Board Attendee	**Attended / Due**
	Jamie Stapleton	3/5

Matters covered	For the reporting period from 1st November 2024 and in addition to standing items, the matters covered by the work of the Board included the following: November 2024 • Review of draft Full Business Case (FBC) • People and workforce • Appointment of the external auditor December 2024 • Approach to Business Plan • Selection questionnaire January 2025 • West Burton progress update • Intellectual Property strategy • Budget and business planning February 2025 • Business Plan • Budget • Resourcing and capability March 2025 • Draft Annual Governance Statement • Dependencies update (UKAEA and UKIFS) • West Burton progress update.

The UKIFS Board operated in shadow form until the Company was formally stood up on 1st November 2024 and has met on five occasions since then. The UKIFS Board also held a workshop focused on strategy with the Executive team in December 2024.

The UKIFS Board is responsible for:
- establishing the overall strategic direction of UKIFS
- reviewing corporate objectives, goals, and performance against these
- approving the annual accounts, budget, and corporate business plan
- reviewing and approving proposals to start new activities or to discontinue existing activities
- ensuring that high standards of corporate governance are observed at all times
- reviewing corporate risks, and reviewing the safety, environmental, and security performance of UKIFS.

The UKIFS Board starts every meeting with a Safety Moment, focused on safety, wellbeing and environmental impact. In addition, the Board receives a technical update at each meeting to provide information and assurance on different aspects of the programme including key technical risks, breeder blankets, fuel cycle and power and cooling.

Directors' Independence
The Non-Executive Directors constructively challenge and help develop proposals on strategy, and bring strong and independent judgement, knowledge, and experience to the Board's deliberations. They are of high calibre and sufficient number that their views carry significant weight in the Board's decision making. The non-executive directors are:
- David Gann, Chair of the Board
- Luc Bardin, non-executive director and UKAEA non-executive director
- Ian Chapman, non-executive director and CEO of UKAEA
- Julie Nerney, Chair of the Audit and Risk Assurance Committee
- Kaveh Pourteymour, non-executive director
- John Staples, non-executive director and Director for Advanced Nuclear Strategy and Fusion Energy in the Department for Energy Security and Net Zero
- Charlotte Valeur, Chair of the People and Culture Committee and Senior Independent Director

All of the non-executives are independent of the UKIFS executive team with Julie Nerney, Kaveh Pourteymour and Charlotte Valeur all meeting these additional requirements related to a greater level of independence. None of these three Non-Executive Directors:

- has been an employee of UKIFS within the last five years.
- has, or has had within the last three years, a material business relationship with UKIFS.
- receives remuneration from the Company other than a director's fee and expenses incurred in carrying out their duties.
- has close family ties with any of UKIFS' advisers, directors or senior employees.
- holds cross-directorships or has significant links with other directors through involvement in other companies or bodies.
- has served on the Board for more than nine years.

The following reasons prevent the other directors from meeting these criteria:
- David Gann was previously Chair of the UKAEA.
- Luc Bardin is a current non-executive director of UKAEA (the shareholder).
- Ian Chapman is an employee and executive member of the UKAEA (the shareholder). As UKAEA CEO, Ian Chapman is also the Accounting Officer for UKIFS.
- John Staples is an employee of DESNZ (Sponsoring Department).

Evaluation of Board Performance and External Review
As a newly established entity, UKIFS has not yet undertaken a formal Board effectiveness review but has conducted informal reviews of the efficacy of the Board and its committees which identified changes to the structure and format of meetings and logistical improvements. UKIFS will conduct a self-assessment of board and committee performance in 2025/26 and annually thereafter and plans to undertake an externally led review before 31st March 2026.

Compliance with the Corporate Governance Code
UKIFS' corporate governance arrangements are kept under review to ensure that they are compliant, where applicable, with the provisions of corporate governance in central government departments: Code of Good Practice April 2017.

Chair's report
The UKIFS Board has overseen and led a successful and momentous five-month period since November 2024 with key highlights which include:
- Maturing world leading integrated fusion plant design.
- Delivery of a raft of technology demonstrations that increase confidence.
- Transition to managing the design digitally through a new Product Lifecycle Management system.
- Continued characterisation of the West Burton site and building a growing digital model of that site
- Supported regional stakeholders in developing a vision for clean energy in the region, catalysed by STEP.
- Launch of a large-scale procurement for industrial partners and commencement of the second dialogue stage of the process.
- Formal stand up of the Company, with all initial policies, processes and staff, underpinned by full governance.
- Securing the full budget for 2025/26.
- Commencing a programme of further organisational evolution in readiness for integration of industry partners.

2025/26 is an important first year of delivery in a four-year period during which UKIFS will move from start up to scale up as the company grows and starts to onboard and integrate with its major industry Whole Plant Partners. Working together, UKIFS and its partners will mature the whole plant design, demonstrate key technologies, seek a Development Consent Order for the site, design and begin to contract the wider supply chain and, critically, deliver value throughout the period.

David Gann
UKIFS Chair

Board Committee reports

Programme Advisory Committee

Programme Advisory Committee	
Terms of Reference	Approved in March 2025
Roles and Responsibility	The Committee provides technical advice and reports on the quality, relevance and importance of UKAEA's research in a national and international context. In particular, the Committee advises in the areas of plasma physics, materials, robotics, tritium and technology, and how these align with UK and international strategic priorities. The Committee also reports to the Board on progress of main programmes and projects.
Chair	Robin Grimes
Number of Meetings	2

Membership and Attendance	**Non-Executive Directors**	**Attended / Due**
	Robin Grimes (Chair from November 2024)	2/2
	Committee Attendees	**Attended / Due**
	Ian Chapman (Chief Executive Officer and Accounting Officer)	2/2
	Sarah Newton (Technical Secretary)	2/2
	Melanie Brownridge	2/2
	Steve Carlier	2/2
	Kay Church	2/2
	Paul Clarke	1/1
	Steven Cowley	1/1
	Melissa Denecke	2/2
	Ambrogio Fasoli	2/2
	Amy Gottschlink	2/2
	Malcolm Joyce	1/1
	Alison Kennedy	2/2
	Bill Lee	1/2
	Kathy McCarthy	1/2
	Rachael McDermott	1/1
	Anna Orlowska	1/1
	Andrew Randewich	1/1
	Fiona Rayment	0/1
	Dennis Whyte	0/1

Matters covered	Key areas considered by the Programme Advisory Committee during the year were: • Coherence of UKAEA's overall technical strategy • Fusion Futures Programme • JET decommissioning and repurposing programme • Strategy and international position of the UKAEA's technical programmes.

Programme Advisory Committee Chair's Report 2024/25

As is usual, the PAC generated reports from its two meetings, one from the full spring meeting and an interim report from its autumn meeting. Both are submitted to the Board. They detailed findings of the PAC regarding UKAEA's overall technical strategy in supporting the wider fusion ecosystem alongside a powerplant design programme led by STEP. It was determined that the overall programme is well placed to retain the UK's international position in fusion with specific recommendations made over the breadth of programmes. The next PAC meeting will be held in November 2025.

Chair
Robin Grimes

People and Remuneration Committee

People and Remuneration Committee	
Terms of Reference	Approved in March 2025
Roles and Responsibility	The People and Remuneration Committee has delegated responsibility from the UKAEA Board for reviewing the remuneration policy and making recommendations to DESNZ on the level of directors' and executives' remuneration. It also endorses the UKAEA's people and EDI strategies to best enable the UKAEA to fulfil its mission. It offers advice on major proposed changes to policies, organisational structures, HR practices, pay and remuneration arrangements or terms and conditions of UKAEA employees. To drive the efficacy of the UKAEA's Inclusion Council, the chair of the committee also acts as chair to the Council. As members of the UKAEA board are appointed by DESNZ, UKAEA does not maintain a nominations committee.
Chair	Lady Eithne Birt
Number of Meetings	4

	Non-Executive Directors	Attended / Due
Membership and Attendance	Eithne Birt (Chair)	4/4
	Luc Bardin	4/4
	Sue Gray	4/4
	Bernard Taylor	4/4
	Committee Attendees	**Attended / Due**
	Ian Chapman CEO	4/4
	Alison George DESNZ	2/3
	Justin Kingsford COO	3/3
	Sharon Taylor	1/1

Matters covered	• Agreed Executive objectives for the 2024/25 financial year. • Undertook Non-Executive Director succession planning. • Undertook annual performance reviews of executive directors, discussing pay and bonus payments based on performance against the objectives set. • Reviewed progress made on UKAEA's pay strategy. • Reviewed progress of the equality, diversity and inclusion agenda.

Accountability report
GOVERNANCE

Chair's Report

People are the UKAEA's most valuable asset. The focus of this Committee on people has therefore continued at pace, always taking care to stay in close alignment with the recruitment and retention of the wide, complex mix of skills and experience needed for the organisation to achieve its strategic goals and delivery targets. We have also worked closely with colleagues in the newly-formed UKIFS to assist and support their endeavours to design and form their organisation.

New Terms of Reference have been prepared for the Committee, to ensure that the culture element of the title is also effectively represented and considered, alongside the traditional remuneration responsibilities.

One critical task of the Committee was to set the performance objectives for the CEO and the senior executive team, assessing individual performance against these measures and determining the end-of-year performance bonuses. The models used were again reappraised and modified to ensure an effective delineation of the objectives which then, together, would capture and reward the totality of the executives' responsibilities and achievements. The evidence brought before the Committee at the end of the year demonstrated high performance by the CEO and the senior executive team in 2024/25. The Senior leadership team is highly skilled and experienced.

It has been a difficult and turbulent year for those working in the People team, following the departure of the Director of People and a significant number of other individuals. I am extremely grateful to all those who stayed focused and determined to maintain standards of delivery and good service to the organisation. We are fortunate to have recruited Sharon Taylor as Director of People and Culture who has spent time getting to know this complex organisation and the colleagues in her team, before drawing up, with them, a new service model for UKAEA. Her approach and operational plans have been considered and approved by the People and Remuneration Committee, and we wish her and her team every success in their execution of these plans.

Competition in the employment market continued to absorb time and energy. The Committee has therefore continuously been appraised of, and approved, UKAEA's intended pay strategy for the whole organisation and tracked its progress.

Our endeavours to help increase the diversity and inclusion of the organisation also took a meaningful stride forward with the further development of the Inclusion Council, which is now a valued and inclusive mechanism for progressing this agenda. I have been delighted to see how many staff members have come forward to give their time to lead or participate in a growing number of support groups to form its whole.

Focus continued to be given by the Committee to succession planning for the UKAEA Board, with determined attempts to encourage a more diverse compliment of Non-Executive Directors.

My report should again close by recognising the enormous work that has been done by colleagues in DESNZ, working alongside UKAEA staff, to bring our recruitment, retention and remuneration challenges and pay strategies to the attention of the UK Government.

In 2024/25, UKAEA has continued to develop as an organisation, adapting its structures and processes to ensure that they reflect and enable its changing strategic focus and priorities, while assisting and supporting its new subsidiary, UK Industrial Fusion Solutions Ltd. It has been another full and challenging year for the People and Remuneration Committee.

Chair
Lady Eithne Birt CB

Performance
Accountability
Annual Accounts

Audit and Risk Assurance Committee

Audit and Risk Assurance Committee	
Terms of Reference	Approved in March 2025
Roles and Responsibility	The Committee supports and advises the Board and the Accounting Officer by independently reviewing the integrity, efficacy and effectiveness of the safety, health and environmental management system; the risk management processes; the control environment; and the integrity of the financial statements and the Annual Report of the UKAEA Group.
Chair	Richard Hookway
Number of Meetings	4

	Non-Executive Directors	Attended / Due
Membership and Attendance	Richard Hookway (Non-Executive Director)	4/4
	Luc Bardin (Non-Executive Director)	3/4
	Stephen Hillier (Non-Executive Director)	4/4
	Committee Attendees	**Attended / Due**
	Ian Chapman (Chief Executive Officer and Accounting Officer)	3/4
	Ruth Elliot (Chief Financial Officer and Director of Corporate Affairs)	4/4
	Nicola Barber (Group Director of QSHE, Risk and Assurance)	4/4
	Alli Brown (Director of Finance and Business Systems to 27-11-24)	2/2
	Jill Evans (Director of Finance and Business Systems from 06-01-25)	1/1
	Justin Kingsford (Chief Operating Officer)	3/4
	Stuart Biltcliffe (Financial Controller)	3/4
	Ian Korner (Head of Pensions)	3/4
	Suzanne Melvin (Head of Safety, Health and Environment)	4/4
	Jakub Kaniewski (Information and Cyber Security Manager)	4/4
	Sarah Laws (Group Head of Internal Audit)	4/4
	External Audit Representative	4/4
	DESNZ Representative	3/4

Matters covered	Key areas considered by the Audit and Risk Assurance Committee during the year were: • UKAEA Group Audit Strategy and Plan endorsement. • Overview of Group Internal Audit programme and management's progress to resolve issues and risks identified. • Overview of the Assurance programme, Strategy and Framework, and overview of the effectiveness of internal controls. • UKAEA Group Annual Report and Accounts, including compliance with HM Treasury guidance, and the application of accounting policies and assumptions. • Review of JET Lifetime Plan which underpins the site restoration provision. • Review of pension scheme accounts. • Review of risk management and risk appetite. • Review of significant safety, health, and environment matters. • Review of Group security including cyber security. • Counter fraud risk assessment and action plan. • The Committee's Performance Effectiveness Review exercise.

Information Security
The Chief Financial Officer and Director of Corporate Services is the executive lead for information management. Information risks are overseen by an information assurance steering committee which feeds significant risks into the corporate risk review group. Information Asset Owners maintain local information repositories and ensure business continuity. During the last year there has been a focus on improving information architecture, modernising security controls and tackling technical debt. Communication and training have continued, including tabletop exercises and cyber security awareness training. UKAEA is aligning with the Government's Secure by Design and Cyber Assessment Frameworks and work is ongoing to achieve the information security management system standard (ISO 27001).

There have been no reportable data breaches or data loss incidents during the year.

Composition of the Audit and Risk Assurance Committee
For the year to 31st March 2025, the committee had one member possessing what the Smith report and HM Treasury's Audit and Risk Assurance Committee handbook describe as recent and relevant financial experience; Richard Hookway (see biography on ***page 85***).

Independent Oversight
As our external auditor, the NAO are given complete access to all financial and other information and the committee meets (without management present) with the NAO. The committee chair meets with the Group Head of Internal Audit, the Group Director of QSHE, Risk and Assurance, the Chief Financial Officer and the secretary of ARAC on a regular basis.

Chair's report

ARAC met on 4 occasions throughout the year to fulfil its role in providing oversight of the system of internal control; financial reporting; health, safety and the environment; risk management; cyber, information, personnel and physical security; whistleblowing; fraud; all matters relating to both internal and external audit; and reviewing and making recommendations to the Accounting Officer and Board. Throughout the past year, the Committee spent significant time on each of these areas, reviewing regular reports and conducting 'deep dives' into specific risk areas.

As a result of its work, ARAC concluded that the Executive Committee and the wider UKAEA team continue to make significant progress in managing and mitigating risks.

This progress has been against a backdrop of constraints on staffing levels, the ability to hire the right people with the right skills, and the challenge of retention. Staffing continues to be one of our key risks, placing significant strain on our ability to deliver the highly scientific, technical and niche work underpinning our corporate goals; several mitigating actions are underway.

The focus in the coming year will be:
- Continuous review of the overall risk landscape to seek assurance over management and mitigation of risk and effectiveness of controls.
- UKIFS and the STEP programme objectives; delivering appropriate assurance and ensuring the demands of the STEP fusion partner are met.
- 'Fusion Futures' continuous portfolio delivery within the timeline set out by UK Government, managing both risk and opportunity.
- Oversight of the financial and control dimensions of the JET Decommissioning and Repurposing programme (JDR).
- Continuous review of health, safety and environment matters.
- Reviewing effectiveness in managing climate-related risks.
- Improving adherence to control and compliance standards.
- Oversight and review of the performance of the Group Internal Audit Programme.
- Continuous improvement of UKAEA contract management, including framework of governance, risk management and control.

The organisation will need to continue to demonstrate value for money across all its large programmes while retaining its world-leading reputation for fusion research. ARAC will play its part in providing assurance to this end.

Chair
Richard Hookway

Remuneration and staff report

Directors' remuneration

Remuneration report
The remuneration of Directors appointed to the UKAEA Board is set by the Secretary of State for DESNZ with the approval of HM Treasury in accordance with the Atomic Energy Authority Act 1954. The UKAEA People and Remuneration Committee makes recommendations to DESNZ on the overall remuneration package for Directors who are appointed to the UKAEA Board. The Non-Executive Directors who form the committee are not involved in decisions relating to their own remuneration.

In reaching its recommendations, the committee has regard to the following considerations:
- the need to recruit, retain and motivate suitably able and qualified people to exercise their different responsibilities; and
- the funding available to UKAEA.

The committee takes account of the evidence it receives about wider economic considerations and the affordability of its recommendations.

Service contracts
Executive Directors who are members of the UKAEA Board are appointed by the Secretary of State for DESNZ. This is normally for a three-year term and is dependant upon continuing employment with UKAEA.

Remuneration and pension entitlements
The individual components of the remuneration packages are:

Salary and fees
The CEO, deputy CEO and CFO as Executive Directors receive a basic salary. The Chair and Non-Executive Directors receive fees for their services. The People and Remuneration Committee makes recommendations to DESNZ as appropriate.

Non-taxable benefits
Executive Directors are also reimbursed for reasonable expenses incurred in line with the policy for UKAEA's employees. These reimbursements are not included in the following table.

Performance-related bonuses
The performance bonuses for Executive Directors are calculated in accordance with performance against agreed objectives, confirmed by DESNZ on the basis of recommendations from the People and Remuneration Committee. The total bonus is made up of two components: the performance of UKAEA against specific quantified targets, and the performance of the individual against specific targets. The performance-related bonuses shown in the table are calculated on the basis of assessment by the People and Remuneration Committee of performance against the relevant specific targets.

Board Directors' remuneration for the year (subject to audit)
Individual Board Directors' remuneration for the year is shown in the following table, with salaries, allowances, fees and bonuses disclosed on an accruals basis.

	Fees / Salary and allowances		Benefits [a]		Annual bonus [b]		Pension benefit [c]		Total	
	2024/25 £k	2023/24 £k	2024/25 to nearest £100	2023/24 to nearest £100	2024/25 £k	2023/24 £k	2024/25 £k	2023/24 £k	2024/25 £k	2023/24 £k
Prof David Gann Chair to 31 Jul 2023	-	5-10	-	-	-	-	-	-	-	5-10
Bernard Taylor Chair from 29 Apr 2024	20-25	-	-	-	-	-	-	-	20-25	-
Dr Luc Bardin Non-Executive Director	10-15	10-15	400	200	-	-	-	-	15-20	15-20
Stephen Barter Non-Executive Director to 13 May 2024	0-5	10-15	-	300	-	-	-	-	0-5	15-20
Dr Mark Bayley Non-Executive Director to 13 May 2023	-	0-5	-	100	-	-	-	-	-	0-5
Lady Eithne Birt Non-Executive Director to 31 Jul 2023, Interim Chair from 1 Aug 2023 to 28 Apr 2024, Non-Executive Director from 29 Apr 2024	15-20	20-25	-	-	-	-	-	-	15-20	20-25
Dame Sue Gray Non-Executive Director	10-15	10-15	200	-	-	-	-	-	15-20	10-15
Prof Robin Grimes Non-Executive Director from 1 Oct 2023	10-15	5-10	500	400	-	-	-	-	15-20	5-10
Sir Stephen Hillier Non-Executive Director	10-15	10-15	400	200	-	-	-	-	15-20	15-20
Richard Hookway Non-Executive Director	10-15	10-15	100	100	-	-	-	-	15-20	15-20
Lee McDonough Non-Executive Director from 13 Nov 2023, Director General, Net Zero, Nuclear and International at DESNZ	-	-	-	-	-	-	-	-	-	-
Mary Ryan Non-Executive Director from 1 Oct 2023	10-15	5-10	-	-	-	-	-	-	10-15	5-10
Prof Sir Ian Chapman Executive Director, CEO	240-245	220-225	-	-	40-45	40-45	150	63	430-435	325-330
Tim Bestwick Executive Director from 9 Jun 2023, Deputy CEO	135-140	105-110	-	-	15-20	10-15	48	25	200-205	140-145
Ruth Elliot Executive Director from 10 May 2023, CFO	125-130	105-110	-	-	15-20	10-15	27	22	170-175	140-145

Notes:
a. Expenses benefits disclosed for the Chair and Non-Executive Directors relate to travel for Board and other meetings at Culham and include the tax liability on these expenses which was met by UKAEA. These expenses vary depending on the distance of the individual's home from Culham.
b. Where applicable, annual bonuses of Directors are subject to approval by DESNZ. 2024/25 bonuses are estimated, 2023/24 bonuses are actual.
c. The value of pensions benefits accrued during the year is calculated as (the real increase in pension multiplied by 20) plus (the real increase in any lump sum) less (the contributions made by the individual). The real increases exclude increases due to inflation or any increase or decrease due to a transfer of pension rights. In some cases, the pensions benefit is negative in real terms where pay increases and additional service have not offset the effect of inflation.

2024/25 notes:
Bernard Taylor - annual equivalent fee was £20k - £25k
Stephen Barter - annual equivalent fee was £10k - £15k
Ruth Elliot - full time annual equivalent salary was £140k - £145k

2023/24 notes:
Prof David Gann - annual equivalent fee whilst Chair of the UKAEA Board was £20k - £25k. Prof David Gann left the UKAEA Board during the year 2023/24 in order to become Chair of the Board of UKIFS - annual equivalent fee for 2023/24 (for time as UKAEA Chair and time as UKIFS Chair) was £30k - £35k.
Dr Mark Bayley - annual equivalent fee was £10k - £15k
Prof Robin Grimes - annual equivalent fee was £10k - £15k
Mary Ryan - annual equivalent fee was £10k - £15k
Tim Bestwick - full time annual equivalent salary was £130k - £135k
Ruth Elliot - full time annual equivalent salary was £135k - £140k

Fair pay disclosures (subject to audit)

Remuneration ratios	2024/25 £	2023/24 £
Highest paid Director's total remuneration for the year excluding pension benefit	280k-285k	260k-265k
	Salary and allowances	**Performance pay and bonuses payable**
Highest paid Director - percentage change from the previous financial year [a]	9.0%	0.0%
Employees taken as a whole, excluding the highest paid Director - average percentage change from the previous financial year [b]	6.47%	4.05%

Notes:
(a) This calculation is based on the midpoint of the band used in disclosing Directors' remuneration for each of salary and performance pay and bonuses payable
(b) Calculated as the total on an annualised basis for all employees (apart from the highest paid Director) as at 31 March, divided by the full time equivalent number of employees (excluding the highest paid Director) as at 31 March.

Employee remuneration ratios

	Salary £	Other pay and benefits [a] £	Total remuneration £	Highest paid Director's remuneration as a multiple of the percentile [b] Ratio
2024/25				
25th percentile	37,509	5,163	42,672	6.7
Median percentile	48,376	8,661	57,037	5.0
75th percentile	59,723	10,585	70,308	4.1
2023/24				
25th percentile	35,520	1,978	37,498	7.1
Median percentile	46,293	8,579	54,872	4.8
75th percentile	57,454	3,200	60,654	4.4

Notes:
(a) Other pay and benefits includes bonus and allowances such as specialist allowances, market premium and responsibility allowances
(b) Calculated using midpoint of £5k disclosure band for highest paid Director's remuneration

Reporting bodies are required to disclose the relationship between the remuneration of the highest paid Director in their organisation and the percentile remuneration of the organisation's workforce.

For the 2024/25 financial year, having completed engagement with the government, the pay award for most staff was not implemented until June 2025. Increases in pay for senior staff, including the highest paid director, were implemented from 1st August 2024.

The implementation of the 2023/24 pay award in 2024/25 financial year has resulted in increased salaries across all percentiles, leading to a reduction in the 25th and 75th percentile pay ratios. Further reduction in ratios across all percentiles is expected once the 2024/25 pay award is implemented.

In 2024/25 and in 2023/24 no employees received remuneration in excess of that of the highest paid Director.

Remuneration of employees excluding the highest paid Director ranged from £19,845 to £237,500 (2023/24: £19,003 to £232,500).

Total remuneration includes salary, non-consolidated performance-related pay and benefits-in-kind. It does not include severance payments, pension benefits, employer pension contributions or the cash equivalent transfer value of pensions.

Pension entitlements (subject to audit)

Executive Directors are members of the United Kingdom Atomic Energy Authority Combined Pension Scheme (CPS) which pays an annual pension based on pensionable final earnings together with a lump sum at normal retirement age. Benefits are also payable in the event of death or ill health retirement. UKAEA also operates an unfunded pension arrangement in respect of three former Chief Executives to take account of pensionable pay above the earnings cap introduced by the Finance Act 1989.

Further details of the pension schemes and unfunded pensions can be found later in the Remuneration and staff report.

The pension entitlements shown in the table below are those that would be paid annually on retirement based on service to 31 March 2025 and include the value of added years paid for by Directors.

	Accrued pension as at 31/03/25 £k	Lump sum as at 31/03/25 £k	Real increase in accrued pension [a] £k	Real increase in lump sum [a] £k
Prof Sir Ian Chapman	45	136	7	22
Tim Bestwick	19	58	3	8
Ruth Elliot	3	9	2	5

Notes:
(a) The real increase has been calculated after subtracting inflation.

The following table sets out the Cash Equivalent Transfer Value (CETV) of the Executive Directors' accrued pension entitlements which have been calculated by the Scheme managers in accordance with the Occupational Pension Schemes (Transfer Values) Regulations 1996 as amended, having taken actuarial advice. The transfer values do not represent sums paid or payable to the Directors but represent a potential liability of the pension scheme or UKAEA.

	CETV at 31 March 2024 £k	Real increase in CETV [a] £k	CETV at 31 March 2025 £k
Prof Sir Ian Chapman	759	130	932
Tim Bestwick	416	52	476
Ruth Elliot	29	25	66

Notes:
(a) The real increase has been calculated after subtracting inflation.

Members of the pension scheme have the option to pay Additional Voluntary Contributions; neither the contributions nor the resulting benefits are included in the above tables.

Staff report

Staff costs (subject to audit)

	2025 £k	2024 £k
Directly employed staff:		
Salaries, bonuses and allowances	114,993	106,300
Social security costs	14,209	12,447
Pension costs – defined contribution plans (see below)	20,943	18,417
	150,145	137,164
Temporary staff	34,874	42,312
	185,019	**179,476**

Staff numbers (subject to audit)

The average number of full-time equivalent staff during the year was as follows:

	2025	2024
Directly employed staff	2,008	1,834
Temporary staff	566	607
	2,574	**2,441**

Temporary (non-payroll) staff may be 'off-payroll workers' who are engaged via an intermediary, or they may be on the payroll of another organisation within the supply chain. Most of the temporary staff are engaged to carry out specialist work in UKAEA's scientific facilities.

Staff composition as at 31 March 2025 (not subject to audit)

All figures in the tables below relate to actual staff numbers at the year end rather than to full time equivalents.

Board and senior staff

	Male	Female	Total
Board members	7	5	12
Group Executive Committee members	4	4	8
PSRE Executive Committee members	7	6	13
Senior staff	24	11	35

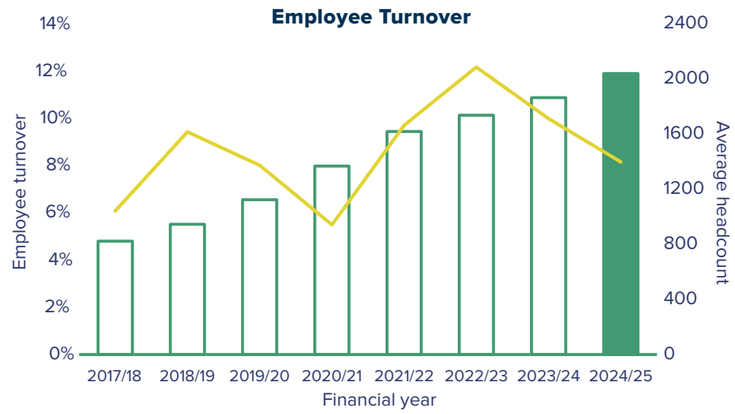
All Employees

	2025		2024	
Male	1,553	72.6%	1,440	73.3%
Female	586	27.4%	524	26.7%

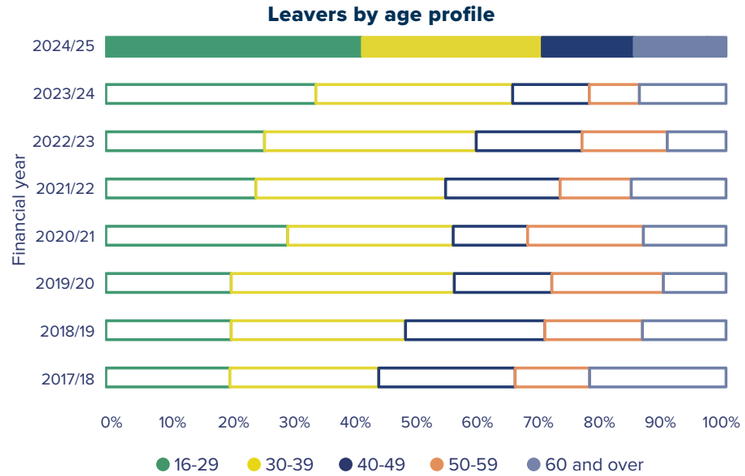
Sickness absence (not subject to audit)

The average sickness absence per employee during the year 2024/25 was 6.7 days (2023/24: 6.6 days).

Employee turnover (not subject to audit) **2025** 8.15% **2024** 9.71%



Employee turnover (number of leavers as a proportion of average headcount) has decreased from a peak in 2022/23. See People section in the Performance report for further detail.



UKAEA Group pension schemes (subject to audit)
(a) Defined benefit schemes

The UKAEA Group has three defined benefit schemes: The Combined Pension Scheme (CPS), the Principal Non-Industrial Superannuation Scheme (PNISS) and the Protected Persons Superannuation Scheme (PPSS). These schemes have members from other employers as well as the UKAEA Group. No information in these financial statements relates to other employers participating in the CPS, PNISS or PPSS. UKAEA has overall responsibility for the management of the schemes under a Framework Agreement with DESNZ. No contingent liability is expected to arise from this responsibility.

In common with other public sector schemes, the CPS, the PNISS and the PPSS do not have many of the attributes of normal pension schemes. All contributions are paid to and benefits paid by HM Government via the Consolidated Fund. Any surplus of contributions made in excess of benefits paid out in any year is surrendered to the Consolidated Fund and any liabilities are met from the Consolidated Fund via the annual Parliamentary vote. The Government does not maintain a separate fund and actuarial valuations are based on a theoretical calculation as to how a typical UK pension scheme would have invested the historical surplus of contributions over payments.

(a) Defined benefit schemes continued
In accordance with the FReM, the schemes are accounted for as defined contribution schemes.

Employer contributions are calculated in accordance with HM Treasury methodology 'Superannuation Contributions Adjusted for Past Experience' and are based on the expected cost of members' benefits as they accrue. The contributions paid by the UKAEA Group during the year totalled £20,645k (2024: £17,936k).

(b) Defined contribution schemes

UKAEA manages two defined contribution schemes, the Additional Voluntary Contribution (AVC) scheme and the Shift Pay Pension Savings Plan (SPPSP) scheme, both of which are fully insured schemes administered by Prudential (a trading name of Prudential Distribution Limited, which is a subsidiary of M&G plc.) to whom contributions are paid.

The AVC scheme includes members from the UKAEA Group and from other employers who are members of CPS or PPSS and who have opted to pay additional voluntary contributions. No employer contributions are made to this scheme.

The members of the SPPSP scheme include shift working employees of UKAEA and of other employers who are members of CPS or PPSS. The costs of the SPPSP scheme, which are directly linked to shift pay earnings, are charged to the Statement of comprehensive net income at the time the shift pay is paid. The contributions paid by the UKAEA Group during the year totalled £23k (2024: £25k).

(c) Unfunded retirement benefits

There are unfunded retirement benefits in respect of three former UKAEA Chief Executives which are not included in the UKAEA pension schemes.

The movement in the liability for these benefits is shown below:

	Group and Authority	
	2024/25 £k	**2023/24 £k**
At 1 April	1,640	1,705
Interest on liability	81	68
Benefits payable	(106)	(98)
Change in discount rate	-	-
Actuarial gain/(loss)	-	(35)
At 31 March	**1,615**	**1,640**

The interest on liability is recognised in the Statement of comprehensive net income and the actuarial gain/(loss) is recognised in taxpayers' equity. The closing liability, discounted at the appropriate pensions liability discount rate, is included in other provisions for liabilities and charges in the Statement of financial position (further details of provisions are given in Note 19).

Staff policy
UKAEA's pay policy is determined by our sponsoring department, DESNZ.

Our Trade Union is Prospect and we have an extant framework on how we engage and consult. We use our existing mechanisms to seek their feedback and thinking on current issues.

UKAEA is committed to promoting equality, diversity, and inclusion inside and outside of the organisation, and to ensuring that the working environment is welcoming, supportive, and inclusive for all. In 2020 we launched a 'Being Inclusive' strategy as a five-year campaign coordinating a series of actions centring around four main commitments:
- **People**: "UKAEA will take positive action to improve the opportunities and lived experience of all individuals working at, or interacting with, the organisation."
- **Environment**: "UKAEA will take positive steps to identify and improve the physical working environment for all of its people, particularly those with disabilities, whether they are visible or hidden."
- **Communication and engagement:** "UKAEA will improve internal and external communications to fully reflect its ED&I commitment and progress to maximise the awareness and engagement of all stakeholders."
- **Policies and practices:** "UKAEA will integrate equality, diversity and inclusion into all our policies and practices."

UKAEA's equal opportunities policy requires that all job applicants enjoy equal opportunity for employment on the basis of ability, qualifications, experience and suitability for the work. We deliver in-house training on diversity and equality, unconscious bias and specific recruitment training. These courses cover equality, diversity and inclusion, ensuring that line managers are aware of their responsibilities towards, and the benefits of, these topics.

UKAEA's equal opportunities policy provides a framework for ensuring that equality is considered throughout the employment of staff. For those who become disabled during their employment, we provide occupational health facilities which provide direct support to the employee and advise line managers on modifications and restrictions which are required. In addition to the training mentioned above, People Department Business Partners provide coaching on flexible working and unconscious bias to ensure that employees with disabilities are given equal opportunity in training, career development and promotion. UKAEA is also registered with the Disability Confident Scheme.

Expenditure on consultancy and temporary staff

Expenditure on temporary staff (the provision of workers to cover business-as-usual or service delivery activities within an organisation) was £34,874k (2024: £42,312k), as detailed in the Staff costs note (Note 7.1). The decrease year on year reflects the Group's drive to reduce reliance on temporary workers.

UKAEA spend on consultancy (the provision to management of objective advice relating to strategy, structure, management, or operations of an organisation, in pursuit of its purposes and objectives) was £2,298k (2024: £3,051k). Such advice is sought when UKAEA does not have the skills set required within its support services and the particular requirement falls outside the 'business-as-usual' environment. When used appropriately, consultancy can be a cost effective and efficient way of getting the temporary and skilled external input that UKAEA needs. The decrease in expenditure year on year reflects the reduction in work that is needed relating to the STEP prototype powerplant and operating model as the project progresses and subsidiary UKIFS commenced operations.

Off-payroll appointments

(a) Highly paid off-payroll worker engagements as at 31 March 2025, earning £245 per day or greater

Number of existing engagements	237
Of which the number that have existed at the time of reporting for	
Less than one year	97
Between one and two years	48
Between two and three years	29
Between three and four years	26
For four or more years	37

(b) All highly paid off-payroll workers engaged at any point during the year ended 31 March 2025, earning £245 per day or greater

Number of temporary off-payroll worker engagements in force during the year ended 31 March 2025	338
Of which:	
Number not subject to off-payroll legislation	316
Number subject to off-payroll legislation and assessed as within the scope of IR35	-
Number subject to off-payroll legislation and assessed as not within the scope of IR35	22
Number of engagements reassessed for consistency/assurance purposes during the year	6
Of which:	
Number of engagements that saw a change to IR35 status following the review	-

(c) Off-payroll engagements of board members and/or senior officials with significant financial responsibility between 1 April 2024 and 31 March 2025

Number of off-payroll engagements of board members and/or senior officials with significant financial responsibility during the financial year	-
Total number of individuals on payroll and off-payroll that have been deemed 'board members and/or senior officials with significant financial responsibility' during the financial year	23

(d) AEA Insurance Limited (see also Note 15.1): Off-payroll engagements of board members, and/or senior officials with significant financial responsibility, between 1 April 2023 and 31 March 2024

Number of off-payroll engagements of board members and/or senior officials with significant financial responsibility during the financial year	2
Total number of individuals on payroll and off-payroll that have been deemed 'board members and/or senior officials with significant financial responsibility' during the financial year	3

AEAIL is a captive insurance company registered in the Isle of Man and subject to their tax and National Insurance legislation. AEAIL does not employ anyone.

Two AEAIL Directors, who have been engaged since 2002 and 2024 respectively, are off-payroll by default and one of them is paid a small fee by AEAIL.

The third Director of AEAIL, who has been engaged since 2024, is an employee of UKAEA and on the UKAEA payroll.

Trade union facility time

Facility time is when an employee takes paid time off from their normal role to carry out their duties and activities as a trade union representative.

Table 1: Relevant union officials

	Number	Full time equivalent number
Employees who were relevant union officials during the year	18	18

Table 2: Percentage of time spent on facility time

Percentage of working hours spent on facility time by employees who were relevant union officials	Full time equivalent number of employees
0%	1
1-50%	17
51-99%	0
100%	0

Table 3: Percentage of total pay bill spent on facility time

Total cost of facility time (£k)	136
Total pay bill (£k)	150,145
Percentage of the total pay bill spent on facility time, calculated as: (total cost of facility time ÷ total pay bill) x 100	0.09%

Table 4: Paid trade union activities

Time spent on paid trade union activities as a percentage of total paid facility time hours, calculated as: (total hours spent on paid trade union activities by relevant union officials during the year ÷ total paid facility time hours) x 100	Nil

Exit packages paid to employees (subject to audit)

	Number of compulsory redundancies		Number of other departures agreed	
	2024/25	2023/24	2024/25	2023/24
Total number of exit packages	0	0	0	0

Other parliamentary disclosures

Fees and charges (subject to audit)
The UKAEA Group does not receive fees and charges for public services, as defined by HM Treasury in Managing Public Money. There are therefore no related disclosures within the Group Annual Report.

Losses and special payments (subject to audit)
There were no losses or special payments in the year (on an accruals basis) that require disclosure.

Remote contingent liabilities (subject to audit)
The Group has no significant remote contingent liabilities to report.

Professor Sir Ian Chapman
Chief Executive and Accounting Officer
11th July 2025

The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament

Opinion on financial statements
I certify that I have audited the financial statements of the United Kingdom Atomic Energy Authority and its Group for the year ended 31 March 2025 under the Atomic Energy Authority Act 1954.
The financial statements comprise the United Kingdom Atomic Energy Authority and its Group's

- Statement of Financial Position as at 31 March 2025;
- Statement of Comprehensive Net Income, Statement of Cash Flows and Statement of Changes in Taxpayers' Equity for the year then ended; and
- the related notes including the significant accounting policies.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and UK adopted International Accounting Standards.
In my opinion, the financial statements:

- give a true and fair view of the state of the United Kingdom Atomic Energy Authority and its Group's affairs as at 31 March 2025 and its profit / (loss) for the year then ended; and
- have been properly prepared in accordance with the Atomic Energy Authority Act 1954.

Opinion on regularity
In my opinion, in all material respects, the income and expenditure recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Basis for opinions
I conducted my audit in accordance with International Standards on Auditing (UK) (ISAs UK), applicable law and Practice Note 10 *Audit of Financial Statements and Regularity of Public Sector Bodies in the United Kingdom (2022)*. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my certificate.

Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2024. I am independent of the United Kingdom Atomic Energy Authority and its Group in accordance with the ethical requirements that are relevant to my audit of the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Conclusions relating to going concern
In auditing the financial statements, I have concluded that the United Kingdom Atomic Energy Authority and its Group's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work I have performed, I have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the United Kingdom Atomic Energy Authority and its Group's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

My responsibilities and the responsibilities of the Accounting Officer with respect to going concern are described in the relevant sections of this certificate.

PARLIAMENTARY ACCOUNTABILITY AND AUDIT REPORT

The going concern basis of accounting for the United Kingdom Atomic Energy Authority and its Group is adopted in consideration of the requirements set out in HM Treasury's Government Financial Reporting Manual, which requires entities to adopt the going concern basis of accounting in the preparation of the financial statements where it is anticipated that the services which they provide will continue into the future.

Other Information
The other information comprises information included in the Annual Report, but does not include the financial statements and my auditor's certificate and report thereon. The Accounting Officer is responsible for the other information.

My opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in my certificate, I do not express any form of assurance conclusion thereon.

My responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If I identify such material inconsistencies or apparent material misstatements, I am required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

I have nothing to report in this regard.

Opinion on other matters
In my opinion the part of the Remuneration and Staff Report to be audited has been properly prepared in accordance with the Atomic Energy Authority Act 1954.

In my opinion, based on the work undertaken in the course of the audit:
- the parts of the Accountability Report subject to audit have been properly prepared in accordance with the Atomic Energy Authority Act 1954; and
- the information given in the Performance and Accountability Reports for the financial year for which the financial statements are prepared is consistent with the financial statements and is in accordance with the applicable legal requirements.

Matters on which I report by exception
In the light of the knowledge and understanding of the United Kingdom Atomic Energy Authority and its Group and its environment obtained in the course of the audit, I have not identified material misstatements in the Performance and Accountability Reports.

I have nothing to report in respect of the following matters which I report to you if, in my opinion:
- adequate accounting records have not been kept by the United Kingdom Atomic Energy Authority and its Group or returns adequate for my audit have not been received from branches not visited by my staff; or
- I have not received all of the information and explanations I require for my audit; or
- the financial statements and the parts of the Accountability Report subject to audit are not in agreement with the accounting records and returns; or
- certain disclosures of remuneration specified by HM Treasury's Government Financial Reporting Manual have not been made or parts of the Remuneration and Staff Report to be audited is not in agreement with the accounting records and returns; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Responsibilities of the Accounting Officer for the financial statements
As explained more fully in the Statement of Accounting Officer's Responsibilities, the Accounting Officer is responsible for:
- maintaining proper accounting records;
- providing the C&AG with access to all information of which management is aware that is relevant to the preparation of the financial statements such as records, documentation and other matters;
- providing the C&AG with additional information and explanations needed for his audit;
- providing the C&AG with unrestricted access to persons within the United Kingdom Atomic Energy Authority and its Group from whom the auditor determines it necessary to obtain audit evidence;

PARLIAMENTARY ACCOUNTABILITY AND AUDIT REPORT

- ensuring such internal controls are in place as deemed necessary to enable the preparation of financial statements to be free from material misstatement, whether due to fraud or error;
- preparing financial statements which give a true and fair view in accordance with the Atomic Energy Authority Act 1954;
- preparing the annual report, which includes the Remuneration and Staff Report, in accordance with the Atomic Energy Authority Act 1954; and
- assessing the United Kingdom Atomic Energy Authority and its Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Accounting Officer anticipates that the services provided by the United Kingdom Atomic Energy Authority and its Group will not continue to be provided in the future.

Auditor's responsibilities for the audit of the financial statements
My responsibility is to audit, certify and report on the financial statements in accordance with the Atomic Energy Authority Act 1954.

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a certificate that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Extent to which the audit was considered capable of detecting non-compliance with laws and regulations including fraud
I design procedures in line with my responsibilities, outlined above, to detect material misstatements in respect of non-compliance with laws and regulations, including fraud. The extent to which my procedures are capable of detecting non-compliance with laws and regulations, including fraud is detailed below.

Identifying and assessing potential risks related to non-compliance with laws and regulations, including fraud
In identifying and assessing risks of material misstatement in respect of non-compliance with laws and regulations, including fraud, I:
- considered the nature of the sector, control environment and operational performance including the design of the United Kingdom Atomic Energy Authority and its Group's accounting policies.
- inquired of management, the United Kingdom Atomic Energy Authority and its Group's head of internal audit and those charged with governance, including obtaining and reviewing supporting documentation relating to the United Kingdom Atomic Energy Authority and its Group's policies and procedures on:
  - o identifying, evaluating and complying with laws and regulations;
  - o detecting and responding to the risks of fraud; and
  - o the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations including the United Kingdom Atomic Energy Authority and its Group's controls relating to the United Kingdom Atomic Energy Authority and its Group's compliance with the Atomic Energy Authority Act 1954, and Managing Public Money;
- inquired of management, the United Kingdom Atomic Energy Authority and its Group's head of internal audit and those charged with governance whether:
  - o they were aware of any instances of non-compliance with laws and regulations;
  - o they had knowledge of any actual, suspected, or alleged fraud;
- discussed with the engagement team and the relevant external specialists, including property valuation specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

As a result of these procedures, I considered the opportunities and incentives that may exist within the United Kingdom Atomic Energy Authority and its Group for fraud and identified the greatest potential for fraud in the following areas: posting of unusual journals, complex transactions, and bias in management estimates. In common with all audits under ISAs (UK), I am required to perform specific procedures to respond to the risk of management override.

I obtained an understanding of the United Kingdom Atomic Energy Authority and its Group's framework of authority and other legal and regulatory frameworks in which the United Kingdom Atomic Energy Authority and its Group operates. I focused on those laws and regulations that had a direct effect on material amounts and disclosures in the financial statements or that had a fundamental effect on the operations of the United Kingdom Atomic Energy Authority and its Group. The key laws and regulations I considered in this context included the Atomic Energy Authority Act 1954,

PARLIAMENTARY ACCOUNTABILITY AND AUDIT REPORT

Managing Public Money, employment law and pensions legislation and tax legislation.

Audit response to identified risk

To respond to the identified risks resulting from the above procedures:

- I reviewed the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described above as having direct effect on the financial statements;
- I enquired of management, the Audit and Risk Assurance Committee and in-house legal counsel concerning actual and potential litigation and claims;
- I reviewed minutes of meetings of those charged with governance and the Board and internal audit reports;
- I addressed the risk of fraud through management override of controls by testing the appropriateness of journal entries and other adjustments; assessing whether the judgements on estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business; and

I communicated relevant identified laws and regulations and potential risks of fraud to all engagement team members including and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: ***www.frc.org.uk/auditorsresponsibilities***. This description forms part of my certificate.

Other auditor's responsibilities

I am required to obtain sufficient appropriate audit evidence to give reasonable assurance that the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control I identify during my audit.

Report

I have no observations to make on these financial statements.

Gareth Davies
Comptroller and Auditor General

Date 14th July 2025

National Audit Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

ANNUAL ACCOUNTS

Consolidated statement of comprehensive net income

for the year ended 31 March 2025

	Note	Group 2025 £k	Group 2024 £k	Authority 2025 £k	Authority 2024 £k
Income					
Revenue	4/5	355,423	323,898	333,247	319,559
Other income	6	1,240	1,048	1,240	1,236
Less: Share of revenue of joint venture		(5,198)	(4,339)	-	-
Total operating income		**351,465**	**320,607**	**334,487**	**320,795**
Expenditure					
Staff costs	7.1	177,964	173,059	172,415	173,059
Purchase of goods and services	7.2	170,251	147,604	158,741	147,680
Depreciation, amortisation and impairment		14,162	13,301	14,155	13,301
Costs charged to provisions		-	(1,422)	-	(1,422)
		362,377	332,542	345,311	332,618
Other operating expenses	7.3	2,764	1,378	2,831	1,378
Revaluation adjustment	12	(3,225)	(2,738)	(3,225)	(2,738)
Total operating expenditure		**361,916**	**331,182**	**344,917**	**331,258**
Operating (loss)/profit		**(10,451)**	**(10,575)**	**(10,430)**	**(10,463)**
Finance income	8	1,689	1,398	1,435	1,154
Finance expense	8	(492)	(171)	(492)	(171)
Profit/(loss) on disposal of assets		(142)	(6)	(142)	(6)
Share of profit/(loss) of joint venture after tax	15.2	25,720	(5,024)	-	-
Profit/(loss) before tax		**16,324**	**(14,378)**	**(9,629)**	**(9,486)**
Current tax (charge)/credit	9	5,238	8,027	4,200	8,027
Deferred tax (charge)/credit	9	(1,564)	(216)	(1,564)	(216)
Profit/(loss) for the year		**19,998**	**(6,567)**	**(6,993)**	**(1,675)**
Other comprehensive net income					
Net gain/(loss) on revaluations - property, plant and equipment	10	7,091	5,715	7,091	5,715
Net gain/(loss) on revaluations - joint venture	15.2	10,378	8,422	-	-
Actuarial gains/(losses) on defined benefit pension plans		-	35	-	35
Tax (charge)/credit relating to components of other comprehensive income	9	(125)	516	(125)	516
Total other comprehensive net income for the year		17,344	14,688	6,966	6,266
Total comprehensive net income/(expenditure) for the year		**37,342**	**8,121**	**(27)**	**4,591**

The notes on pages 122 to 152 are an integral part of these financial statements.

Consolidated statement of financial position

as at 31 March 2025

	Note	Group 2025 £k	Group 2024 £k	Authority 2025 £k	Authority 2024 £k
Non-current assets					
Property, plant and equipment	10	383,254	330,622	382,700	330,622
Right-of-use assets	11	3,751	3,730	3,735	3,730
Investment property	12	92,813	62,210	92,813	62,210
Intangible assets	13	428	385	377	385
Trade and other receivables	14	737,754	724,737	736,685	724,737
Financial assets	15	138,628	102,530	18,623	18,623
Total non-current assets		1,356,628	1,224,214	1,234,933	1,140,307
Current assets					
Trade and other receivables	14	146,951	115,197	145,763	115,162
Financial assets	15	-	200	-	-
Cash and cash equivalents	16	63,944	75,507	58,404	70,327
Total current assets		210,895	190,904	204,167	185,489
Total assets		**1,567,523**	**1,415,118**	**1,439,100**	**1,325,796**
Current liabilities					
Trade and other payables	17	86,802	78,181	85,587	78,143
Lease liabilities	18	597	260	577	260
Provisions for liabilities and charges	19	62,592	58,690	62,554	58,614
Total current liabilities		149,991	137,131	148,718	137,017
Total assets minus current liabilities		**1,417,532**	**1,277,987**	**1,290,382**	**1,188,779**
Non-current liabilities					
Trade and other payables	17	1,421	1,459	1,421	1,459
Deferred income	20	12,492	13,625	12,492	13,625
Deferred income tax liabilities	21	31,673	29,984	31,673	29,984
Lease liabilities	18	22,378	3,328	22,378	3,328
Provisions for liabilities and charges	19	739,940	724,418	739,788	724,231
Total non-current liabilities		807,904	772,814	807,752	772,627
Assets less liabilities		**609,628**	**505,173**	**482,630**	**416,152**
Taxpayers' equity					
General reserve		13,658	13,658	13,658	13,658
Revaluation reserve		72,199	67,131	72,199	67,131
Capital grants reserve		288,306	231,840	287,701	231,840
Retained earnings		235,465	192,544	109,072	103,523
Total taxpayers' equity		**609,628**	**505,173**	**482,630**	**416,152**

The notes on pages 122 to 152 are an integral part of these financial statements.

Professor Sir Ian Chapman
Chief Executive and Accounting Officer
11th July 2025

Consolidated statement of cash flows

for the year ended 31 March 2025

	Note	Group 2025 £k	Group 2024 £k	Authority 2025 £k	Authority 2024 £k
Cash flows from operating activities					
Profit/(loss) for the year		19,998	(6,567)	(6,993)	(1,675)
Adjustments for non-cash transactions:					
- Depreciation, amortisation and impairment		14,163	13,300	14,155	13,300
- Deferred income released	20	(1,133)	(1,013)	(1,133)	(1,013)
- Change in fair value of investment property	12	(3,225)	(2,738)	(3,225)	(2,738)
- Loss on disposal of property, plant and equipment		142	6	142	6
- Net finance (income)/expense recognised	8	(1,197)	(1,227)	(943)	(983)
- Deferred tax charge/(credit)	9	1,564	216	1,564	216
- Share of loss/(profit) of joint venture	15.2	(25,720)	5,024	-	-
Changes in working capital:					
- (Increase)/decrease in trade and other receivables		(25,841)	2,212	(23,619)	2,417
- (Increase)/decrease in current financial assets		200	759	-	-
- Increase/(decrease) in trade and other payables		8,583	(2,513)	7,406	(2,499)
- Use of and change in provisions, net of the movement on reimbursement receivables		318	(1,676)	391	(1,675)
Net cash inflow/(outflow) from operating activities		**(12,148)**	**5,783**	**(12,255)**	**5,356**
Cash flows from investing activities					
Purchase of property, plant and equipment	10	(62,101)	(57,807)	(61,545)	(57,807)
Proceeds from sale of property, plant and equipment		-	13	-	13
Costs of right-of-use assets incurred prior to inception of corresponding leases	11/12/18	(37)	-	(37)	-
Purchase of investment property	12	(4,820)	-	(4,820)	-
Purchase of intangible assets	13	(192)	(36)	(139)	(36)
Net cash inflow/(outflow) from investing activities		**(67,150)**	**(57,830)**	**(66,541)**	**(57,830)**
Cash flows from financing activities					
Capital grant from sponsoring department		67,113	57,151	66,505	57,151
Interest received	8	1,689	1,398	1,435	1,154
Payments of interest on lease liabilities	8	(316)	(34)	(316)	(34)
Repayments of lease liabilities	18	(751)	(289)	(751)	(289)
Net cash inflow/(outflow) from financing activities		**67,735**	**58,226**	**66,873**	**57,982**
Net increase/(decrease) in cash and cash equivalents in the year		**(11,563)**	**6,179**	**(11,923)**	**5,508**
Cash and cash equivalents at the beginning of the year		75,507	69,328	70,327	64,819
Cash and cash equivalents at the end of the year		**63,944**	**75,507**	**58,404**	**70,327**

The notes on pages 122 to 152 are an integral part of these financial statements.

Consolidated statement of changes in taxpayers' equity

for the year ended 31 March 2025

Group	General reserve [a] £k	Revaluation reserve [b] £k	Capital grants reserve [c] £k	Retained earnings [d] £k	Total £k
Balance at 1 April 2023	**13,658**	**62,148**	**182,903**	**181,192**	**439,901**
Changes in Taxpayers' Equity 2023/24:					
Total comprehensive net income for the year	-	6,231	-	1,890	8,121
Capital grant from sponsoring department	-	-	57,151	-	57,151
Depreciation transfer	-	(1,248)	(8,214)	9,462	-
Transfer re buildings moved from property, plant and equipment to investment property	-	-	-	-	-
Balance at 31 March 2024	**13,658**	**67,131**	**231,840**	**192,544**	**505,173**
Changes in Taxpayers' Equity 2024/25:					
Total comprehensive net income for the year	-	6,966	-	30,376	37,342
Capital grant from sponsoring department	-	-	67,113	-	67,113
Depreciation transfer	-	(1,366)	(10,647)	12,013	-
Transfer re buildings moved from property, plant and equipment to investment property	-	(532)	-	532	-
Balance at 31 March 2025	**13,658**	**72,199**	**288,306**	**235,465**	**609,628**

Authority	General reserve [a] £k	Revaluation reserve [b] £k	Capital grants reserve [c] £k	Retained earnings [d] £k	Total £k
Balance at 1 April 2023	**13,658**	**62,148**	**182,903**	**95,701**	**354,410**
Changes in Taxpayers' Equity 2023/24:					
Total comprehensive net income for the year	-	6,231	-	(1,640)	4,591
Capital grant from sponsoring department	-	-	57,151	-	57,151
Depreciation transfer	-	(1,248)	(8,214)	9,462	-
Transfer re buildings moved from property, plant and equipment to investment property	-	-	-	-	-
Balance at 31 March 2024	**13,658**	**67,131**	**231,840**	**103,523**	**416,152**
Changes in Taxpayers' Equity 2024/25:					
Total comprehensive net income for the year	-	6,966	-	(6,993)	(27)
Capital grant from sponsoring department	-	-	66,505	-	66,505
Depreciation transfer	-	(1,366)	(10,644)	12,010	-
Transfer re buildings moved from property, plant and equipment to investment property	-	(532)	-	532	-
Balance at 31 March 2025	**13,658**	**72,199**	**287,701**	**109,072**	**482,630**

Notes:
(a) General reserve - This is a legacy reserve created from historical transactions, representing investment in UKAEA by the sponsoring department.
(b) Revaluation reserve - Reflects the unrealised element, net of tax, of the cumulative balance of gains/(losses) on revaluations of Land and buildings, Leasehold improvements and Plant and equipment (see Note 10).
(c) Capital grants reserve - Relates to capital grants received from UKAEA's sponsoring government department less the associated depreciation.
(d) Retained earnings - Represents total assets less liabilities, to the extent that the total is not represented by other reserves.

The notes on pages 122 to 152 are an integral part of these financial statements.

Notes to the financial statements

1 General information

UKAEA is a public sector research establishment (PSRE).
UKAEA is a non-departmental public body (NDPB) and was established by the Atomic Energy Authority Act 1954.
The address of UKAEA's registered office is Culham Campus, Abingdon, Oxfordshire, OX14 3DB.
UKAEA and its subsidiaries are referred to as 'the Group'.
UKAEA's sponsoring government department is the Department for Energy Security and Net Zero (DESNZ).

2 Basis of preparation

The financial statements comply with the provisions of the Atomic Energy Authority Act 1954 and the requirements of HM Treasury. The latter requires the financial statements to be prepared in accordance with the Government Financial Reporting Manual (FReM) issued by HM Treasury as updated annually. The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector. Where the FReM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the Group for the purpose of giving a true and fair view has been selected.

The financial statements have been prepared on a going concern basis.

The financial statements are presented in pounds sterling, which is UKAEA's functional currency, and have been prepared under the historical cost convention, except for land and buildings, leasehold improvements, plant and equipment and investment properties which are revalued annually (Note 3.8 and Note 3.10).

The preparation of financial statements in conformity with IFRS requires judgements, estimates and assumptions to be made that affect the application of accounting policies and the reported amounts of income, expenditure, assets and liabilities. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected. Information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most material effect on the amounts recognised in the consolidated financial statements is included in the notes to the financial statements.

3 Material accounting policies

The principal accounting policies applied by UKAEA and its subsidiaries UK Industrial Fusion Solutions Ltd (UKIFS) and AEA Insurance Ltd (AEAIL) in the preparation of these financial statements are set out below. These policies have been applied consistently in dealing with all items that are considered material to the financial statements..

3.1 Consolidation

(a) Subsidiaries

Subsidiaries are entities controlled by the Group. Control exists when the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from the activities of that entity. In assessing control, potential voting rights that are currently exercisable are taken into account. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries are changed when necessary to align them with the policies adopted by the Group.

3.1 Consolidation continued

(b) Joint ventures

Joint ventures are those entities over which the Group exercises joint control through a contractual arrangement. The results, assets and liabilities of joint ventures are incorporated in the consolidated financial statements using the equity method of accounting. Investments in joint ventures are initially carried in the Statement of financial position at cost and subsequently adjusted by post-acquisition changes in the Group's share of the net assets of the joint venture, less any impairment in the value of individual investments. Losses of joint ventures in excess of the Group's interest in those joint ventures are not recognised, except where the Group has made a commitment to make good those losses..

(c) Transactions eliminated on consolidation

Intra-group transactions and balances and unrealised gains and losses on transactions between Group entities are eliminated on consolidation.

3.2 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the UKAEA Board.

3.3 Revenue recognition

Revenue is recognised when a performance obligation has been met i.e. at the point when delivery of a product or service transfers control to the customer and specific criteria have been met as described below. Revenue is shown net of value added tax, returns, rebates and discounts.

Grant funding relating to revenue expenditure is recognised in the Statement of comprehensive net income in the same period as the related expenditure that it is intended to fund, in accordance with IAS 20 'Accounting for Government Grants and Disclosure of Government Assistance'.

(a) Service contracts

Revenue from customer contracts is recognised under IFRS 15 'Revenue from Contracts with Customers'. Contract milestones have been identified as the performance obligations for revenue recognition and are satisfied at a point in time. Revenue on contracts that do not separately identify milestones is recognised on completion. Most of UKAEA's contracts with customers allow for invoices to be raised once contract milestones have been completed. Revenue is measured based on the consideration set out in the customer contract.

(b) Rental income

Rental income from investment properties is recognised in the Statement of comprehensive net income on a straight-line basis over the term of the lease. Lease incentives granted are recognised as an integral part of the total rental income over the term of the lease.

(c) Grant in Aid

Grant in Aid relating to revenue expenditure is recognised in the Statement of comprehensive net income in the same period as the related expenditure that it is intended to fund, in accordance with IAS 20. This departure from the specified treatment in the FReM has been agreed with UKAEA's sponsoring government department.

Grant in Aid relating to capital expenditure is recognised as financing and credited to taxpayers' equity in line with the FReM.

3.4 Employee benefits

(a) Short-term employee benefits

Short-term employee benefits are recognised in the year in which the related service is provided. A liability is recognised for the amount expected to be paid under short-term bonus arrangements if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by employees and the obligation can be estimated reliably.

(b) Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits when it is demonstrably committed to either: terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal; or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the reporting date are discounted to their present value.

(c) Retirement benefits

Obligations for contributions to defined contribution schemes are recognised as an expense when they are due. The Group has no further payment obligations once the contributions have been paid.

The Group operates three defined benefit schemes for the benefit of its employees. Two of these are closed to new members. The schemes are unfunded multi-employer defined benefit schemes. In accordance with the FReM, these schemes are accounted for as defined contribution schemes in these financial statements and the obligations recognised are limited to the contributions due.

The Group also has a separate liability in respect of unfunded retirement benefits relating to three individuals. The liability recognised in the Statement of financial position is the present value of the defined benefit obligation at the reporting date, together with adjustments for unrecognised past-service costs. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using a real rate of interest set by HM Treasury. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to taxpayers' equity in the period in which they arise.

3.5 Research expenditure

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the Statement of comprehensive net income when incurred.

3.6 Foreign currency translation

Transactions in foreign currencies are translated to the functional currency of the Group using the exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency using the exchange rates at that date. Foreign exchange gains and losses resulting from the settlement of transactions and from the translation of monetary assets and liabilities are recognised in the Statement of comprehensive net income.

3.7 Current and deferred tax

The tax charge or credit for the period comprises current and deferred tax. Tax is recognised in the Statement of comprehensive net income, except to the extent that it relates to items recognised directly in taxpayers' equity. In this case, the tax is also recognised in taxpayers' equity.

3.7 Current and deferred tax continued

Current tax is the expected tax payable or receivable on the taxable income for the year, using tax rates enacted or substantially enacted by the reporting date, plus any adjustment to tax payable in respect of previous years.

Research and Development Expenditure Credits (RDEC) payable by HM Revenue and Customs are treated as tax credits in line with the provisions of IAS 12 'Income Taxes' and are included within current tax (charge)/credit in the Statement of comprehensive net income (see Note 9).

Deferred tax is recognised, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the reporting date and are expected to apply when the deferred tax asset is realised, or the deferred tax liability is settled. Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which temporary differences can be utilised.

3.8 Property, plant and equipment

Land and buildings are occupied by the Group and are shown at fair value, based on periodic, but at least triennial, valuations by external independent valuers, less subsequent depreciation for buildings. In the intervening years any new buildings along with elements of land and buildings that have changed circumstances are independently revalued, and the remaining property portfolio is uplifted using indexation rates with the assistance of the valuers.

Fair value is based on market values for existing use, except where there are alternative uses for the land and buildings. Where basing fair value on market values is not applicable because of the specialised nature of the asset, valuations are carried out on a depreciated replacement cost basis.

Increases in the carrying amount arising on revaluation of land and buildings are credited to the revaluation reserve. Decreases that offset previous increases in the value of the same asset are charged against the revaluation reserve; all other decreases are charged to the Statement of comprehensive net income. Each year the difference between depreciation based on the revalued carrying amount of the asset charged to the Statement of comprehensive net income and depreciation based on the asset's original cost is transferred from the revaluation reserve to retained earnings.

Leasehold improvements and plant and equipment, excluding assets with short useful lives, are revalued using appropriate indices as published by the Office for National Statistics for each class of asset.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the Statement of comprehensive net income during the financial period in which they are incurred.

Property, plant and equipment capitalisation thresholds are as follows:

– Land and buildings	£100k
– Plant and equipment for decommissioning	£100k
– Software	£20k
– Other	£5k

3.8 Property, plant and equipment continued
Land is not depreciated. Assets under construction are not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost or revalued amounts to their residual values over their estimated useful lives, as follows:

– Buildings	initially up to 40 years, reassessed during the property valuation cycle
– Leasehold improvements	over the balance of the lease term
– Plant, machinery and equipment	up to 25 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date.

Property, plant and equipment may have component parts with different useful lives. In accordance with the provisions of IAS 16 'Property, Plant and Equipment', each part of any newly recognised item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 3.12).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and any amounts to be released from deferred income on disposal and are recognised in the Statement of comprehensive net income. When revalued assets are sold, any amounts included in the revaluation reserve are transferred to retained earnings.

3.9 Leases

Leases are accounted for in line with IFRS 16 'Leases'.

(a) The Group as lessee
At inception of a contract the Group assesses whether the contract is a lease, or contains a lease. In line with the FReM the Group recognises a right-of-use asset and a corresponding lease liability, except for short-term leases (of term 12 months or less) and leases of low value underlying assets (cost when new below £5k). For each such lease, the Group expenses the lease payments as an operating lease on a straight-line basis over the term of the lease.

The lease liability is initially measured at the present value of not-yet-paid lease payments, discounted using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses the incremental discount rate(s) as advised by HM Treasury.

Lease payments included in the measurement of the lease liability comprise:
• fixed lease payments (including in-substance fixed payments), less any lease incentives
• variable lease payments that depend on an index or rate
• expected payments under residual value guarantees
• the exercise price of purchase options, if the Group is reasonably certain to exercise the options
• payments of penalties for terminating the lease, if the lease term reflects the expected exercise of a termination option.

The Group currently does not anticipate exercising any available lease breaks, so none are included in the calculation of lease liabilities.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

3.9(a) The Group as lessee continued
The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:
• the lease term has changed or there is a change in the assessment of the likelihood of exercising a purchase option
• an index or rate changes or there is a change in expected payment under a guaranteed residual value
• a lease contract is modified and the lease modification is not accounted for as a separate lease.

At the lease commencement date the costs of right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the lease commencement date, any initial direct costs incurred, plus the amount of any provision for reinstatement recognised and measured under IAS 37.

Right-of-use assets are subsequently measured at cost less accumulated depreciation (based on the shorter period of lease term and estimated useful life of the underlying asset) and impairment losses (assessed under IAS 36 'Impairment of Assets'). The depreciation starts at the lease commencement date.

Variable rental payments that do not depend on an index or rate are expensed as incurred.

3.9(b) The Group as lessor
The Group enters into lease agreements as a lessor with respect to some of its investment properties.

Leases for which the Group is lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

All of the Group's leases during 2024/25 and 2023/24 were operating leases.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease. When a contract includes lease and non-lease components, the Group applies IFRS 15 to allocate the consideration under the contract to each component.

3.10 Investment property

Investment property, comprising freehold land and buildings plus investment property right-of-use assets plus investment property assets under construction, is held either for rental yields or capital appreciation and is not occupied by the Group. Investment property is carried at fair value, representing open market value determined annually by external independent valuers.

Fair value is based on active market prices, adjusted, if necessary, for any difference in the nature, location or condition of the specific asset. In the absence of current prices in an active market, the valuations are prepared by considering the aggregate of the estimated cash flows expected to be received from renting out the property. Valuations reflect the allocation of maintenance and insurance responsibilities between the Group and the lessee and the remaining economic life of the property.

Changes in fair values are recognised in the Statement of comprehensive net income.

3.11 Intangible assets

Intangible assets comprise acquired computer software licences and are stated at cost, net of amortisation and any provision for impairment. The cost of intangible assets, less estimated residual value, is amortised on a straight-line basis over their estimated useful lives of up to five years.

3.12 Impairment of non-financial assets

Assets that are subject to depreciation or amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows. Non-financial assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

3.13 Financial instruments

UKAEA measures its financial assets in accordance with IFRS 9 'Financial Instruments', whereby financial assets are classified into the following measurement categories: amortised cost, fair value through other comprehensive income (FVOCI) and fair value through profit and loss (FVTPL).

UKAEA's financial assets comprise trade and other receivables, investments and cash and cash equivalents. UKAEA's interest in its subsidiaries and joint venture (Notes 15.1 and 15.2) are exempted from the application of IFRS 9. Term deposits (Note 15.3) are solely payments of principal and interest and are therefore held at amortised cost. All other financial assets of the Group were held at amortised cost at both 31 March 2024 and 31 March 2023.

Financial assets are included in current assets, except for maturities greater than 12 months after the reporting date which are classified as non-current assets.

Under IFRS 9, financial liabilities are classified as held at amortised cost or at FVTPL.

The majority of UKAEA's financial liabilities relate to trade and other payables.
All financial liabilities of the Group were held at amortised cost at both 31 March 2024 and 31 March 2023.

Financial liabilities are included in current liabilities, except for maturities greater than 12 months after the reporting date which are classified as non-current liabilities.

As the majority of financial instruments relate to contracts to buy non-financial items in line with UKAEA's expected purchase and usage requirements UKAEA is exposed to little credit, liquidity or market risk (see Note 26(c)).

UKIFS and AEAIL also measure their financial instruments in accordance with IFRS 9.

3.14 Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less.

3.15 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount can be reliably estimated.

UKAEA's site restoration provision is the most significant area of estimation uncertainty in the financial statements. Full details are in Note 19.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using real rates of interest. The change in the provision due to passage of time and changes in discount rate is recognised as finance expense or finance income as appropriate.

Where assurances have been received from another party that they will reimburse some or all of the expenditure required to settle a provision, and the requirements for recognition of IAS 37 'Provisions, Contingent Liabilities and Contingent Assets' section 53 are met (i.e. it is virtually certain that reimbursement will be received if the obligation is settled) a reimbursement asset will be recognised to the extent of the amount expected to be reimbursed. The reimbursement asset is shown separately from the related provision in the Statement of financial position. As the reimbursement asset is reduced in line with the utilisation of the corresponding provision there is a net neutral utilisation impact within the Statement of comprehensive net income in respect of such provisions.

3.16 IFRS issued but not yet effective

The following new standards, amendments and interpretations to existing standards are not yet effective or are not yet effective in HMT's 2024/25 FReM and have not been early adopted by the Authority:

IFRS 17 Insurance contracts

IFRS 17 'Insurance Contracts' replaced IFRS 4 'Insurance Contracts' for accounting periods beginning on or after 1 January 2023, and is to be included in the FReM for mandatory implementation from 2025-26. It establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of this Standard.

The Board anticipate that the adoption of this standard in future periods will have no impact on the financial statements of the Authority. There is also no material impact on UKIFS or AEAIL.

IAS16 Adaptation - Non investment asset valuation

In December 2023 HM Treasury released an exposure draft on potential changes to make to valuing and accounting for non-investment assets (e.g. property, plant and equipment, intangible assets). The following changes to the valuation and accounting of non-investment assets are to be included in the 2025-26 FReM for mandatory implementation:

References to assets being held for their 'service potential' and the terms 'specialised/non-specialised' assets are being removed from the FReM. Non-investment assets are instead described as assets held for their 'operational capacity'. This change has no impact on the valuation basis of non-investment assets, which remains Existing Use Value (EUV).

An adaptation to IAS 16 will be introduced to withdraw the requirement to revalue an asset where its fair value materially differs from its carrying value. Assets are now to be valued using one of the following processes:

- A quinquennial revaluation supplemented by annual indexation.
- A rolling programme of valuations over a 5-year cycle, with annual indexation applied to assets during the 4 intervening years.
- For non-property assets only, appropriate indices.
- In rare circumstances where an index is not available, a quinquennial revaluation supplemented by a desktop revaluation in year 3.

The option to measure intangible assets using the revaluation model is withdrawn. The carrying values of intangible assets at 31 March 2025 will be considered the historical cost at 1 April 2025.

IFRS 18 Presentation and disclosure in financial statements

IFRS 18 'Presentation and Disclosure in Financial Statements' will replace IAS 1 'Presentation of Financial Statements' and is effective for annual reporting periods beginning on or after 1 January 2027 in the private sector. The public sector implementation date is not yet confirmed. The impact of IFRS 18 on the public sector is still being assessed.

4 Segment information

As the majority of the Group's activities do not represent the provision of public services, segment information in accordance with IFRS 8 'Operating Segments' is included in these financial statements.

4.1 Reportable segments

The Group has two reportable segments, as described below, which are the Group's main business areas reported to the UKAEA Board. The business areas offer different services and are managed separately because they require different strategies and have different funding streams.

The following summary describes the operations in each of the Group's reportable segments:

(a) Fusion research - research into using fusion to create a new source of energy that is safe and environmentally benign
(b) Property management - operational costs, management and development of the Culham and Harwell campuses for future scientific use

None of the other segments met any of the criteria for determining reportable segments in 2024 or 2025.

4.1 Reportable segments continued

The segmental analysis for years 2024 and 2025 is as follows:

	Note	Fusion research segment £k	Property management segment £k	Other segments £k	Total £k
Year ended 31 March 2024					
Revenue	6	294,557	15,065	14,276	323,898
Less: Share of revenue of joint venture		-	(4,339)	-	(4,339)
Other income	6	-	-	1,048	1,048
Expenditure		(304,621)	(20,691)	(8,608)	(333,920)
Investment property revaluation		-	2,738	-	2,738
Operating profit/(loss)		**(10,064)**	**(7,227)**	**6,716**	**(10,575)**
Finance income		-	-	1,398	1,398
Finance expense		-	-	(171)	(171)
Loss on disposal of assets		-	-	(6)	(6)
Share of profit/(loss) of joint venture		-	(5,024)	-	(5,024)
Profit/(loss) before tax		**(10,064)**	**(12,251)**	**7,937**	**(14,378)**
Year ended 31 March 2025					
Revenue	6	326,274	26,058	3,091	355,423
Less: Share of revenue of joint venture		-	(5,198)	-	(5,198)
Other income	6	-	-	1,240	1,240
Expenditure		(333,735)	(25,235)	(6,171)	(365,141)
Investment property revaluation		-	3,225	-	3,225
Operating profit/(loss)		**(7,461)**	**(1,150)**	**(1,840)**	**(10,451)**
Finance income		-	-	1,689	1,689
Finance expense		-	-	(492)	(492)
Loss on disposal of assets		-	-	(142)	(142)
Share of profit/(loss) of joint venture		-	25,720	-	25,720
Profit/(loss) before tax		**(7,461)**	**24,570**	**(785)**	**16,324**

Reconciliation between reportable segments and Statement of comprehensive net income

	Group 2025 £k	Group 2024 £k
Revenue		
Total revenue for reportable segments	352,332	309,622
Total revenue for other segments	3,091	14,276
Total revenue per Statement of comprehensive net income	**355,423**	**323,898**
Profit or loss		
Total profit/(loss) for reportable segments	17,109	(22,315)
Profit/(loss) for other segments	(785)	7,937
Total profit/(loss) before tax per Statement of comprehensive net income	**16,324**	**(14,378)**

4.2 Geographical segments

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers.

	Group 2025 £k	Group 2024 £k
Revenue		
United Kingdom	346,291	319,205
Europe	7,701	1,875
Rest of the World	1,431	2,818
	355,423	**323,898**

5 Disaggregation of revenue under IFRS 15 'Revenue from Contracts with Customers'

UKAEA derives its customer revenue from the transfer of goods and services at a point in time. This revenue is categorised within the fusion and property segment, total 2025 £7,701k (2024: £30,178k).

Contract milestones have been identified as performance obligations under IFRS 15 and are fulfilled within twelve months.

Timing of revenue recognition

Contract milestones have been identified as the performance obligations for revenue recognition at a point in time. Revenue on contracts which do not have separately identifiable milestones is recognised at a point in time, on completion.

Most customer contracts provide for invoices to be raised and paid once contract milestones have been completed.

Contract balances

The following table provides information about trade receivables, contract assets and contract liabilities from contracts with customers:

	Note	2025 £k	2024 £k
Trade receivables	14	3,352	4,060
Contract assets	14	734	875
Contract liabilities	17	(474)	(482)

Contract assets relate to direct costs incurred on unsatisfied performance obligations and to performance obligations satisfied but not yet invoiced.

Contract liabilities relate to invoicing and consideration received in advance.

Movement in contract assets/liabilities in the year:

	2025 Contract assets £k	2024 Contract assets £k	2025 Contract liabilities £k	2024 Contract liabilities £k
Contract assets/liabilities at the beginning of the year	875	1,303	(482)	(368)
Contract assets for performance obligations satisfied but not yet invoiced	(112)	78	-	-
Contract liabilities for payments received in advance of the satisfaction of performance obligations	-	-	8	(114)
Changes in the measure of progress	(29)	(506)	-	-
Contract assets/liabilities at the end of the year	**734**	**875**	**(474)**	**(482)**

6 Operating income

	Group 2025 £k	Group 2024 £k
Grant in Aid from sponsoring department	296,189	248,333
Rentals, property and construction income	10,565	32,471
Revenue from contracts with customers and collaborations	25,988	22,130
Grant income	22,522	20,814
Other revenue	159	150
Total revenue	**355,423**	**323,898**
Release of deferred capital grant income	1,133	1,013
Other	107	35
Total other income	**1,240**	**1,048**
Less: Share of revenue of joint venture	(5,198)	(4,339)
Total operating income	**351,465**	**320,607**

7 Operating expenditure

7.1 Staff costs

Staff costs comprise:

	Group 2025 £k	Group 2024 £k
Directly employed staff:		
Salaries, bonuses and allowances	114,993	106,300
Social security costs	14,209	12,447
Pension costs – defined contribution plans (see below)	20,943	18,417
	150,145	137,164
Temporary staff	34,874	42,312
Total	**185,019**	**179,476**
Less: Costs capitalised	(7,055)	(6,417)
Total expenditure recognised in Statement of comprehensive net income	**177,964**	**173,059**

Full details of UKAEA Group's pension schemes are given in the Remuneration Report.
The total employer's pension contributions paid by the UKAEA Group to the CPS during the year were £20,645k (2024: £17,936k).
The total employer's pension contributions paid by the UKAEA Group during the year to the SPPSP were £23k (2024: £25k).

7.2 Purchase of goods and services

	Group 2025 £k	Group 2024 £k
Research services	52,934	22,827
Design and construction	46,844	57,403
Plant, equipment and spares	38,965	26,284
Professional and technical services	23,742	23,651
Site maintenance and services	22,802	17,023
Electricity	8,710	15,755
Software	8,406	5,256
IT equipment	7,919	7,796
Travel and subsistence	4,142	3,489
Consultancy	2,298	3,051
Pensions administration	1,582	1,527
Gases	454	2,030
Other	11,511	12,939
Total	**230,309**	**199,031**
Less: Costs capitalised	(60,058)	(51,427)
Total expenditure recognised in Statement of comprehensive net income	**170,251**	**147,604**
Operating leases - lessee rentals:		
- Short term leases - plant, machinery and vehicles	76	68
- Short term leases - property	2	-
- Leases of low value assets - plant, machinery and vehicles	-	5
Auditors' remuneration:		
Fees payable to the Group's auditor, the National Audit Office, for the audit of the Group's annual accounts	180	172
Fees payable to the Group's auditor for other services - audit of the accounts of subsidiary UKIFS	80	-

Audit of subsidiary AEAIL and joint venture:
The audit fee payable to the auditors of AEAIL was £12k (2024: £12k).
The audit fee payable to the auditors of HSIC PubSP, in which UKAEA has a share of one half, was £21k (2024: £33k).
The audit fee payable to the auditors of HSIC Holdings, in which UKAEA has a share of one quarter via HSIC PubSP, was £30k (2024: £30k).

7.3 Other operating expenses

	Group 2025 £k	Group 2024 £k
Movement in provisions net of reimbursement receivables	1,796	762
Movement in contract assets	(21)	506
Expected Credit Loss	921	-
Foreign exchange differences	68	110
	2,764	**1,378**

8 Finance income and expense

	Group 2025 £k	Group 2024 £k	Authority 2025 £k	Authority 2024 £k
Finance income				
Interest receivable	1,689	1,398	1,435	1,154
Total finance income	**1,689**	**1,398**	**1,435**	**1,154**
Finance expense				
Interest on lease liabilities	(316)	(34)	(316)	(34)
Revalorisation of provisions:				
- Unwinding of discounting	(16,450)	(9,440)	(16,450)	(9,440)
- Adjustments to reimbursement receivables	16,355	9,372	16,355	9,372
Interest on unfunded retirement benefits	(81)	(69)	(81)	(69)
Total finance expense	**(492)**	**(171)**	**(492)**	**(171)**

Full details of provisions and the discount rates used are provided in Note 19.

9 Tax (charge)/credit

Group

	2025 £k	2024 £k
Current tax		
Current tax credit (RDEC)	5,565	8,346
Current tax charge for year	(31)	(319)
Adjustments relating to previous years	(296)	-
	5,238	8,027
Deferred tax		
Origination and reversal of temporary timing differences	(1,717)	(660)
Recognition of deferred tax asset (Note 21)	597	444
Adjustments relating to previous years	(444)	-
	(1,564)	(216)
Total tax (charge)/credit	**3,674**	**7,811**

The Research and Development Expenditure Credit (RDEC) became mandatory from 1 April 2016. The RDEC is beneficial for UKAEA and offsets the tax charge on any non-trading profits from property and other activities.

The current tax on the Group's profit before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated entities as follows:

	2025 £k	2024 £k
Profit/(loss) for the year	19,998	(6,567)
Add back: Tax charge/(credit)	(3,674)	(7,811)
Profit/(loss) before tax	16,324	(14,378)
Tax calculated at the standard UK corporation tax rate of 25% (2024: 25%)	(4,081)	3,595
Tax effects of:		
- Reversal of timing differences	(3,142)	(2,995)
- Items not deductible for tax purposes	7,731	(189)
- R&D expenditure credit under s104A CTA 2009	(1,855)	(2,814)
- Current year profit offset against deferred tax asset	675	1,905
- Non-trading profits offset by RDEC credit	582	465
- Net RDEC claim 2023/24	-	8,346
- Net RDEC claim 2024/25	5,565	-
- Tax losses for which no deferred income tax asset was recognised	59	33
- Adjustments for previous periods	(296)	(318)
Current tax (charge)/credit for the year	**5,238**	**8,028**

The tax (charged)/credited to taxpayers' equity during the year is as follows:

	2025 £k	2024 £k
Deferred tax (charge)/credit relating to fair value gains on property, plant and equipment	(125)	516

10 Property, plant and equipment

Group	Land £k	Buildings £k	Leasehold improvements £k	Plant and equipment £k	Assets under construction £k	Total £k
Cost or valuation						
At 31 March 2023	**57,369**	**71,674**	**3,768**	**49,553**	**131,567**	**313,931**
Additions	-	-	-	433	57,374	57,807
Disposals	-	-	-	(86)	-	(86)
Revaluation	4,143	(1,704)	642	2,634	-	5,715
Impairment	-	(1,604)	-	(169)	-	(1,773)
Transfers within property, plant and equipment	-	34,255	-	11,556	(45,811)	-
Transfers (to)/from investment property	-	-	-	-	-	-
At 31 March 2024	**61,512**	**102,621**	**4,410**	**63,921**	**143,130**	**375,594**
Additions	-	-	-	1,305	60,796	62,101
Disposals	-	-	-	(658)	-	(658)
Revaluation	(4,240)	10,124	101	1,106	-	7,091
Impairment	-	(30)	-	(1)	-	(31)
Transfers within property, plant and equipment	-	41,202	35	13,185	(54,422)	-
Transfers (to)/from investment property	(63)	(2,290)	-	-	(999)	(3,352)
At 31 March 2025	**57,209**	**151,627**	**4,546**	**78,858**	**148,505**	**440,745**
Depreciation and impairment						
At 31 March 2023	**-**	**(12,720)**	**(428)**	**(20,809)**	**-**	**(33,957)**
Depreciation charge	-	(4,436)	(190)	(6,456)	-	(11,082)
Disposals	-	-	-	67	-	67
Transfers within property, plant and equipment	-	(158)	-	158	-	-
Transfers to investment property	-	-	-	-	-	-
At 31 March 2024	**-**	**(17,314)**	**(618)**	**(27,040)**	**-**	**(44,972)**
Depreciation charge	-	(5,398)	(240)	(7,882)	-	(13,520)
Disposals	-	-	-	516	-	516
Transfers within property, plant and equipment	-	-	-	-	-	-
Transfers to investment property	-	485	-	-	-	485
At 31 March 2025	**-**	**(22,227)**	**(858)**	**(34,406)**	**-**	**(57,491)**
Net book value						
At 31 March 2024	**61,512**	**85,307**	**3,792**	**36,881**	**143,130**	**330,622**
At 31 March 2025	**57,209**	**129,400**	**3,688**	**44,452**	**148,505**	**383,254**

All property, plant and equipment are owned by the Group.

New buildings along with elements of land and buildings that have changed circumstances during the year have been revalued as at 28 February 2024. The valuations were undertaken by Carter Jonas in accordance with the Valuation Standards of the Royal Institute of Chartered Surveyors, IFRS and guidelines in HM Treasury's FReM. The value of the remaining property portfolio has been uplifted using indexation rates with the assistance of the valuers.

The Group determined that the valuations were still appropriate as at the reporting date.

The additions during the year include expenditure on the development of UKAEA's Culham campus and to progress programmes, including STEP, H3AT and MRF. For further information on these programmes, please see the Performance Report.

The net book value under the historical cost model as at 31 March 2025 relating to classes of property, plant and equipment subject to revaluation was as follows: Land £132k (2024: £133k), Buildings £103,287k (2024: £68,077k), Leasehold improvements £2,983k (2024: £3,150k), Plant and equipment £41,260k (2024: £34,416k).

The value of property, plant and equipment additions in the year which were funded by government grant comprises £62,101k (2024: £57,114k) funded by capital grant from sponsoring department and £Nil (2024: £693k) funded by other UK government grants.

NOTES TO THE FINANCIAL STATEMENTS

11 Right-of-use assets (excluding investment property right-of-use assets)

Group	Buildings £k	Plant, equipment and vehicles £k	Total £k
Cost or valuation			
At 31 March 2023	**4,153**	**302**	**4,455**
Additions	-	184	184
Remeasurements	-	-	-
Disposals	-	-	-
At 31 March 2024	**4,153**	**486**	**4,639**
Additions	417	109	526
Remeasurements	-	(42)	(42)
Disposals	-	(289)	(289)
At 31 March 2025	**4,570**	**264**	**4,834**
Depreciation			
At 31 March 2023	(426)	(173)	(599)
Depreciation charge	(213)	(97)	(310)
Disposals	-	-	-
At 31 March 2024	**(639)**	**(270)**	**(909)**
Depreciation charge	(352)	(111)	(463)
Disposals	-	289	289
At 31 March 2025	**(991)**	**(92)**	**(1,083)**
Net book value			
At 31 March 2024	**3,514**	**216**	**3,730**
At 31 March 2025	**3,579**	**172**	**3,751**

The right-of-use assets above relate to leases entered into by UKAEA and UKIFS of industrial and office buildings, vehicles, lifting and transporting equipment and office equipment. AEAIL does not have any leases.

UKAEA has three property leases subject to capitalisation as right-of-use assets under IFRS 16.
One of those property right-of-use assets meets the definition of an investment property under IAS 40 'Investment Property' and so has been recognised within investment property in the Statement of financial position (see Note 12).
Of the two remaining capitalised property leases, one is a short life asset and so is not revalued.
The other is for a shorter period than the useful life of the underlying asset and the rent is open market with regular periodic reviews UKAEA has used the cost measurement model as an appropriate proxy for the current value in existing use or fair value of the right-of-use asset.

12 Investment property

Group and Authority	Investment property £k	Investment property right-of-use assets £k	Investment property assets under construction £k	Total £k
Cost or valuation				
At 31 March 2023	59,472	-	-	59,472
Additions	-	-	-	-
Transfers	-	-	-	-
Transfers (to)/from land and buildings	-	-	-	-
Revaluation adjustment - change in fair value	2,738	-	-	2,738
At 31 March 2024	**62,210**	**-**	**-**	**62,210**
Additions	-	19,691	4,820	24,511
Transfers	5,819	-	(5,819)	-
Transfers (to)/from land and buildings	1,868	-	999	2,867
Revaluation adjustment - change in fair value	3,225	-	-	3,225
At 31 March 2025	**73,122**	**19,691**	**-**	**92,813**

Investment properties were valued at fair value as at 28 February 2025 by independent valuers. The valuations were undertaken by Carter Jonas in accordance with the Valuation Standards of the Royal Institute of Chartered Surveyors, IFRS and guidelines in HM Treasury's FReM.

The net book value under the historical cost model at 31 March 2025 relating to investment property subject to revaluation was £43,587k (2024: £16,465k).

Investment properties are held for their investment potential. Rental income from tenants outside the Group is negotiated at arm's length. The following amounts have been recognised in the Statement of comprehensive net income:

	Group and Authority	
	2025 £k	2024 £k
Rental income	2,884	2,785
Direct operating expenses:		
- Investment properties that generated rental income	2,944	2,879
- Investment properties that did not generate rental income	653	231
- Expected Credit Loss	921	-

13 Intangible assets

Group	Software £k	Total £k
Cost		
At 31 March 2023	**2,469**	**2,469**
Additions	36	36
At 31 March 2024	**2,505**	**2,505**
Additions	192	192
At 31 March 2025	**2,697**	**2,697**
Amortisation and impairment		
At 31 March 2023	**(1,985)**	**(1,985)**
Amortisation charge	(135)	(135)
At 31 March 2024	**(2,120)**	**(2,120)**
Amortisation charge	(149)	(149)
At 31 March 2025	**(2,269)**	**(2,269)**
Net book value		
At 31 March 2024	**385**	**385**
At 31 March 2025	**428**	**428**

14 Trade and other receivables

	Group		Authority	
	2025 £k	2024 £k	2025 £k	2024 £k
Amounts falling due after more than one year				
Reimbursement receivables:				
- Site restoration	712,836	694,392	712,836	694,392
- Restructuring	19,353	22,000	19,353	22,000
Corporation tax	5,565	8,345	4,496	8,345
	737,754	**724,737**	**736,685**	**724,737**
Amounts falling due within one year				
Trade receivables	7,512	8,861	7,509	8,861
Reimbursement receivables:				
- Site restoration	56,500	53,266	56,500	53,266
- Restructuring	3,033	3,134	3,033	3,134
Prepayments and accrued income - Grant in Aid from sponsoring department	41,642	15,318	41,642	15,318
Prepayments and accrued income - other	18,870	21,963	18,779	21,928
Contract assets - in respect of revenue receivable	33	145	33	145
Contract assets - direct costs in respect of work in progress	701	730	701	730
VAT	10,573	7,209	9,479	7,209
Corporation tax	8,055	4,501	8,055	4,501
Other receivables	32	70	32	70
	146,951	**115,197**	**145,763**	**115,162**

There are no impaired assets in any of the classes of trade and other receivables. UKAEA has calculated an Expected Credit Loss provision for its trade receivables, in accordance with the requirements of IFRS 9, in the sum of £1,609k (2024: £496k).

The reimbursement receivables have been discounted at the rates applicable to the provisions to which they relate. Further details of these rates are disclosed in Note 19.

15 Financial assets

	Group		Authority	
	2025 £k	2024 £k	2025 £k	2024 £k
Non-current				
Movements during the year				
At 1 April	102,530	99,132	18,623	18,623
Revaluation and profit/(loss) on joint venture	36,098	3,398	-	-
At 31 March	**138,628**	**102,530**	**18,623**	**18,623**
Total non-current assets				
Investment in subsidiary undertakings	-	-	3,000	3,000
Investment in joint venture	138,628	102,530	15,623	15,623
	138,628	**102,530**	**18,623**	**18,623**
Current				
Total current assets				
Term bank deposits	-	200	-	-
	-	**200**	**-**	**-**

15.1 Investment in subsidiary undertakings

Name		Country of incorporation	Ownership interest %	
			2025	2024
AEA Insurance Limited		Isle of Man	100	100
UK Industrial Fusion Solutions Ltd		England and Wales	100	100
UK Fusion Solutions Ltd	(dormant subsidiary)	England and Wales	100	100
UKAEA Ltd	(dormant subsidiary)	England and Wales	100	100

All subsidiary undertakings are included in the consolidation. The proportion of voting rights in the subsidiary undertakings held directly by the Group does not differ from the proportion of shares held.

Registered offices:
AEA Insurance Limited: 1st Floor, Goldie House, 1-4 Goldie Terrace, Upper Church Street, Douglas, Isle of Man, IM1 1EB
UK Industrial Fusion Solutions Ltd and dormant subsidiaries: Culham Campus, Abingdon, Oxfordshire, OX14 3DB

15.2 Investment in joint venture

The Group has 50% control of a joint venture, Harwell Science and Innovation Campus Public Sector Limited Partnership (HSIC PubSP), the public sector partner in Harwell Science and Innovation Campus Holdings (HSIC Holdings LP), which is responsible for the development of the Harwell Oxford Campus. The interest in the joint venture, which is accounted for using the equity method in the Group financial statements, is as follows:

	Group	
	2025 £k	**2024 £k**
At 1 April	102,530	99,132
Share of profit/(loss) net of tax	25,720	(5,024)
Revaluation - prior year	13	10,897
Revaluation - current year	10,365	(2,475)
At 31 March	**138,628**	**102,530**
Analysed as follows:		
Cost or valuation	70,496	60,118
Share of retained profits/(losses)	68,132	42,412
	138,628	**102,530**

The £25,720k share of profit of the joint venture (2024: loss of £5,024k) represents UKAEA's share of the operating profit/loss of HSIC Holdings LP via HSIC PubSP and was largely due to revaluation adjustments and the cost of financing.

The following amounts represent the Group's share of the income, results, assets and liabilities of HSIC Holdings LP via HSIC PubSP. They are included in the Statement of comprehensive net income and Statement of financial position:

	Group	
	2025 £k	**2024 £k**
Profit/(loss) net of tax		
Income	5,198	4,339
Expenditure	(9,638)	(6,707)
Net revaluation gain/(loss)	30,160	(2,656)
	25,720	**(5,024)**
Assets		
Non-current assets	198,394	139,634
Current assets	41,830	30,243
	240,224	**169,877**
Liabilities		
Current liabilities	3,925	3,492
Non-current liabilities	97,671	63,855
	101,596	**67,347**
Net assets	**138,628**	**102,530**

There are no contingent liabilities relating to the Group's interest in the joint venture, and no significant contingent liabilities of the joint venture itself.

15.2 Investment in Harwell joint venture continued

Within current/non-current assets there is £187.6m of investment properties (2024: £129.1m). The investment properties have been valued at market value as at 31 March 2025 using information provided by Radice Chartered Surveyors, independent chartered surveyors. The valuation was carried out in accordance with the provisions of RICS definition of market value. The market value has been determined having regard to factors such as current and future projected income levels, taking account of location, quality of the building and recent market transactions in the sector. Changes in these assumptions such as the valuation basis applied in comparable market transactions, or the level of income generated by the investment property could materially impact the valuation of the investment properties.

The Group noted that the joint venture accounts are in the final stages of audit and not yet approved by the HSIC board.

Annual accounts including the full investment property disclosure note can be requested from the address below

Registered office:
Harwell Science and Innovation Campus Public Sector Limited Partnership
c/o Science and Technology Facilities Council
UK Astronomy Centre
Royal Observatory Edinburgh
Blackford Hill
Edinburgh
EH9 3HJ

15.3 Term bank deposits

Term bank deposits were held during the year with major UK banks. The average interest rate on the deposits held at 31 March 2025 was 4.50% (2024: 5.52%). The credit risk associated with these investments was considered to be low because of the size and status of the banks involved.

16 Cash and cash equivalents

	Group		Authority	
	2025 £k	**2024 £k**	**2025 £k**	**2024 £k**
At 1 April	75,507	69,328	70,327	64,819
Net change in cash and cash equivalent balances	(11,563)	6,179	(11,923)	5,508
At 31 March	**63,944**	**75,507**	**58,404**	**70,327**
The following balances were held at 31 March:				
Commercial banks and cash in hand	62,759	74,525	58,404	70,327
Short-term bank deposits	1,185	982	-	-
	63,944	**75,507**	**58,404**	**70,327**

17 Trade and other payables

	Group		Authority	
	2025 £k	2024 £k	2025 £k	2024 £k
Amounts falling due within one year				
Trade payables	11,107	11,816	9,697	11,816
Accrued costs	60,925	47,633	56,247	47,595
Payments received on account - Grant in Aid from sponsoring department	-	1,734	-	1,734
Payments received on account - other	8,575	11,735	8,575	11,735
Contract liabilities	474	482	474	482
Corporation tax	31	-	-	-
Social security and other taxes	3,208	2,657	2,997	2,657
Amounts payable to group undertakings	-	-	5,272	-
Other payables	2,482	2,124	2,325	2,124
	86,802	**78,181**	**85,587**	**78,143**
Amounts falling due after more than one year				
Payments received on account	1,359	1,397	1,359	1,397
Other payables	62	62	62	62
	1,421	**1,459**	**1,421**	**1,459**

18 Lease liabilities

Group and Authority	Total £k
At 31 March 2023	**3,693**
Additions	184
Remeasurements	-
Repayments	(323)
Unwinding of discounting	34
At 31 March 2024	**3,588**
Additions	20,180
Remeasurements	(42)
Repayments	(1,067)
Unwinding of discounting	316
At 31 March 2025	**22,975**

At 31 March 2024	
Due within one year	260
Due after one year	3,328
	3,588
At 31 March 2025	
Due within one year	597
Due after one year	22,378
	22,975

A maturity analysis of lease liabilities as at 31 March is given in the table below:

Group	2025 £k	2024 £k
Undiscounted lease payments to be made after the reporting date:		
Not later than one year	1,550	294
Later than one year and not later than two years	1,533	265
Later than two years and not later than three years	1,350	231
Later than three years and not later than four years	1,350	207
Later than four years and not later than five years	1,350	207
Later than five years and not later than ten years	6,853	1,116
Later than ten years and not later than twenty years	12,750	1,548
Later than twenty years and not later than forty years	16,534	-
Total lease payments	**43,270**	**3,868**
Less: Interest element	(20,295)	(280)
Total present value of obligations	**22,975**	**3,588**

19 Provisions for liabilities and charges

Group	Site restoration £k	Restructuring £k	Other £k	Total £k
At 31 March 2023	**762,518**	**32,039**	**7,758**	**802,315**
Unwinding of discounting	9,371	487	2	9,860
Provisions utilised in the year	(28,513)	(3,278)	(2,187)	(33,978)
Provisions not required written back	-	-	(28)	(28)
Increase/(decrease) in provision in the year	74,522	(1,013)	789	74,298
Changes in price levels	(19,138)	2,111	33	(16,994)
Discount charge	(51,103)	(1,262)	-	(52,365)
At 31 March 2024	**747,657**	**29,084**	**6,367**	**783,108**
Unwinding of discounting	16,355	629	4	16,988
Provisions utilised in the year	(47,344)	(3,296)	(1,251)	(51,891)
Provisions not required written back	-	-	-	-
Increase/(decrease) in provision in the year	57,443	(815)	1,896	58,524
Changes in price levels	(3,774)	501	8	(3,265)
Discount charge	(1,002)	70	-	(932)
At 31 March 2025	**769,335**	**26,173**	**7,024**	**802,532**
At 31 March 2024				
Non-current	694,391	25,683	4,344	724,418
Current	53,266	3,401	2,023	58,690
	747,657	**29,084**	**6,367**	**783,108**
At 31 March 2025				
Non-current	712,835	22,909	4,196	739,940
Current	56,500	3,264	2,828	62,592
	769,335	**26,173**	**7,024**	**802,532**

19.1 Site restoration provision

The site restoration provision represents the estimated costs of decommissioning the Joint European Torus (JET) and associated facilities at UKAEA's Culham site, including the storage, processing and eventual disposal of radioactive wastes.

JET ceased scientific operations in December 2023. It is the responsibility of UKAEA to oversee the repurposing of the part of the Culham site on which JET is located. Where necessary, UKAEA work with the Nuclear Decommissioning Authority (or its authorised parties), as the body responsible for the disposal of intermediate level radioactive waste (ILW). No part of JET is expected to become high level radioactive waste (HLW).

Calculation of the liabilities is based on the technical assessments of the processes and methods likely to be used in the future to carry out the work. Estimates are derived from the latest technical knowledge and commercial information available, considering current legislation, regulations and Government policy. Summary figures are built up by aggregating detailed estimates for individual liabilities. Allowance is also made for infrastructure costs, which are an appropriate share of site running costs and other overhead costs attributable to plant and buildings. The calculation is reassessed annually.

The best estimate of the cost of dealing with the liabilities at 31 March 2025 is discounted to the reporting date at inflation and nominal (discount) rates advised by HM Treasury. The rates are set out below:

General provisions			2025	2024
Nominal rates	Short-term	(up to and including 5 years)	4.03%	4.26%
	Medium-term	(between 6 and 10 years)	4.07%	4.03%
	Long-term	(between 11 and 40 years)	4.81%	4.72%
	Very long-term	(41 or more years)	4.55%	4.40%
Inflation rates	Year 1		2.60%	3.60%
	Year 2		2.30%	1.80%
	Into perpetuity		2.00%	2.00%

Cash flows which occur during the first year are assumed to be at present value and are not discounted or inflated.

The unwinding of discounting in the year of £16,355k (2024: £9,371k) is the change in the provision from unwinding the previous year's estimated forward cash flows at the same rate as was used the previous year but bringing all the cash flows forward by one year.
Changes in price levels of £(3,774)k (2024: £(19,138)k) is the change in provision arising from changes in inflation rates. This is the difference between the current year's estimated forward cash flows, discounted using last year's discount rates, inflated using this year's inflation rates and the same cash flows inflated using last year's inflation rates.
The discount charge for the year of £(1,002)k (2024: £(51,103)k) represents the effect of changes in the nominal discount rates as advised by HM Treasury in comparison to prior year rates. This is the difference between the current year's estimated, inflated, forward cash flows discounted at the current year's nominal rates and the same cash flows discounted at the previous year's nominal rates; this plus the changes in price levels gives the total change in liability due to changes in real discount rates.

The analysis of expected timing of discounted cash flows is as follows:

	Group and Authority 2025 £k	2024 £k
Not later than one year	56,500	53,266
Later than one year and not later than five years	292,646	268,862
Later than five years and not later than ten years	235,528	228,441
Later than ten years and not later than twenty years	184,661	197,088
	769,335	**747,657**

19.1 Site restoration provision continued

The real terms discount rate is sensitive to changes in inflation and nominal discount rates, as illustrated below:

	Group and Authority 2025				
		Inflation rates		Nominal discount rates	
	Current rates £k	0.5% increase £k	0.5% decrease £k	0.5% decrease £k	0.5% increase £k
Not later than one year	56,500	56,500	56,500	56,500	56,500
Later than one year and not later than five years	292,646	296,237	289,090	296,195	289,165
Later than five years and not later than ten years	235,528	243,540	227,753	243,427	227,932
Later than ten years and not later than twenty years	184,661	196,281	173,690	196,025	174,018
	769,335	**792,558**	**747,033**	**792,147**	**747,615**

The best estimate of the undiscounted cost of dealing with the liabilities is £886,725k (2024: £864,212k). The best estimate of the discounted cost is £769,335k (2024: £747,657k).

	P50 - 50% chance of actual costs being higher or lower	P80 - 80% chance of actual costs being lower
	£k	£k
Undiscounted costs	886,725	1,114,327
Discounted costs	**769,335**	**966,807**

The best estimate (P50) value is supported by a statistical analysis of cost and estimation uncertainties, along with other discrete risks.

A letter issued by the then Secretary of State for Energy in 1986 stated that the Government was prepared to continue to accept responsibility in principle for those costs which UKAEA incurs in treating and disposing of nuclear wastes and in decommissioning plant arising from:

(i) programmes carried out by UKAEA and its predecessors prior to 1 April 1986; and
(ii) programme agreement work undertaken for BEIS (the predecessor to DESNZ) and BEIS's predecessors after 1 April 1986.

These assurances have been reconfirmed by DESNZ. On the basis of these assurances a matching receivable is included in the Statement of financial position.

19.2 Restructuring provisions

The restructuring provisions represent termination benefits payable under early retirement arrangements to employees who had retired early, or had accepted early retirement, before 31 March 2019. These benefits continue at least until the date at which the employee would have reached normal retirement age, and in many cases part of the benefit is payable for life. The restructuring provisions are discounted to the reporting date at the discount rate for pension liabilities advised by HMT, which is 2.40% in 2024/25 (2024: 2.45%). The undiscounted cost of the Group's restructuring provisions is £29,966k (2024: £33,617k) and the benefits are estimated to be payable over a period up to 27 years.

The analysis of the expected timing of discounted cash flows is as follows:

	Group and Authority	
	2025 £k	2024 £k
Not later than one year	3,264	3,401
Later than one year and not later than five years	10,142	11,017
Later than five years and not later than ten years	7,711	8,553
Later than ten years and not later than twenty years	4,886	5,846
Later than twenty years	170	267
	26,173	**29,084**

Part of the expenditure required to settle the restructuring liabilities will be reimbursed by other parties as follows:

(i) Lump sums paid to employees on early retirement are refundable to the Group from the appropriate pension scheme at or after the date on which the individual concerned would have reached normal retirement age.
(ii) Assurances covering restructuring provisions made before 1 April 2004 have been reconfirmed by DESNZ, and expenditure related to these provisions is reimbursed by DESNZ.

On the basis of these reimbursement arrangements, receivables of £19,353k (2024: £22,000k) have been included in the Statement of financial position.

19.3 Other provisions

UKAEA has made provision of £1,806k (2024: £1,757k) for the eventual decommissioning of the MRF at its Culham site.

The remaining provisions mainly comprise unfunded retirement benefit obligations and claims relating to industrial-related injuries.

20 Deferred income

	Group and Authority	
	2025 £k	2024 £k
At 1 April	13,625	13,945
Deferred income received	-	693
Released to Statement of comprehensive net income	(1,133)	(1,013)
At 31 March	**12,492**	**13,625**

The majority of UKAEA's deferred income relates to capital grants for the RACE building and for the purchase of equipment for RACE, Fusion Technology, and the Materials Research Facility.

21 Deferred income tax liabilities

Group and Authority

	Investment property £k	Land and buildings £k	Total £k
Deferred tax liability			
At 31 March 2023	**11,691**	**18,593**	**30,284**
Movements during 2023/24:			
Charged/(credited) to Statement of comprehensive net income:			
- Revaluation	660	-	660
- Change in tax rate	-	-	-
Charged/(credited) directly to taxpayers' equity:			
- Revaluation	-	(516)	(516)
- Change in tax rate	-	-	-
At 31 March 2024	**12,351**	**18,077**	**30,428**
Movements during 2024/25:			
Charged/(credited) to Statement of comprehensive net income:			
- Revaluation	1,717	-	1,717
- Change in tax rate	-	-	-
Charged/(credited) directly to taxpayers' equity:			
- Revaluation	-	125	125
- Change in tax rate	-	-	-
At 31 March 2025	**14,068**	**18,202**	**32,270**

Deferred tax asset	
At 31 March 2024	**444**
Increase/(decrease) in deferred tax asset	153
At 31 March 2025	**597**

Net deferred tax liability	
At 31 March 2024	**29,984**
At 31 March 2025	**31,673**

Deferred tax liability

UKAEA's deferred tax provision has been calculated at 25%.

Movements in the deferred tax provision relating to investment property are charged or credited to the Statement of comprehensive net income in arriving at the profit or loss for the year. Movements in the deferred tax provision relating to revaluation of land and buildings are charged or credited to the revaluation reserve.

Deferred tax asset

Deferred income tax losses are recognised for tax depreciation and tax loss carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable.

UKAEA has recognised a deferred income tax asset of £598k (2024: £444k) in respect of RDEC set-off amounts that can be carried forward against future taxable income.

The deferred tax asset has been netted off against UKAEA's deferred tax liability in the Accounts as it fulfils the conditions for offsetting within IAS 12.

22 Related party transactions

UKAEA is an NDPB sponsored by DESNZ. DESNZ is regarded as a related party.

During the year the Group had various transactions which were collectively material with DESNZ and with UKRI (an entity for which DSIT is regarded as the responsible department). UKRI (STFC) is UKAEA's partner in the Harwell Science and Innovation Campus Public Sector Limited Partnership (Note 15).

No Board member, key manager or other related party has undertaken any material transactions with the Group during the year, except for remuneration as disclosed in the Remuneration and staff report.

23 Events after the reporting date

In accordance with the requirements of IAS10 'Events After the Reporting Period', post Statement of financial position events are considered up to the date on which the Accounts are authorised for issue. This is interpreted as being the date of the Certificate Report of the Comptroller and Auditor General.

24 Commitments

Expenditure contracted for at the reporting date but not recognised in the financial statements comprised capital commitments £26.2m (2024: £40.1m), which related mainly to assets in course of construction. There were no further financial commitments under non-cancellable contracts.

25 Operating leases - lessor rentals

UKAEA leases its investment property with lease terms of between 1.4 and 99 years. The leases contain market review clauses in the event that the lessee exercises the option to renew. The lessee does not have an option to purchase the property at the expiry of the lease period. UKAEA has classified these leases as operating leases because they do not transfer substantially all of the risks and rewards incidental to the ownership of the assets. UKIFS and AEAIL are not lessors.

Operating leases:

Undiscounted lease payments to be received after the reporting date are as follows:

	2025 £k	2024 £k
Not later than one year	2,001	2,458
Later than one year and not later than two years	1,933	1,891
Later than two years and not later than three years	1,520	1,332
Later than three years and not later than four years	1,118	904
Later than four years and not later than five years	896	712
Later than five years and not later than ten years	2,814	2,759
Later than ten years and not later than twenty years	5,556	5,193
Later than twenty years and not later than forty years	9,650	9,720
Later than forty years and not later than sixty years	9,000	9,000
Later than sixty years and not later than eighty years	7,433	7,883
	41,921	**41,852**

26 Contingent liabilities

Contingent liabilities represent potential future cash outflows which are either not probable or cannot be measured reliably. UKAEA has been audited on behalf of EUROfusion for the years 2014-2022 inclusive. The audit concluded in February 2025. The results of the audit are unknown but there is a potential obligation for funding to be repaid.

27 Financial risk management

Due to the nature of its activities, the Group is not exposed to the same degree of financial risk as that faced by other business entities. Financial instruments play a much more limited role in creating or changing risk and generally financial assets and liabilities are generated from day-to-day operational activities and not held to change the risks facing the Group in undertaking its activities. While the Group has significant financial liabilities relating to decommissioning and restructuring, most of the risks attached to these liabilities do not rest with the Group as they are broadly matched by reimbursement assets.

(a) Foreign exchange risk

Foreign exchange risk arises when commercial transactions or recognised assets or liabilities are denominated in a currency that is not the Group's functional currency. The Group operates internationally and is exposed to minor foreign exchange risk arising from various currency exposures, primarily with respect to the Euro.

(b) Interest rate risk

As the Group has no borrowings or significant interest-bearing assets, the Group's income and operating cash flows are substantially independent of changes in market interest rates. Cash balances on deposit are held in highly rated fixed term deposits and the exposure to interest rate risk is minimal and appropriately managed.

(c) Credit risk

The Group's income is received primarily from public sector bodies in the UK and the exposure to credit risk is therefore considered to be low.

(d) Liquidity risk

The Group is primarily financed by income from public sector bodies in the UK. The Group has a facility to request temporary working capital funding from DESNZ should the need arise.

During 2024/25, the statutory borrowing limit set by Section 3 of the Atomic Energy Authority Act 1986 as amended by The United Kingdom Atomic Energy Authority (Limit on Borrowing) Order 1991 remained at £200m. There were no borrowings by UKAEA during the current or previous year.

LIST OF ABBREVIATIONS

AEAIL	AEA Insurance Ltd
AI	Artificial Intelligence
AO	Accounting Officer
ARAC	Audit and Risk Assurance Committee
AVC	Additional Voluntary Contribution
BD	Business Development
BEIS	Former Department for Business, Energy and
CCFE	Culham Centre for Fusion Energy
CDM	Construction Design and Management
CDO	Chief Development Officer
CEO	Chief Executive Officer
CETV	Cash Equivalent Transfer Value
CFO	Chief Financial Officer
CFS	Commonwealth Fusion Systems, spun out from MIT
CHIMERA	Combined Heating and Magnetic Research Apparatus
COO	Chief Operating Officer
CPM	Corporate Performance Measure
CPS	Combined Pension Scheme
CRC	Carbon Reduction Commitment Energy Efficiency Scheme
DEMO	European DEMOnstration fusion power plant
DESNZ	Department for Energy Security and Net Zero
DSHZ	Departmental Security Health Check
DT	Deuterium-Tritium campaigns/fuel mix
EDI	Equality, Diversity, and Inclusion
EDI&W	Equality, Diversity, Inclusion, and Welfare
EPSRC	Engineering and Physical Sciences Research Council
ERM	Enterprise Risk Management
ESS	European Spallation Source
ExCo	Executive Committee
F4E	Fusion for Energy
FIB	Focused Ion Beam imager/mill
FIP	Fusion Industry Programme
FOI	Freedom Of Information
FOSTER	Fusion Opportunities in Skills, Training, Education & Research
FReM	Government Financial Reporting Manual
FSA	Fusion Safety Advisory group
FTE	Full Time Equivalent
FTF	Fusion Technology Facilities
GGC	Greening Government Commitment
H3AT	Hydrogen-3 (tritium) Advanced Technology facility
HERA	Hydrogen Experiment for Real-time Analysis
HM	His Majesty's
HM Treasury	His Majesty's Treasury
HPC	High Performance Computing
HSIC	Harwell Science and Innovation Campus Ltd partnership
HSIC PubSP	HSIC Public Sector Limited Partnership
IAEA	International Atomic Energy Authority
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
ILW	Intermediate Level Waste
IO	ITER Organisation
IP	Intellectual Property
ITER	Next generation international experimental fusion reactor
JDR	JET Decommissioning and Repurposing
JET	Joint European Torus
JV	Harwell Joint Venture
LIBRTI	Lithium Breeding Tritium Innovation programme
MAST-U	Mega Ampere Spherical Tokamak Upgrade
MIT	Massachusetts Institute of Technology
ML	Machine Learning
MRF	Material Research Facility
NAO	National Audit Office
NDA	Nuclear Decommissioning Authority
NDPB	Non-Departmental Public Body
OAS	Oxfordshire Advanced Skills apprentice training centre
ONS	Office of National Statistics
ORI	Oxford Robotics Institute
OSR	Radioactive and Out of Scope of Regulations
PAO	Principal Accounting Officer
PBIAA	Place Based Impact Accelerator Account
PNISS	Principal Non-Industrial Superannuation Scheme
PPMO	Programme and Project Management Office
PPSS	Protected Persons Superannuation Scheme
PSRE	Public Sector Research Establishment
QSHE	Quality, Safety, Health, and Environment
R&D	Research and Development
R&T	Research and Training
RACE	Remote Applications in Challenging Environments facility
RAI	Robotics and Artificial Intelligence
RAICo	Robotics and Artificial Intelligence Collaboration
RAIN	Robotics and Artificial Intelligence in Nuclear
RDEC	Research and Development Expenditure Credit
SPPSP	Shift Pay Pension Savings Plan
SRO	Senior Responsible Officer
STEM	Science, Technology, Engineering, and Mathematics
STEP	Spherical Tokamak for Energy Production
STFC	Science and Technology Facilities Council
STORM	Spherical Tokamak Optimisation for Remote Maintenance
TCV	Tokamak à Configuration Variable
TOM	Target Operating Model
UKAEA	UK Atomic Energy Authority
UKIFS	UK Industrial Fusion Solutions Ltd
UKRI	UK Research and Innovation
WB	West Burton