

# **Invitation to Express an Interest**

# Strategic Investment & Development for Energy & AI (STRIDE)

Reference: T/ED029/25

Date of issue: 27th August 2025

# **Change Management Log**

Version	Change	Date
V2	Addition of Change Management Log.  Deletion of "c" before 10 acres of land" in the second paragraph under the heading "First Plot Development".  Addition of "a minimum of" before "10 acres of land" in the second paragraph under the heading "First Plot Development".	27 <sup>th</sup> August 25
	Addition of a new paragraph at the end of the section "First Plot Development".	
V1	First issue.	12 <sup>th</sup> August 25

#### Introduction

The UK Atomic Energy Authority (UKAEA), based in South Oxfordshire, is a world leading research organisation. UKAEA is an executive non-departmental public body sponsored by the Department for Energy Security and Net Zero leading research in fusion and related technologies, with the aim of positioning the UK as a leader in sustainable fusion energy.

This Expression of Interest (EOI) document is a continuation of the recent market engagement undertaken to gain further insight into the existing market and supply chain and to assess the interest of potential suppliers in their participation in future stages of this opportunity.

Participation in this EOI is a prerequisite to be considered for inclusion in subsequent stages.

This document outlines the requirements for expressing an interest, along with any additional information regarding the timeline and scope for this opportunity.

#### What is STRIDE

Our vision is to further develop the UKAEA Culham Campus as a globally recognised centre of excellence for fusion, through a bold and collaborative partnership between the public sector and a strategic investment partner. At the heart of STRIDE is the creation of a commercially led technology campus, anchored by UKAEA's world leading fusion research programme. The designation of Culham Campus as the UK's first AI Growth Zone will accelerate the development of the UK's fusion cluster, unlocking high-value economic growth, and sustainable, technology-driven transformation.

#### **Background**

A core component of UKAEA's strategic aims is to develop a vibrant cluster of fusion relevant organisations and AI / HPC compute capability to enable growth of the campus and to help realise UK fusion strategy of both delivering fusion energy; creating a vibrant new industry sector and supporting the wider Government research aims for NetZero.

The scale of the opportunity at the campus will inevitably require private sector expertise and funding to support the development of UK's fusion cluster at the pace and scale required.

Through the creation of a such a partnership with an investor, UKAEA anticipates further growth and renewal of the campus and the development of an industry leading cluster as well as supporting its own fusion endeavours.

#### Scope

This expression of interest now seeks to identify and secure an appropriate commercial and legal arrangement in the form of a strategic investment partnership agreement with a private sector investment partner.

UKAEA shall seek to appoint a long-term investment partner to initially develop a commercial masterplan and delivery strategy for Culham Campus based on UKAEA's goals and a shared vision between UKAEA and the investment partner.

Thereafter the investment partner will be responsible for securing funding to facilitate the delivery of development, redevelopment, refurbishment and repurposing for the growth of the campus in line with the masterplan and delivery strategy on an individual plot basis.

## **First Plot Development**

As a result of market feedback received via pre-market engagement, the first plot that will be offered to the investment partner for development will be in support of the Government's Al Opportunities Action Plan, leading to Culham Campus being identified as the first Al Growth Zone.

UKAEA intends to release a minimum of 10 acres of land and its reconfigured power connections as the first investment opportunity. The high voltage infrastructure provides connections to both 132kV and 400kV electricity grids with available spare capacity to initially deliver approximately 100MW of steady state, dual resilient power for the delivery of a mission-led AI data centre,

potentially adjacent to other use cases (either Government led or commercial) – ideally with a focus upon driving near term economic growth and longer-term economic opportunities towards realisation of UK Net Zero. UKAEA expects that a portion of this facility (up to 20MW, or equivalent services) would be available on demand for fusion and broader R&D research.

UKAEA is continuing to actively explore the possibility of expanding the acreage of this first development plot(s) and in doing so allow proposals for a >100MW AI data centre (potentially up to a maximum limit of 500MW). To this end, the invitation to participate documents following the expression of interest process will include a final set of parameters within which suppliers will be permitted to create proposals.

#### **Additional Information**

Market Engagement activities released by UKAEA previously are:

- PIN 2024/S 000-021923 dated 16<sup>th</sup> July 2024
- PIN 2025/S 000-001475 dated 16<sup>th</sup> January 2025
- PIN 2025/S 000-005218 dated 14<sup>th</sup> February 2025
- A market interest day was held on the 10<sup>th</sup> March following the PIN released on 14<sup>th</sup> February 2025. Following the event, a Request for Information (RFI) Questionnaire was released to all delegates and a number of informal discussions were held with those parties that responded to the RFI.

#### **Expression of Interest**

UKAEA invites potential investment partners ("participants") to express their interest in this opportunity by responding to the question set as detailed within this document. Participants that do not provide a response will not be invited to participate in further stages of the selection process. For the avoidance of doubt, this document is not an invitation to provide a bid or quotation to deliver the scope.

The content of the scope must be fully considered and the strategic investment partner, in responding to the question set, must demonstrate its capability to deliver the full scope. EOIs will be reviewed for completeness and capability. Partial responses will not be considered further, and those that cannot demonstrate full scope delivery will be rejected. Participants may be considered to attend further due diligence sessions with UKAEA in September 2025, following the review of all submissions.

If a submission fails to provide all of the required information, UKAEA will notify the participant and allow a reasonable opportunity to resubmit. If there is further failure to submit the required information within the timeframe set, UKAEA will notify its intention to disregard the submission from this exercise. The participant will not be invited to participate in any further activities.

UKAEA reserves the right to amend, cancel or withdraw from any part of this process at any point. UKAEA shall not be liable for any costs incurred by a participant in responding to this EOI or any other part of this process.

Participant responses must be submitted to <u>StrategicInvestmentPartner@ukaea.uk</u> no later than **Midday Monday 15**<sup>th</sup> **September 2025**. Responses submitted past the deadline will be rejected.

Clarifications must be sent to the above email address. These will be responded to in a timely manner.

Participants shall ensure that their submission is comprised a font size no smaller than Arial font size 11. Page limits have been stated in Appendix 1.

#### **Schedule of Activities**

This timetable is for indicative purposes only, and may be subject to change:

Activity	Date
EOI released	Tuesday 12 <sup>th</sup> August 2025

EOI response deadline	Midday Monday 15 <sup>th</sup> September 2025
Invitation to Participate released by UKAEA	October 2025

#### Freedom of Information

UKAEA is subject to the Freedom of Information (FOI) Act 2000.

As part of its duties under FOI Law, the Authority may disclose information provided by participants to anyone who makes a request. UKAEA may also include information provided by participants in its Publication Scheme under the Act.

If you consider any of the information contained in your response should not be disclosed because of its commercial sensitivity, then you should highlight the information that you consider should not be disclosed (in an annex to your response) together with your reasons for considering it to be commercially sensitive and provide an estimate of the period of time during which you believe that such information will remain commercially sensitive. Information thus highlighted should be limited to that information which is genuinely confidential and/or which would or would be likely to prejudice your commercial interests if disclosed and which may, therefore, be exempted from disclosure under FOI Law.

This process does not remove UKAEA's obligation to consider the applicability of the exemption on a case-by-case basis. In particular, the receipt of any material marked 'confidential' or equivalent by UKAEA should not be taken to mean that UKAEA accepts any duty of confidence by virtue of that marking.

# Appendix 1

Section 1: Identity			
Question Number	Question	Guidance	Information
1	What is your company's legal name?	Please provide your company's legal name.	
2	What is your company's trading name?	Please provide your company's trading name.	
3	What is your company's registered office address?	Please provide the following:  Address line 1 (including property name/number) Address line 2 Address line 3 Town County Postcode Website (if applicable).	
4	What is your company's trading address?	Please provide your company trading address, if different from your company's registered office address, and the addresses of any branch offices (if applicable).  If your company's trading address is the same as your registered office address, please answer <i>N/A</i> .	
5	Is your company registered, based and active in the UK, Channel Islands and/or Republic of Ireland?	Please answer <i>yes</i> or <i>no</i> .	
6	What are your company's contact details for enquiries for this questionnaire?	Please provide the following:  Title (Mr, Mrs, Ms, etc.) Forename Surname Job title	

		<ul> <li>E-mail</li> <li>Company e-mail</li> <li>Telephone number</li> <li>Address line 1 (including property name/number)</li> <li>Address line 2</li> <li>Address line 3</li> <li>Town</li> <li>County</li> <li>Postcode.</li> </ul>
7	What is your company type?	Please select the applicable option from the list below:  Public Limited Company Private Limited Company Limited Liability Partnership Other partnership Sole trader Third Sector Other (please specify your organisation)
8	What is your Companies House registration number or equivalent?	Please provide your company's Companies House registration number or equivalent.  If you are a company based outside the UK and registered with Companies House, please ensure that your registration number includes the prefix FC.  If you are a sole trader or not registered on Companies House, please answer <i>N/A</i> .  If your company is a charity, please provide your charity registration number.
9	What is your company's VAT registration number?	Please provide your company's VAT registration number.  If your company is not VAT registered, please answer N/A.

10	What is your company's unique tax reference (UTR)?	Please provide your company's unique tax reference (UTR).  If your company does not have a UTR, please answer N/A.
11	When was your company incorporated?	Please provide the date your company was incorporated.  If your company is not incorporated, please provide the date the business was started.
12	Is your company part of a group?	If no, please answer no.  If yes, please provide details of the group structure and legal ownership, including the following as applicable:  Name of ultimate parent company Name of immediate parent company Names of associated or group companies
13	Is your company a micro, small, or a medium-sized enterprise?	If your company is not a large company, please select the applicable option from the list below:  • Micro:  1) Fewer than 10 employees, and 2) Turnover below £1.8m or balance sheet total less than £1.8m.  • Small:  1) Fewer than 50 employees, and 2) Turnover below £9m or balance sheet total less than £9m.  • Medium:  1) Fewer than 250 employees, and 2) Turnover below £45m or balance sheet total less than £38.5m.  If your company is a large company, please answer no.

	Where an enterprise is not autonomous (e.g. it is a partner enterprise or a linked enterprise) it may be necessary to take account of the headcount, turnover and balance sheet	
	totals of other enterprises to which it has connection.	

# Section 2: Experience of Funding and Developing Science & Advanced Technology Parks

## **Purpose**

To gain assurance that the potential investment partner has the relevant experience and capability of securing funding and leading development-led investment schemes of a comparable scope, scale, and complexity at UKAEA's Culham Campus.

## **Evidence Required**

Please provide x1 (single) case study that addresses each of the items listed below (Potential Investment Partners may wish use these as section headings for the purpose of structuring their response but are under no obligation to do so if they have a preferred structure that presents the required information in a more cogent manner):

# Funding:

• Experience of raising and investing significant levels of funding (either own funds and/or externally sourced) over the long-term and delivering financial returns to investors (please quantify values and timescales).

## Master planning and viability:

- Experience of taking a long-term approach, with appropriate phasing in implementing a development vision or masterplan.
- Evidence of the delivery of a masterplan which maximised market and development potential.
- Evidence of how you secured the realisation of development and the delivery of developed assets pursuant to the masterplan.
- Experience in overcoming viability challenges in the early stages of development, including any details of supporting or enabling early adopters.

## Regional regeneration:

 Details of any retained control/ownership/ongoing interest in the developed asset – including the duration of that interest – and how this provided wider benefit for the comprehensive scheme (including the local community and/or economy).

# Community ecosystem:

- Experience of stimulating interest in the opportunity, including:
  - o attracting occupiers and translating requirements into a viable development;
  - o attracting a range of occupiers from large companies to SMEs across the science and advanced technology sectors;
  - Strategy/ies for identifying and engaging the relevant sector(s) whilst ensuring the opportunity had the broadest and deepest possible reach e.g. into lower tiers of the supply chain

 Working with strategic partners to create a shared vision (and brand) and how this was aligned with stakeholder expectations/demands for the ecosystem

#### **Customer reference:**

- Please provide contact details for a customer reference. This is a mandatory requirement and as a minimum, needs to include the following information:
  - o Name
  - o Role/Title
  - Organisation
  - Dates/Period of activity
  - o Contact points (email and phone number)
- We recognise that this information is sensitive and may be with an organisation where you have an ongoing relationship that needs to be respected and managed. You should advise us as soon as possible where this is the case so that we can agree an approach for accessing information from your customer reference site.

The case study (excluding customer reference details) must not exceed six sides of A4 in Arial font size 11. You are encouraged to be as detailed/specific as possible in your response e.g. regarding values, time periods, locations, exact sources and split of funding, names of partner/client organisations. Information you submit will be treated in the strictest of confidence and used only for the purpose of this process.

# Section 3: Experience of Developing, Building and Operating a High Power-Density Data Centre

## **Purpose**

To gain assurance that the potential Strategic Investment Partner can demonstrate the relevant experience and **capability of their partner** leading the design, build, and operation of a high-density (+80kW a rack) data centre of a comparable scope, scale, and complexity as the opportunity at UKAEA's Culham Campus.

This section should capture the experience of the partner who will deliver the development of the first business plot as an Al Data Centre, through a contractual relationship with the Strategic Investment Partner.

Where you are relying on the evidence of a delivery partner in response of this question, provide evidence of the commercial or strategic partnership you currently have in place, that you will rely upon when bidding for this opportunity.

# **Evidence Required**

Please provide x1 (single) case study that addresses each of the items listed below (Participants may wish use these as section headings for the purpose of structuring their response, but are under no obligation to do so, if they have a preferred structure that presents the required information in a more cogent manner).

#### **Deployed infrastructure:**

- Please provide quantifiable evidence of the data centres you or your supply chain development partner have delivered that are relevant to the opportunity at UKAEA's Culham Campus, and provide details of, as a minimum:
  - Number of data centre projects funded / developed of +50MW globally
    - Exact details of your role in terms of invest/fund and your supply chain partners on design and/or build and/or operate and the role(s) of other delivery partners (including any client)
    - Power density of each location (kW per rack)
    - Location(s), citing any in the UK
    - Delivery dates (start and end)
    - How if at all the data centre was part of a longer-term, UK-specific strategy for your organisation
  - o Total (precise) MW capacity delivered in each
    - Including details of any upscaling after delivery of the initial data centre (or during if relevant e.g. incorporating change)
  - o Include relevant WUE (L/kWh) information, (inc. relevant cooling topology, % non-potable water, drought contingency) and any current or intended future heat-reuse plan (inc. Indicative temperature, MWh/yr and actual/potential off takers)
  - Your experience of operating the high power-density data centre environment (80kW/rack or greater). The response must include your experience of workload types (e.g. Al Training and inference, HPC Workloads etc), experience of working with on-chip liquid cooling systems and roadmap towards higher power density racks. Provision of the system specifications and locations.
  - Your experience of providing data centre environments with enhanced levels of security suitable for UK government missions (esp. Sovereign data, IP protection etc.). Cite examples where technical solutions were designed and implemented to adhere to specific regulations (detail designs and specific accreditations) including whether it was part of critical national infrastructure (CNI)

#### **Customer reference:**

- Please provide contact details for a customer reference. This is a mandatory requirement and, as a minimum, needs to include the following information:
  - o Name
  - o Role/Title
  - Organisation
  - Dates/Period of activity
  - Contact points (email and phone number)
- We recognise that this information is sensitive and may be with an organisation where you have an ongoing relationship that needs to be respected and managed. You should advise us as soon as possible where this is the case so that we can agree an approach for accessing information from your customer reference site.

The case study (excluding customer reference details) must not exceed six sides of A4 in Arial font size 11. You are encouraged to be as detailed/specific as possible in your response e.g. regarding values, time periods, locations, exact sources and split of funding, names of partner/client organisations and technical information (location, square footage, total utility power, PUE and WUE). Information you submit will be treated in the strictest of confidence and used only for the purpose of this process.