Department for Energy Security & Net Zero

February 2026

Introduction to the Advanced Nuclear Framework

Department for Energy Security & Net Zero

Agenda

Item
Welcome and Overview of the Framework
Advanced Nuclear Business Engagement Unit
Pipeline and PRA process
Finance and Funding
National Wealth Fund
GBE-N
UKNNL
Break
Q&A Panel

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Purpose of the Framework

- Designed to **unlock privately-led** advanced nuclear projects in the UK and **support credible projects**

- Aims to make the UK **one of the best places** in the world to **develop private nuclear projects**

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Overview of the Framework

- Provides a **route to market** from proposal to deployment
- Introduces the **UK Advanced Nuclear Pipeline** and Project Readiness Assessment process
- Sets out the government's **finance and funding** support policies
- Sets out the UK's wider **enabling landscape** to support project deployment

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Scope of the Framework

In Scope

- The Framework aims to support private projects that use **advanced nuclear technologies** for civil energy purposes. This includes projects that supply energy as heat and/or electricity and where the energy is supplied to the National Grid and/or to private energy users.
- Projects must be fuelled by Uranium-235 enriched less than 20%

Out of Scope

- Offshore or floating nuclear platforms
- Civil nuclear propulsion
- Space-based reactors
- Transportable nuclear solutions
- Government is considering its position in respect to applications or technology **out of scope** and **may** expand the scope of the Framework

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Advanced Nuclear Business Engagement Unit

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Advanced Nuclear Business Engagement Unit

- A **concierge-style service** for projects to help them navigate the UK system and barriers to market

- Will act as **facilitators** for projects, helping them progress, and supporting wide-ranging **engagement with government** and other key bodies in the UK

- Any enquiries please contact: **advancednuclear@energysecurity.gov.uk**

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United Kingdom Advanced Nuclear Pipeline

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What is it?

UK ADVANCED NUCLEAR PIPELINE

- Voluntary
- A public listing of privately-led projects that DESNZ and GBE-N have assessed as sufficiently developed and credible to warrant a limited, in-principle endorsement.
- A place to find out further information and contact details for those projects.
- An open and ongoing process.

PROJECT READINESS ASSESSMENT

- A structured due diligence and engagement process.
- It is NOT a competition.
- An assessment of whether a project has considered the areas needed to deploy in the UK and the maturity of their plans and agreements to do so.
- It is NOT an assessment of the “best” project or whether we prefer one plan to another.
- A balance between detail and pace.

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What do you get on the Pipeline?

- A Statement of limited, in-principle, endorsement from DESNZ.
- Be listed on the DESNZ public Pipeline, together with key project information.
- Initial engagement on future mechanisms for Revenue Support and High Impact, Low Probability (HILP) investor risk protections.
- Coordinated engagement with the Advanced Nuclear Business Engagement Unit regarding other enabling elements of the Framework.
- Regular review.
- Agreed terms of participation.

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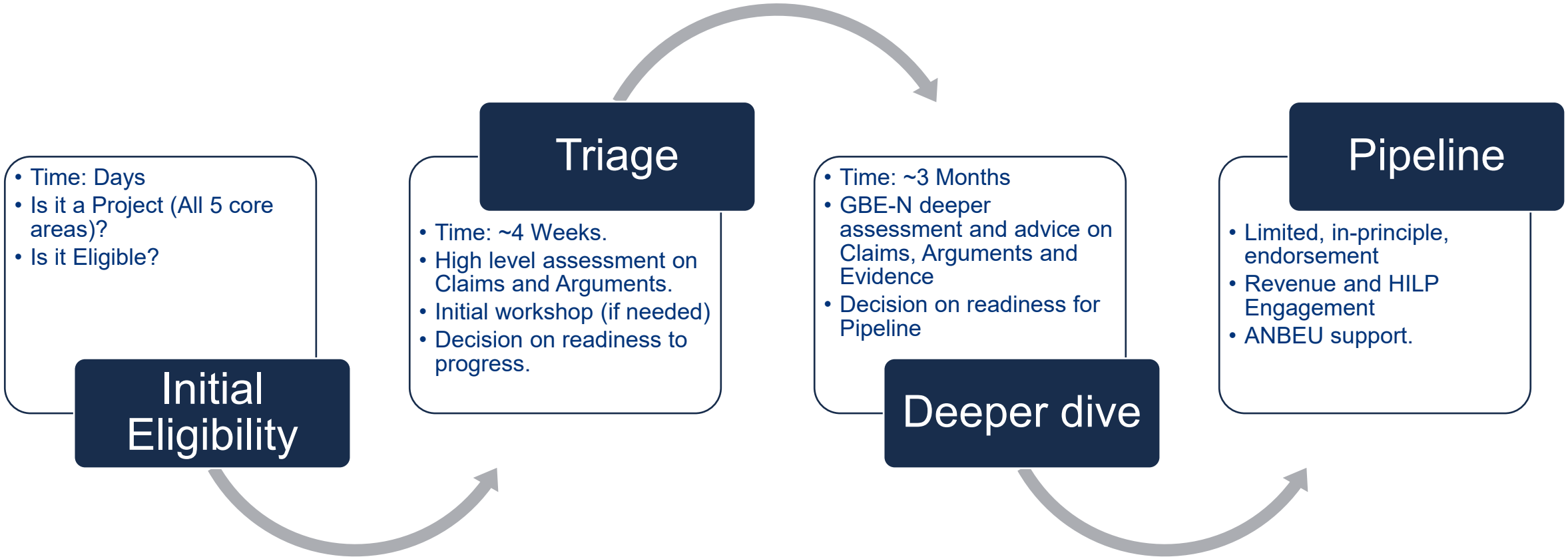
PRA timeline



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What is a Project?

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Scoring Matrix

	Triage (>1 including a 3)		**Deep Dive** (15 points)
3	More than satisfactory: **Good, or better, claims and arguments** that the project has plans and agreements in place that satisfactorily **address the criterion in a Core Area** with only **minor omissions** at most. Substantial evidence provided upon which Phase 2 assessment can be carried out.	5	Excellent: **Clear evidence** that the project has satisfactorily addressed **all** the criterion in a Core Area and has binding agreements and credible plans in place to deliver them.
		4	Good: The project has plans and agreements in place that satisfactorily address the criterion in a Core Area with a **good evidence base**, with only **minor omissions** or lack of clarity.
2	Satisfactory: **Reasonable claims and arguments** that the project has considered or has credible plans to satisfactorily address the criterion set out in a Core Area but **some omissions** are evident and **further clarification is needed**. Moderate evidence provided upon which Phase 2 assessment can be carried out.	3	Satisfactory: Reasonable evidence that the project has considered or has credible plans to satisfactorily address the criterion in a Core Area but **some omissions** are evident and **further clarification is needed**.
1	Not satisfactory: **No content and/or weak claims and argument** that the project has considered or has credible plans for the criterion set out in a Core Area. Major omissions are evident. No or limited evidence provided upon which GBE-N can carry out a Phase 2 assessment.	2	Partially unsatisfactory: There is little evidence that the project has considered or has credible plans for satisfactorily addressing the criterion in a Core Area and **some omissions** are evident. **Much more clarification is needed.**
		1	Not satisfactory: **No, or insufficient, evidence** that the project has considered or has credible plans for the criterion set out. **Major omissions are evident**.

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Technology & Supply Chain

Reactor

- Design
- Operation or design status
- Regulatory status
- Provider engagement
- Fit

Fuel

- Fuel spec
- Availability
- Compliance with UK civil fuel use.
- Waste management.

Supply Chain

- Component status
- Availability and market
- Uk supply chain resilience.

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Developer Capability

Developer Structure

- Developer organisation, experience and status.
- Needs assessment.

EPC Plan

- Key organisations.
- Planning for EPC elements

Timeline and risks

- Milestones and timeline
- Dependencies, risks and opportunities.
- Resource assessments and plans for lifetime.

Workforce planning

- Capability and capacity needs and availability.
- Mitigations for gaps.
- Skills profile and availability.
- Recruitment and training plans.

Social Value

- Community engagement.
- Environmental sustainability.
- Economic inclusion, health and wellbeing.
- Legacy impacts.
- Sustainable, diverse inclusive opportunities.

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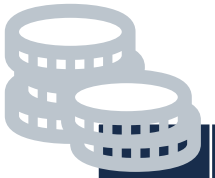
Finance, Funding and Investment.



Costs

- Project cost breakdown.
- Assumptions, evidence and uncertainty

Finance structure & time

- Finance plans.
- Economic risk.
- Availability of finance
- Expectations and mitigations for Public funding.

Funding & revenue

- Plans, agreements & assumptions for lifetime revenue.
- Expectations and mitigations for Public funding.

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Siting Plan

Preferred Site(s)

- Location, location locations…
- Ownership and engagement.
- Other rights, options or proposals.
- Site suitability
- Risk mitigation
- Community engagement and local plans.

Regulatory, planning & approvals

- Regulatory status of site(s)
- Planning status & plans
- Other significant approvals.

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Operation and End Users.

Operator Structure

- Operator status and experience.
- Agreements and engagement.
- Operational needs assessment.

Outputs, users & markets

- Users and outputs.
- Integration with energy system.
- User markets.
- Contract structures & RAID.
- User locations.

Waste and Decommissioning

- Project waste assessments and plans.
- Funded decommissioning plans.
- Long term site plans.

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Questions for you to think about.

Is the balance of detail and pace in the right place?

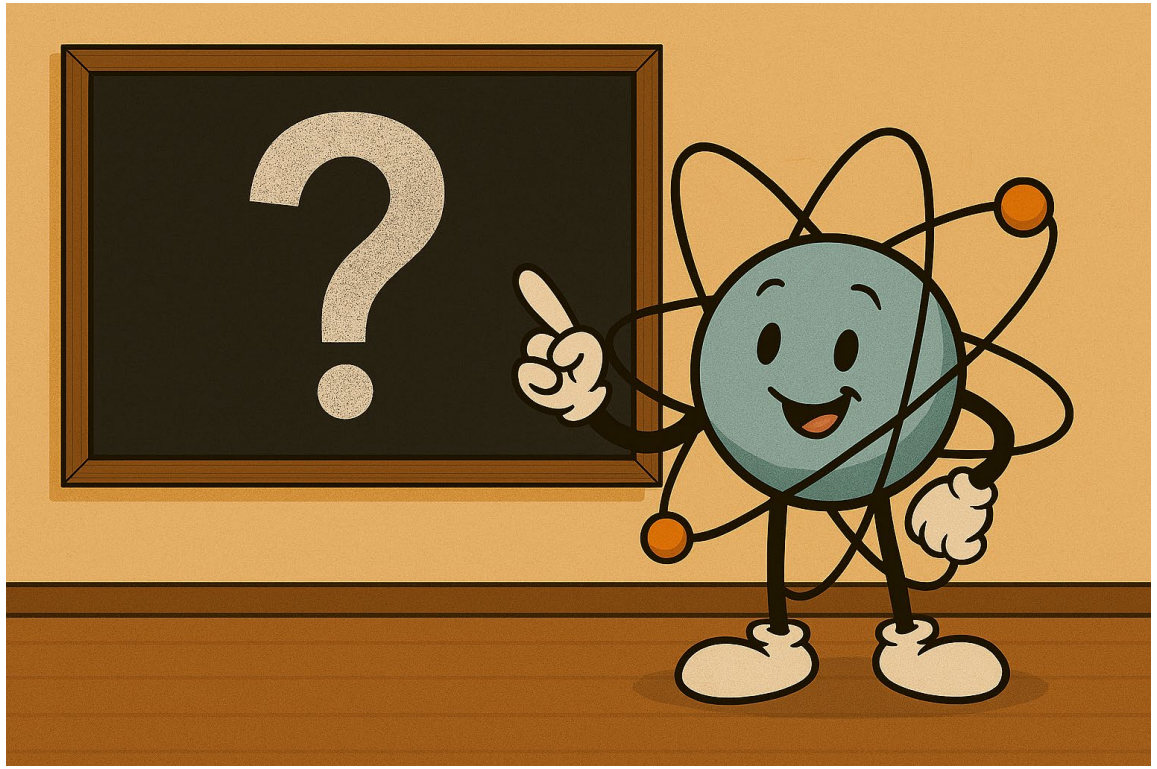
Are the core areas and criteria appropriate for projects to consider? Have we missed anything?

Is the process sufficiently fair, open and repeatable?

If resources became overwhelmed and we had to charge for elements of the process, what would your expectations be in terms of:

- Elements to charge (Technical and other advice?)
- Quantum of costs?
- Outputs?

Anything else you want to tell us for future consideration?



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Finance and Funding

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Finance and Funding

- Pipeline projects will have the opportunity to engage government on support that the market cannot efficiently provide.
- This includes engagement on revenue support mechanisms, such as a Contract for Difference, and protections against high-impact, low-probability investor risks.
- Any government “offer” would be subject to Value for Money and full government approvals.
- Developers can also seek investment from our colleagues at the National Wealth Fund.

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National Wealth Fund

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National Wealth Fund

- NWF will engage with commercially viable projects in the Advanced Nuclear Framework to understand the financing needs and the role NWF can play to enable and mobilise private capital.
- NWF has a range of financing tool kits at its disposal through debt, equity, and hybrid instruments to support commercially viable projects and attract private investment.
- All proposals undergo rigorous due diligence, governance, and commercial viability assessments.
- NWF operates independently of ministers and must meet its statutory mandate.
- You can read NWF's recent strategy which outlines their priorities and investment principles on NWF's website: national-wealth-fund-five-year-strategic-plan.pdf

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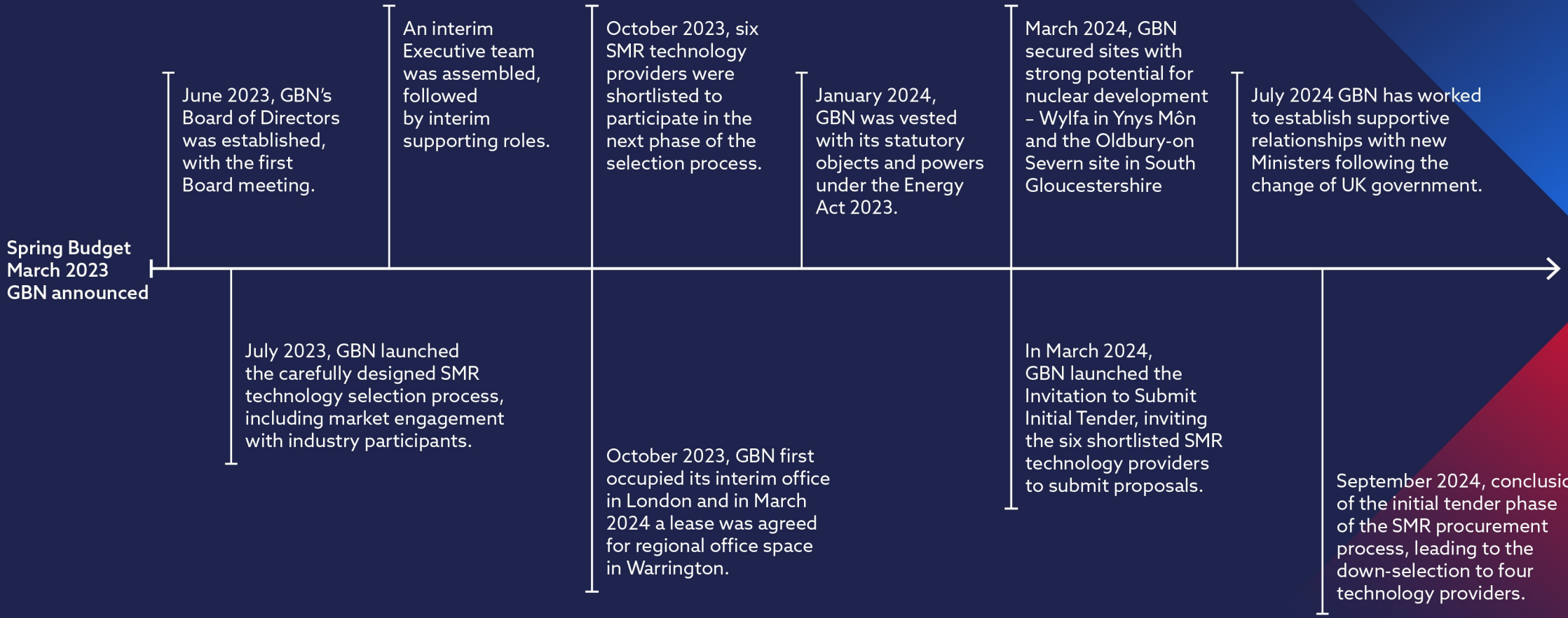
Great British Energy – Nuclear

We are HMG Civil Nuclear Delivery Body

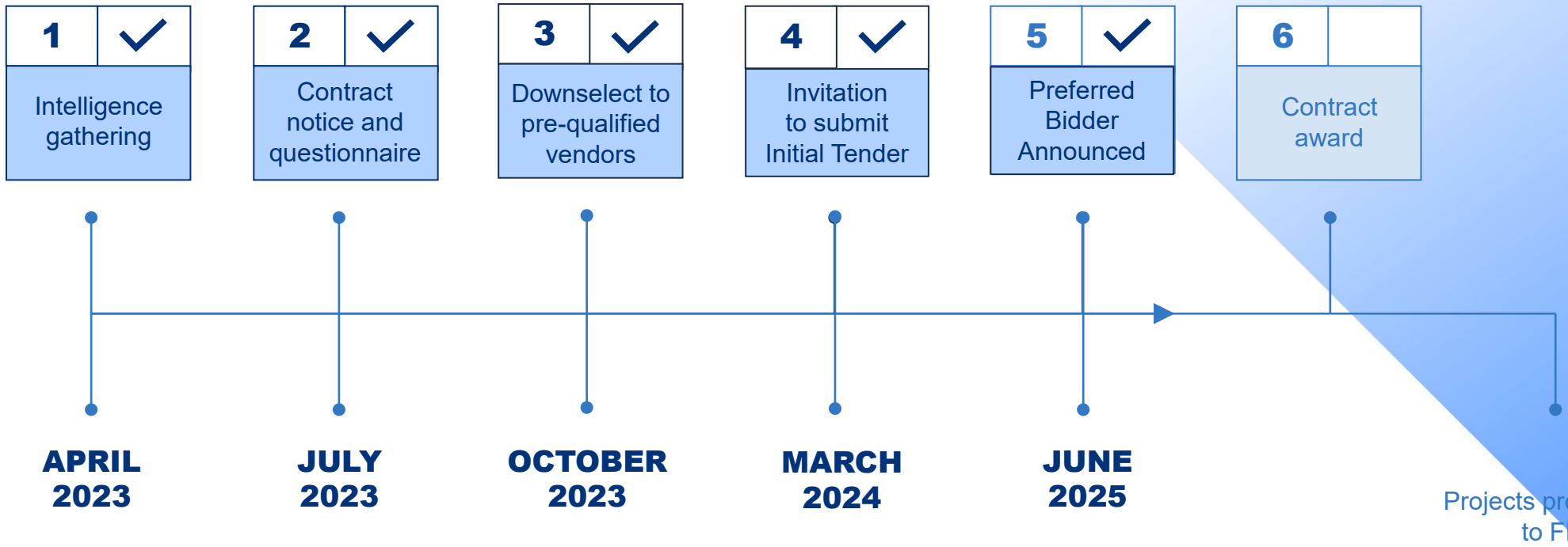
1 Advise

2 Enable

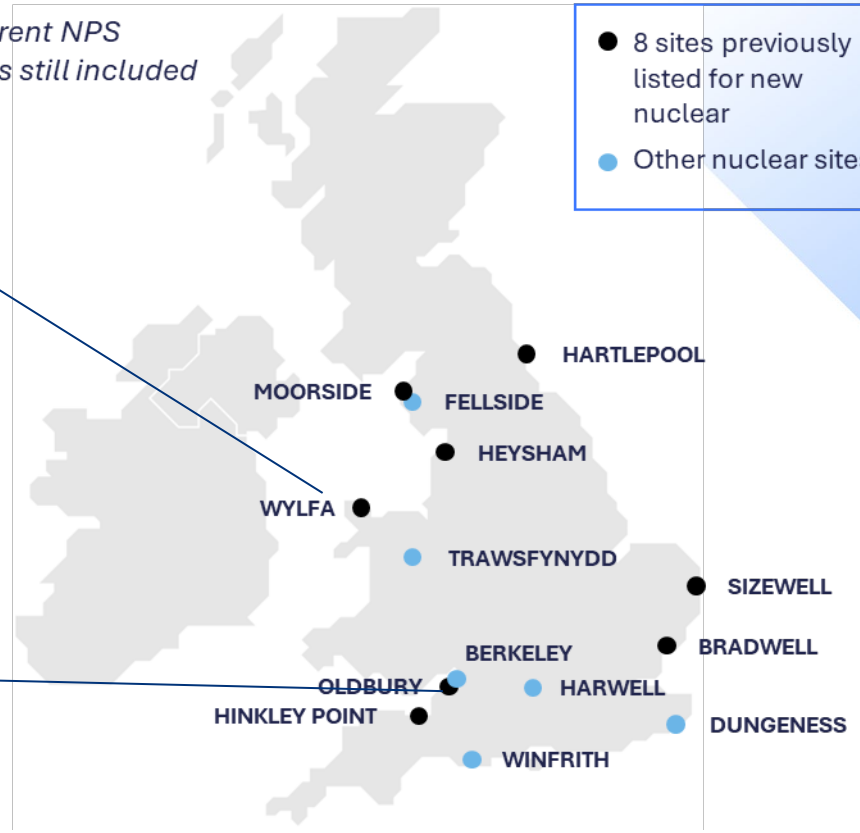
3 Deliver


Spring Budget March 2023 GBN announced
June 2023, GBN's Board of Directors was established, with the first Board meeting.
An interim Executive team was assembled, followed by interim supporting roles.
October 2023, six SMR technology providers were shortlisted to participate in the next phase of the selection process.
January 2024, GBN was vested with its statutory objects and powers under the Energy Act 2023.
March 2024, GBN secured sites with strong potential for nuclear development – Wylfa in Ynys Môn and the Oldbury-on Severn site in South Gloucestershire
July 2024 GBN has worked to establish supportive relationships with new Ministers following the change of UK government.
July 2023, GBN launched the carefully designed SMR technology selection process, including market engagement with industry participants.
October 2023, GBN first occupied its interim office in London and in March 2024 a lease was agreed for regional office space in Warrington.
In March 2024, GBN launched the Invitation to Submit Initial Tender, inviting the six shortlisted SMR technology providers to submit proposals.
September 2024, conclusion of the initial tender phase of the SMR procurement process, leading to the down-selection to four technology providers.

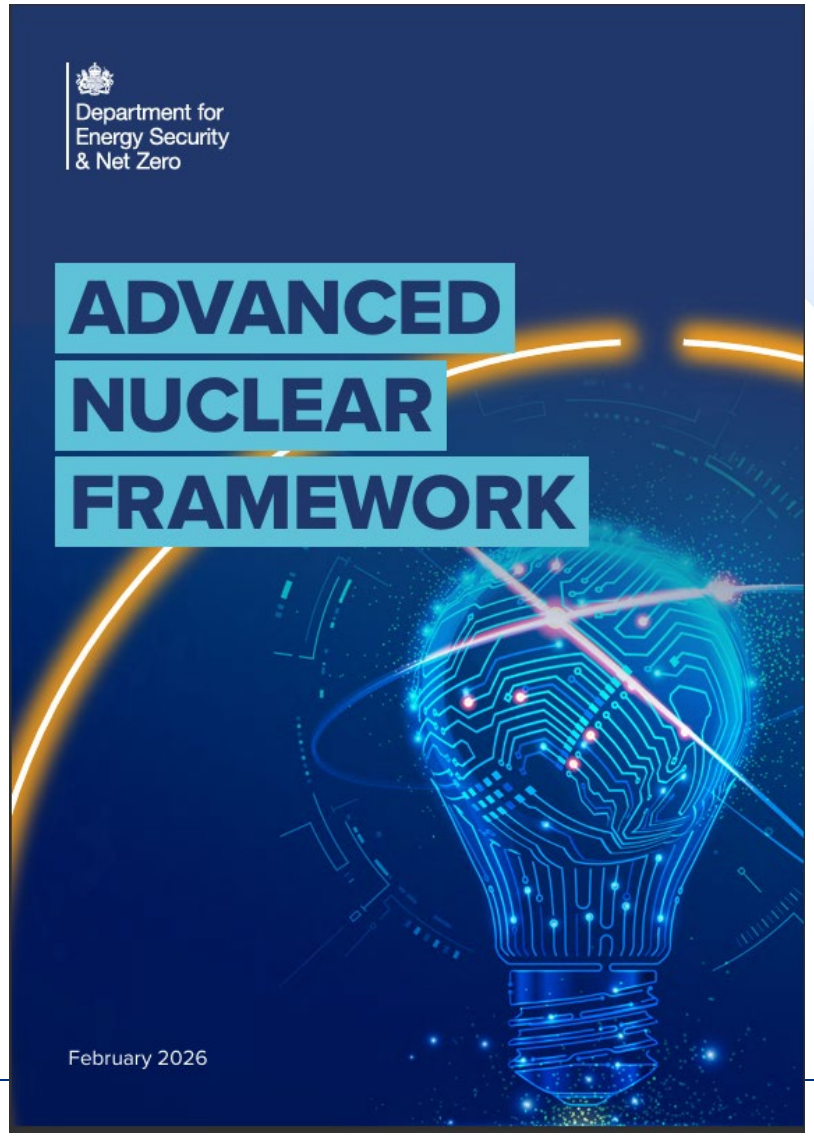
Small Modular Reactors: Technical Selection



GBE-N Sites


Current NPS
sites still included
8 sites previously listed for new nuclear
Other nuclear sites
HARTLEPOOL
MOORSIDE
FELLSIDE
HEYSHAM
WYLFA
TRAWSFYNYDD
SIZEWELL
BERKELEY
BRADWELL
OLDBURY
HARWELL
HINKLEY POINT
DUNGENESS
WINFRITH

Great British Energy – Nuclear’s role



United Kingdom National Nuclear Laboratory

UKNNL and the Advanced Nuclear Framework

Our mission is to enable and deliver nuclear outcomes for government, and to support growth of the UK nuclear sector

United Kingdom National Nuclear Laboratory

To achieve our mission we will:

- Be a custodian of national capabilities and infrastructure critical for national and energy security
- Deliver practical nuclear research and enable decommissioning programmes
- Become government's lead civil technical and strategic advisor for nuclear fuels and nuclear materials
- Provide expertise and facilities to be a platform for the private sector to accelerate the deployment of technology to market
- Carry out research to continue securing the safe operation of nuclear plants domestically and internationally
- Champion and nurture advanced nuclear skills

How can UKNNL Support Developers?

United Kingdom National Nuclear Laboratory

- Specialist facilities including fuel fabrication, materials performance, access to irradiation testing, and post-irradiation examination laboratories.
- Technical services and consultancy covering reactor design, fuel cycle analysis, safety case development, materials science, and waste management expertise, including dedicated laboratory facilities.
- Collaborative research and development programmes enabling joint projects with industry and academia.
- Regulatory and licensing support drawing on UKNNL's experience to help developers meet requirements
- Future PIE requirements

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Closing remarks and thank you

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advancednuclear@energysecurity.gov.uk