



Department for
Business, Energy
& Industrial Strategy

UK Civil Nuclear Policy

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Department for Business, Energy & Industrial Strategy


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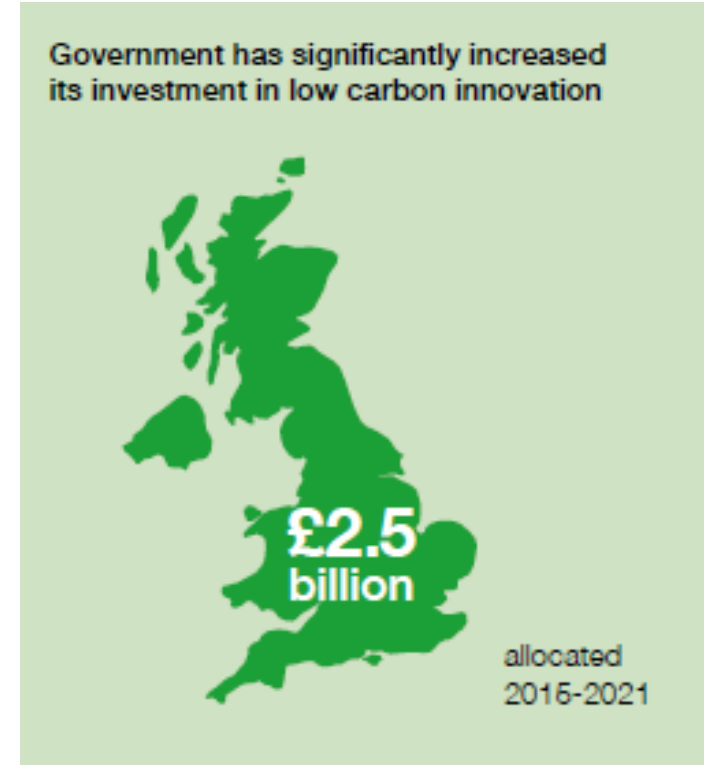


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Clean Growth Strategy

- Published October 2017
- Sets out government policies and proposals for decarbonising the UK economy:
 - Accelerating clean growth
 - Improving Business and Industry Efficiency (25% of UK Emissions)
 - Improving Our Homes (13% of UK Emissions);
 - Accelerating the Shift to Low Carbon Transport (24% of UK Emissions)
 - **Delivering Clean, Smart, Flexible Power** (21% of UK Emissions);
 - Enhancing the Benefits and Value of Our Natural Resources (15% of UK Emissions);
 - Leading in the Public Sector (2% of UK Emissions);
 - Government Leadership in Driving Clean Growth
- The Strategy has a strong focus on innovation to bring down the cost of clean technologies





Industrial Strategy

- Published 27 November 2017
- Sets out **Five Foundations** of productivity:
 - Ideas
 - People
 - Infrastructure
 - Business Environment
 - Places



And Four Grand Challenges:

- Growing AI & data economy
- **Clean Growth**
- Future of mobility
- Ageing society



putting the UK at the forefront of the artificial intelligence and data revolution;



maximising the advantages for UK industry from the global shift to clean growth;



being a world leader in shaping the future of mobility; and



harnessing the power of innovation to help meet the needs of an ageing society.



Nuclear Sector Deal

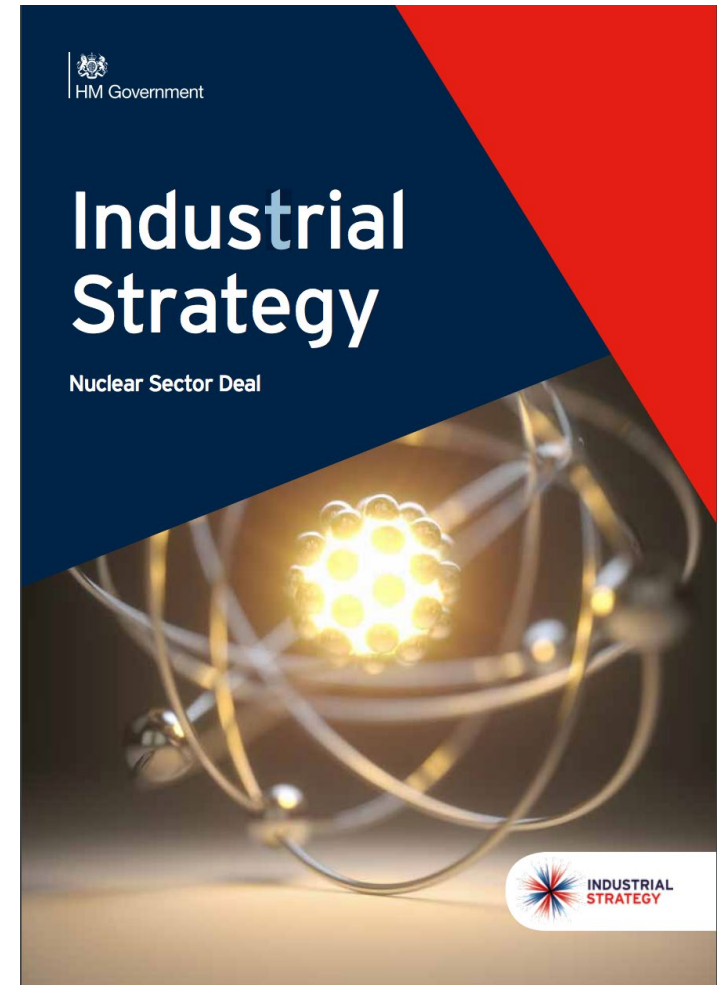
- **Published 28 June 2018**
Trawsfynydd in North Wales
- NSD demonstrates strong historical partnership between government & nuclear industry
- Sets out actions to ensure nuclear plays role in achieving **Clean Growth Grand Challenge** set out in Industrial Strategy & helps UK meet carbon reduction targets





Key Commitments

- The deal is about Government and industry working in partnership to drive competitiveness across the nuclear sector
- Sector committed to deliver by 2030:
 - **30% cost reduction** in cost of new build projects
 - **Savings of 20%** in cost of decommissioning compared with current estimates
 - **40% women** in nuclear
 - **Up to £2bn** domestic & international contract wins
- Structured around 5 foundations of the Industrial Strategy





Government Commitments

Government is committed to the Nuclear Sector:

- **Up to £20m** support for advanced manufacturing + **£12m** from industry
- **Up to £10m** support to develop supply chain competitiveness
- **Up to £44m** Feasibility & Development funding for Advanced Modular Reactor Competition
- **Up to £86m** funding for National Fusion Technology Platform
- **Up to £40m** funding for thermal hydraulics facility in North Wales
- **Around £80m** funding for Nuclear Research and Innovation (i.e the remainder of the BEIS Nuclear Innovation Programme)





Measuring Success

- The **Nuclear Industry Council** will oversee delivery of the NSD
- Dedicated resource from the sector to assist in implementation and work closely with Government officials
- Sector governance to be kept under review
- Sept '18 – NSD Implementation workshop with over 60 representatives from industry, Government, academia, LEPs , regulators and unions
- Oct '18 – NIC meeting built on workshop, allocated resource and assigned working groups



nuclear industry council



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Nuclear Industry Association



Advanced Nuclear Technologies Policy Framework

Nuclear Sector Deal signals fresh pace and ambition for SMRs

- Shared commitment from Government and Industry
- Want to create a fertile environment for advanced nuclear technologies
- No down-selection
- Distinct strands to bring technically and commercially viable technologies to market including:
 - Regulatory Readiness
 - International Collaboration
 - Financing (including the work of the Expert Finance Working Group)
 - Supply Chain Development for SMRs
 - Research and Evidence (including the AMR Competition)
 - Land Access and siting



Advanced Nuclear Technologies Policy Framework

Regulatory Readiness

- Up to £12m to build capability and capacity
- GDA Optimisation for small and advanced reactors
- Vendor Engagement

Finance

- Consideration of recommendations from the Expert Finance Working Group.



Siting & Land Access

- Role of HMG in enabling sites
- Process to be announced soon

International Collaboration

- UK re-joining GIF
- Participation in Nuclear Innovation: Clean Energy (NICE) Future
- Bilateral cooperation e.g UK-Poland IGC

Supply Chain Development

- £32m for Advanced Manufacturing & Construction Programme
- Process to be announced soon

Research & the AMR Competition

- Up to £44m for Advanced Modular Reactor (AMR) Programme



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Next Steps

BEIS are hosting **Commercialisation of Small Nuclear in the UK**



HM Government



SAVE THE DATE

Commercialisation of Small Nuclear in the UK

Monday 5th and Tuesday 6th November 2018

Manufacturing Technology Centre (MTC), Coventry

Save the date for the first ever national conference dedicated to bringing together key voices from across sectors (vendors, regulators, financiers, sites and potential users) to complete the jigsaw of commercialising small nuclear in the UK.

The event will begin with an evening networking reception and dinner on Monday 5th November, followed by a full day conference on Tuesday 6th November, which will feature live demonstrations, key notes addresses and delegates from all over the world.

Further information about how to register and opportunities to exhibit and sponsor the event will be available shortly.



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Questions?

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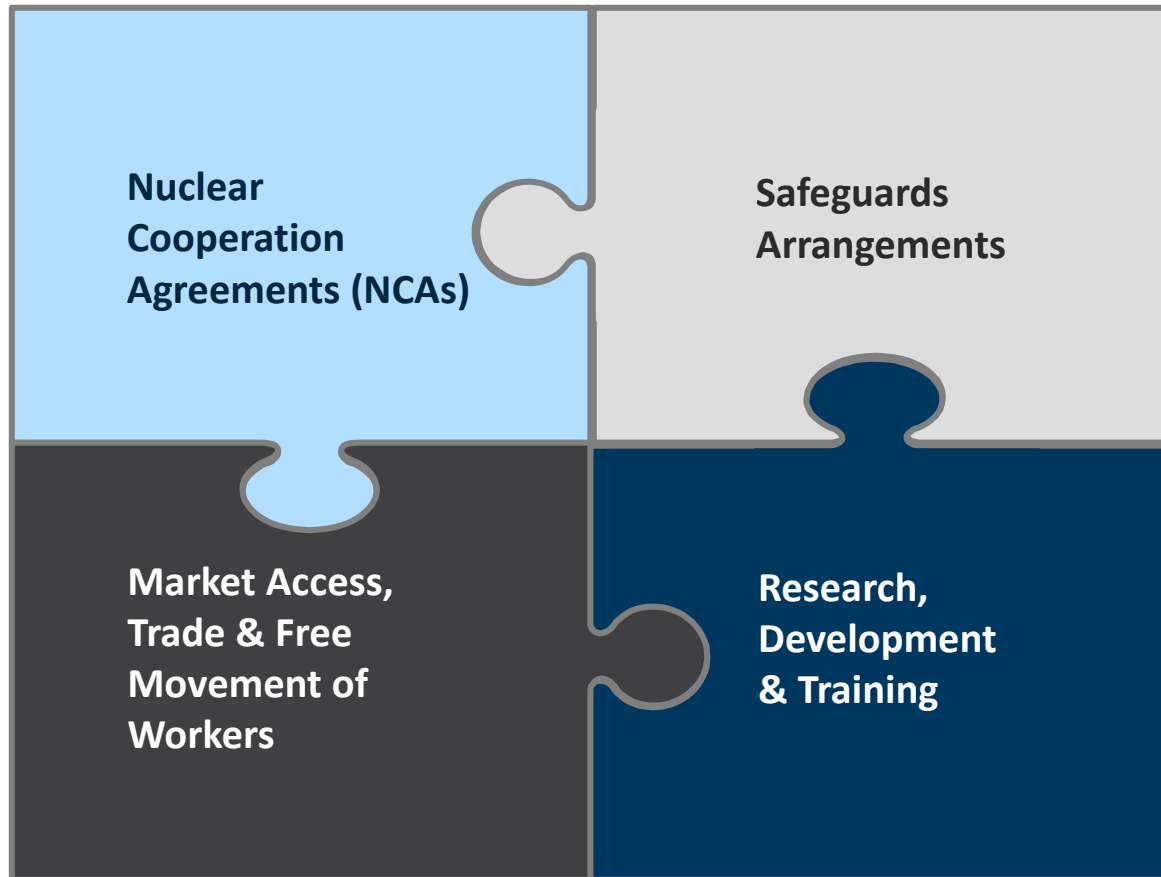


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Appendix



Ensuring Continuity After Euratom





Ensuring Continuity After Euratom

Lay the new Nuclear Safeguards Regulations

Preparation of the new Safeguards Regime

EU Negotiations

Nuclear Cooperation Agreements

Domestic Implementation



UK Fusion R&D

- The UKAEA manages the UK's fusion research programme at the Culham Centre for Fusion Energy (CCFE), one of the world's leading fusion research laboratories.
- UKAEA operates the world's largest fusion experiment, the Joint European Torus (JET), on behalf of EUROfusion - which co-ordinates all members of the EU fusion programme. MAST (Mega-Amp Spherical Tokamak) is the UK's spherical tokamak, an innovative type of fusion reactor.
- The MAST upgrade has just been completed and represents the largest investment in one scientific experiment in the UK in decades, further cementing UKAEA's place at the forefront of world-wide fusion research.
- In December 2017, UK Government announced a further £86M of funding for UKAEA's National Fusion Technology Platform, comprising two new facilities (H3AT and FTF) due to open in 2020





UK Fusion R&D – Impact of EU Exit

- The UK is exploring association to the Euratom Research and Training Programme and the EU's Joint Undertaking for ITER, Fusion for Energy, as part of a Science and Innovation Accord with the EU. This will allow us to continue our mutually beneficial partnership on this transformative area of research.
- The UK wants to discuss all potential options for how collaboration on nuclear issues, including nuclear research and training, could be taken forward, including the major fusion collaborations at Joint European Torus (JET) and International Thermonuclear Experimental Reactor (ITER).
- The provisions in the draft Withdrawal Agreement mean that UK entities will continue to have the right to participate in and bid for funding in current EU programmes, including Euratom Research and Training, until 2020, and to receive EU funding for the lifetime of the projects.

