



Nuclear Innovation – From NIP to NZIP(ANF).

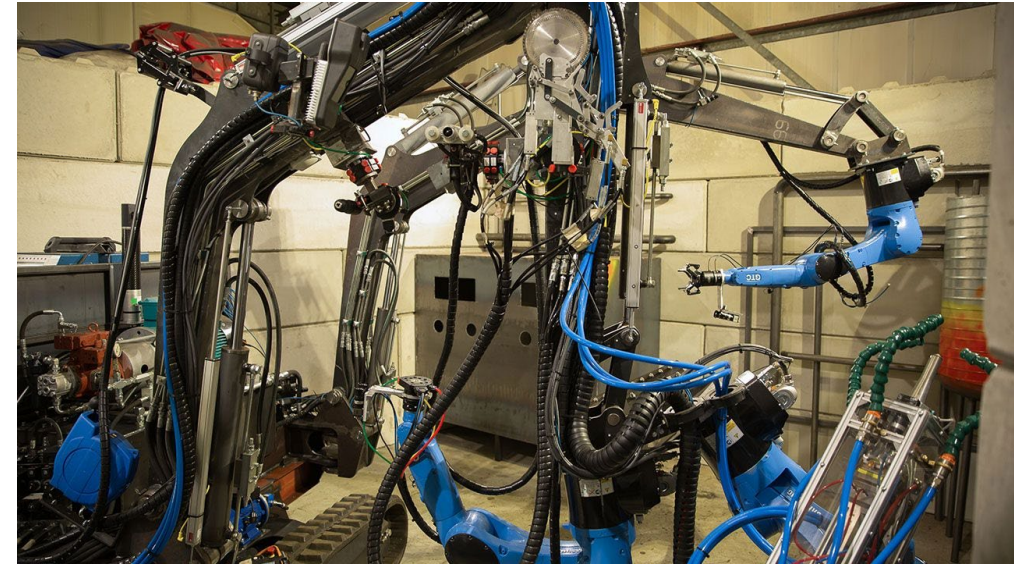
Si Dilks– Head of Nuclear and
Renewables Innovation , BEIS.



BACK TO THE PAST

Energy Innovation Programme – Nuclear

- A total of 181 research groups across AMM (103) Strategic Toolkit (5) Digital reactor (39) AMRs (34) in addition to the fuels programme, which is delivered by over 90 organisations UK wide.
- Delivery in partnership with NDA, UKRI & NNL.



AMR Feasibility & Development

Stream 1 - The AMR F&D Projects

Phase 1

- Up to £300,000 contract for each project.
- Eight projects (companies) completed a feasibility study on an AMR design.

Phase 2

- Up to £10m contract for each project.
- Three projects- from phase 1 - completed further R&D activities on their AMR design.



Stream 2 - The Regulatory Capability for AMRs Project

Phase 1

- £7m contract.
- The Office for Nuclear Regulation (ONR) and Environmental Agency (EA) developed the regulatory capability for AMR designs.



Phase 2

- £5m contract.
- The ONR and EA continued to develop the regulatory capability.
- Engagement with specific projects/ designs from the AMR F&D Project.



10 Point Plan for a Green Industrial Revolution.

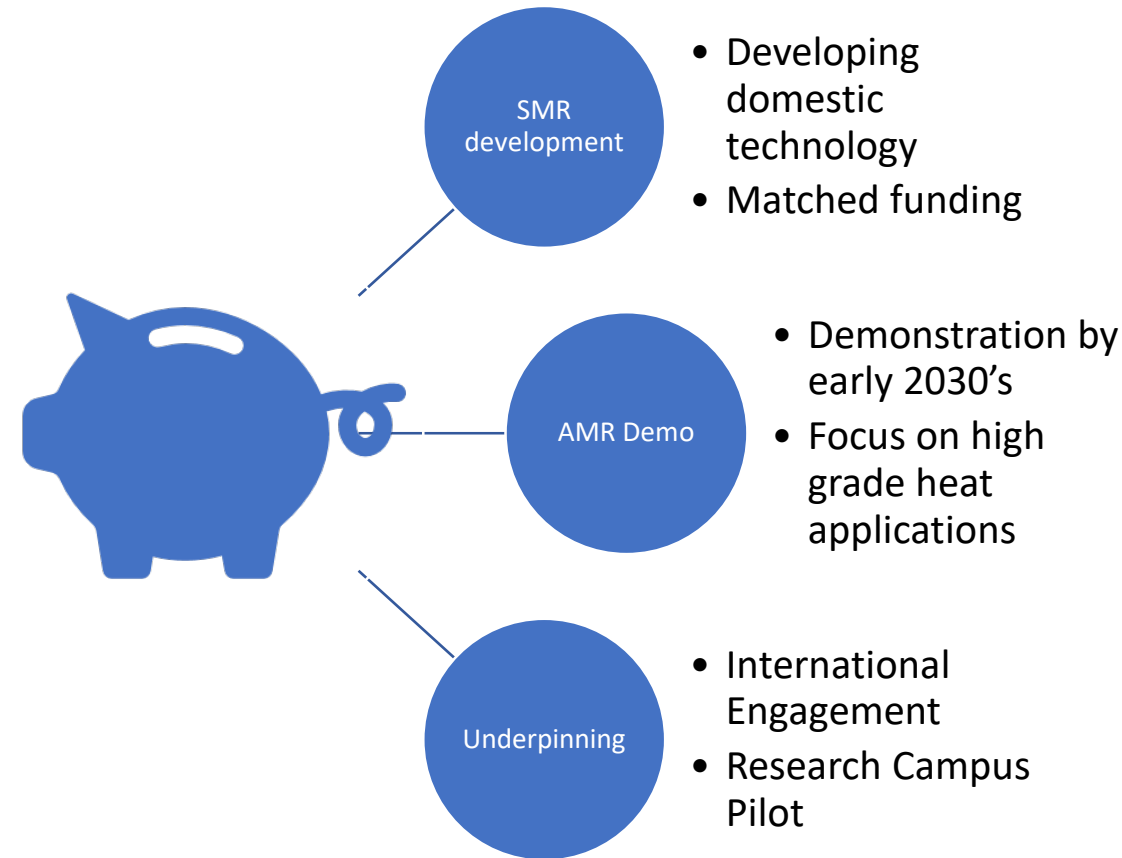
Delivering New and Advanced nuclear power is Point 3 in the plan.

- The plan sets out the Policy impacts as:
 - key role for nuclear in delivering deep decarbonisation of our electricity system, alongside renewables and other technologies
 - high-skilled jobs created and sustained across the UK
 - likely role for AMRs in decarbonising industry, heat and transport
- It also announced the creation of an Advanced Nuclear Fund to bring together the key BEIS innovation programmes....



£385m Advanced Nuclear Fund

.....Subject to value-for-money and future spending rounds



AMR Demonstration Programme

Current Status: Planning the AMR Demonstration Programme.

A Call for Evidence was published on the 29th July 21’.

‘Potential of high temperature gas reactors to support the AMR RD&D programme’

(<https://www.gov.uk/government/consultations/potential-of-high-temperature-gas-reactors-to-support-the-amr-rd-demonstration-programme-call-for-evidence>)

Three questions:

1. Do you agree with the government’s preference to explore the potential of high temperature gas reactors (HTGRs) to meet the key objective of the Programme?
2. Whether there is any new, additional **evidence** on other AMR technologies that could meet the key objective of the Programme?
3. How the capability of the UK supply chain could support the Programme?

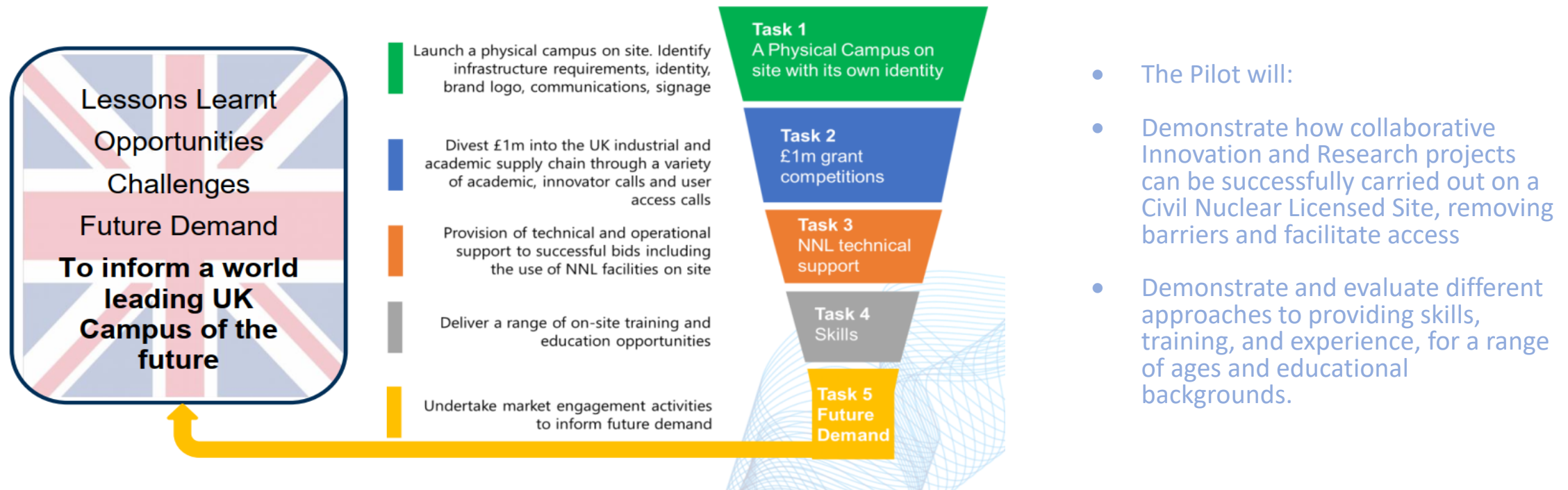
NIRO research paper is available: *‘Advanced modular reactors (AMRs): technical assessment’*

Please send in your responses – agreement, disagreement and general discourse are all welcome.

Deadline for Call for Evidence: 11.45 pm, 9th September 21’

Advanced Nuclear Skills and Innovation Campus Pilot

BEIS are funding the development of a unique Campus, focused on accelerating the deployment of advanced reactor technologies and encouraging collaboration is required to do this, and an Advanced Reactor Campus could become the nucleus which would enable future success.



Advanced Nuclear Skills and Innovation Campus Pilot



- **Keys Dates**
- 2nd September - Call launch
- 15th September – Briefing Webinar
- 30th September – Call closes

Full details on the Game Changers website:

<https://www.gamechangers.technology/>

Future

