

Investing in Nuclear: UK Policy Perspectives



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UK Nuclear Landscape

- Powering homes and businesses for over 60 years
- 20% of the UK's electricity needs
- 40% of UK low-carbon electricity
- Low-carbon, secure and reliable base-load power
- Reduction in UK's CO2 emissions
- Diversifying local economies.



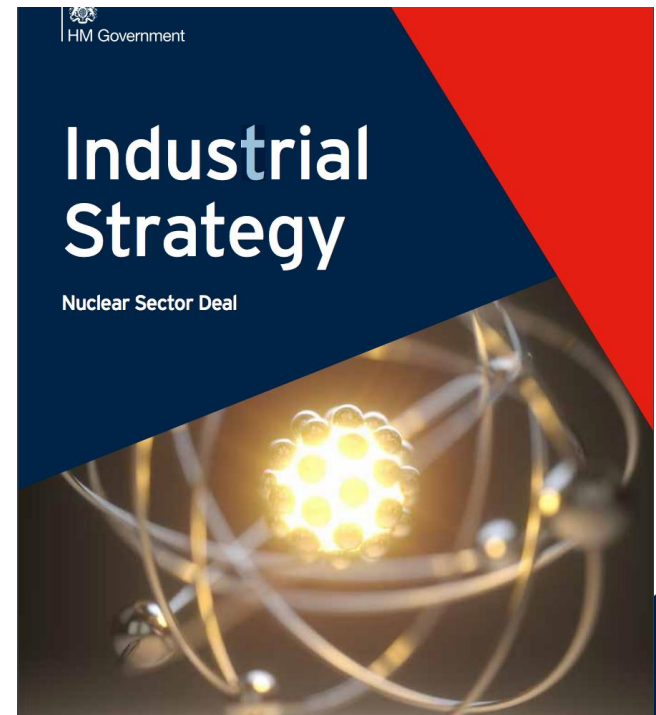
New Nuclear: Sustainability

- Nuclear has an important role to play in the UK's energy future as we transition to the low carbon economy
- Emphasis on value for money for consumers and taxpayers
- Feasibility of a Regulated Asset Base (RAB) funding model currently being explored
- Sustainable funding mechanisms are key.



The UK Nuclear Sector Deal – June 2018

- UK Industrial Strategy published on 27 November 2017
- Right support from the government can help meet the **Clean Growth Grand Challenge**
- Nuclear Sector Deal signals fresh pace and ambition for SMRs
- Shared commitment from Government and Industry
- Working to create a fertile environment for Advanced Nuclear Technologies



The SMR & AMR 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 Engagement

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



Supply Chain Development

£20m for Advanced Manufacturing & Construction Programme



Research & the AMR Competition

Underpinning “need-case” for small nuclear
Up to £44m for Advanced Modular Reactor (AMR) Programme



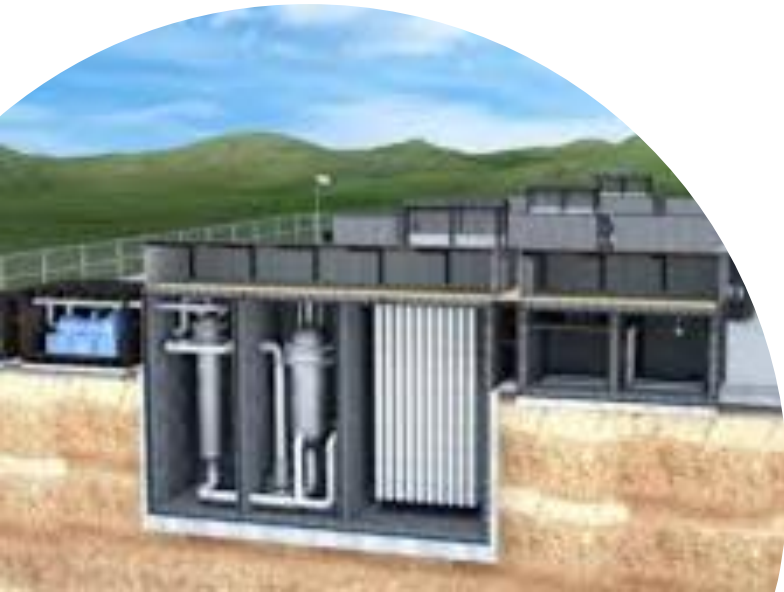
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Financing Small Nuclear



Expert Finance Working Group



Expert group brought together from financial sector, industry, academia and Government



Organisations came forward throughout the process to present commercial/financing models



Process identified opportunities to integrate financial and nuclear sectors





Expert Finance Working Group

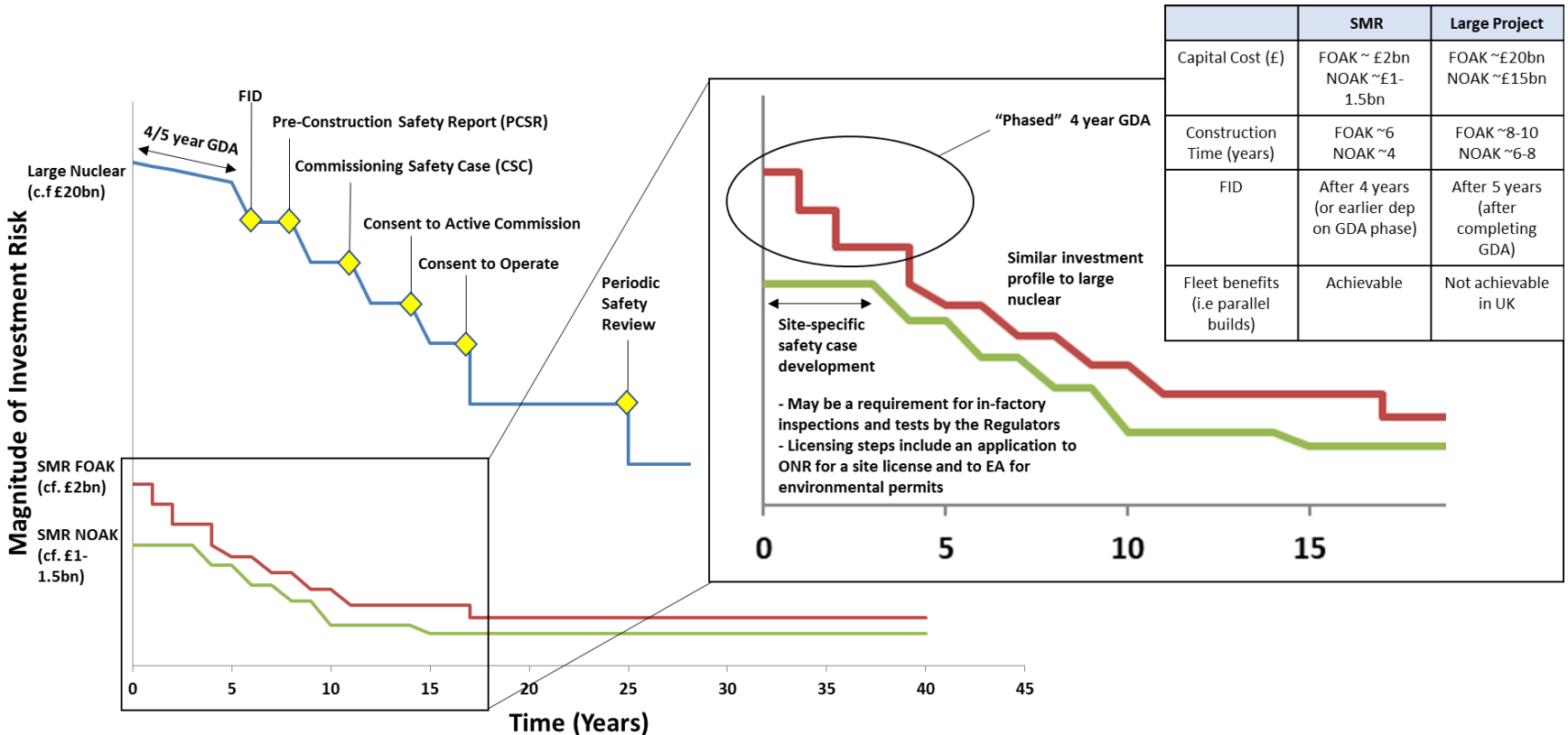
- The Group has identified several market conditions which if in place could attract private finance to support small nuclear technologies coming forward as commercially viable propositions.
- The Group issued a series of recommendations that it believes could enable the UK to become a vibrant market place for small and advanced reactor technologies.



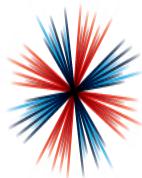
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What makes Small Nuclear Different?



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Regulated Asset Base – a new model for nuclear new build?



What is RAB?

RAB = Regulated Asset Base

- The **infrastructure provider** receives a **licence** from an **economic regulator** [such as Ofgem], which gives them a right to charge a **regulated price** to **customers** in return for providing the infrastructure service.
- RAB models are commonly used for funding and financing UK infrastructure **network assets** such as water, rail and power transmission, for certain **single asset models**, such as Heathrow and Thames Tideway Tunnel.
- Investments are recognised through **regulatory asset value** on which an **allowed return** is paid over the **full economic life**.
- Arrangements based in **statute, licence and regulatory guidance**.
- **Rate of return** set in competition or through the economic regulator.



Why are we considering RAB?

The appeal of a RAB model

- Aims to attract private capital with **an appropriate balance of risks**.
- Could **reduce the cost of capital**.
- **Consumers could pay less** overall.
- **Well understood by investors** & has attracted large quantities of investment from domestic and international investors in other sectors.

RAB feasibility study

- Reviewing the feasibility of a RAB model for nuclear
- Can it provide value for money for consumers and taxpayers?
- National Audit Office and Public Affairs Committee both suggested RAB
- Intend to publish our assessment of RAB by the summer.
- Implementation would be subject to VfM, market conditions & Ministerial decisions



Next Steps – Energy White Paper

Later this year an Energy White Paper is expected to set out:

- A new approach to financing large scale new nuclear.
- The role SMRs have to play in the energy mix of the future.
- Outcomes of AMR R&D and next steps.
- Further developments of the SMR & AMR framework.



Thank you for listening



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