



House of Commons
Science, Innovation and
Technology Committee

Delivering nuclear power: Government Response to the Committee's Eighth Report

**Sixth Special Report of
Session 2022–23**

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Science, Innovation and Technology Committee

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Sixth Special Report

The Science, Innovation and Technology Committee published its Eighth Report of Session 2022–23, *Delivering nuclear power* (HC 626), on 31 July 2023. The Government response was received on 6 October 2023 and is appended below.

Appendix: Government Response

Conclusions and recommendations for government comment (recommendations from the committee are in italics)

Government's aim of delivering 24 GW of nuclear power by 2050

1. **We conclude that it is reasonable for EDF to seek life extensions to extend their contribution to the grid if, and only if, the Office for Nuclear Regulation's judgement is that they can be safely operational as is currently the case.** (Paragraph 31)

2. *The new Nuclear Strategic Plan, that we recommend, must spell out how the current reactor fleet, through life extensions, will contribute to the Government's ambition of 24 GW from nuclear by 2050.* (Paragraph 32)

HMG welcomed the recent announcement by EDF that two key stations, Heysham 1 and Hartlepool, with a combined capacity of ~ 2.4 GW will continue to operate until March 2026, an extension of two years. The continued operation of assets in the nuclear fleet (including the AGR fleet and Sizewell B) is supportive of HMG's ambitions to deploy up to 24GW by 2050 however, lifetime extensions are a decision for the operator (EDF) and the independent nuclear regulator (the ONR) based on safety and commercial considerations. While generation dates are kept under regular review by HMG, we are not in the position to set out EDF's future plans for lifetime extensions in the roadmap.

3. **Large scale nuclear power is an important option that uses a proven technology that can deliver dependable low carbon baseload electricity to the grid as part of the low carbon energy mix required to achieve the Government's goals of increasing energy security and achieving net zero by 2050. Concentration of a large amount of energy generation in one place for Gigawatt-scale power stations would be considered for security and resilience risks by DESNZ and the regulators as part of the planning process and mitigation actions agreed as appropriate. The Government's aim to bring up to 24 gigawatts of nuclear-powered electricity to the grid by 2050 is commensurate with its net zero ambitions but currently lacks a comprehensive plan to achieve it. We welcome the Government's intention of "building a project pipeline" of nuclear projects but agree with industry that the details of this pipeline must be published by Government if investments in new nuclear are to proceed in time.** (Paragraph 41)

4. *Setting a notably stretching target requires a credible pathway towards its delivery. The Government should publish a clear delivery plan, a Nuclear Strategic Plan, for its nuclear project pipeline, backed up by detailed figures of projected energy production from nuclear for the years leading up to 2050, and be developed in collaboration with and engaging the confidence of the whole sector. This Nuclear Strategic Plan should include interim targets for nuclear energy production in 2035, 2040 and 2045.* (Paragraph 42)

When the Government accepted the nuclear recommendations of Mission Zero - Independent Review of Net Zero, we agreed to produce a nuclear roadmap, which would set out next steps for civil nuclear. The roadmap will set out these next steps and will be available later in 2023.

The Government is also committing to consult in the autumn on alternative routes to market for new nuclear projects, in addition to that provided by the Technology Selection Process (TSP). The evidence received will help shape future policy and ensure that the UK's nuclear programme is as comprehensive and inclusive as possible.

5. In his previous role as industry advisor to Great British Nuclear, Simon Bowen produced a report proposing what function and form Great British Nuclear should take. This report was delivered to the Government in September 2022. (Paragraph 46)

6. *The Government should publish the report and recommendations submitted by Simon Bowen, industrial adviser to Great British Nuclear, and his team on the purpose of Great British Nuclear, alongside the Government response to this report.* (Paragraph 47)

The Government would like to thank Simon Bowen, then our industry adviser on new nuclear and now the interim-Chair of Great British Nuclear (GBN), for the expert advice he has provided. His advice has been instrumental in the development of government policy, including the setting up of GBN and the running of the Small Modular Reactor Technology Selection Process, which we have done at pace. In his role as interim-Chair of GBN we will continue to draw on his expertise and advice.

The Government is minded to publish Mr Bowen's advice, subject to considerations of commercial sensitivity, alongside the nuclear roadmap later this year.

7. The 2050 target for nuclear of 24 GW needs a plan to achieve it, which must include clarity on the bodies and institutions that will deliver it. After asking the Department to provide more clarity on what legislation will be required to ensure that Great British Nuclear can operate as intended, we are pleased to see that the Government has tabled amendments to the Energy Bill 2022–23 to include this legislation. Having said this, there are still some points of ambiguity over exactly how Great British Nuclear will function and what activities it will carry out beyond running a small modular reactor competition. We expected further clarity to be given in the Government's launch of GBN in July 2023, but the announcement only included details of the SMR competition and the allocation of funds that had already been announced. (Paragraph 56)

8. *In response to this Report, the Government should set out additional detail on how Government will intersect with Great British Nuclear, including details of Great British Nuclear's exact remit and funding model, and the formal split of responsibilities with the Department for Energy Security and Net Zero. To aid this, the Government should publish the required secondary legislation that will support the creation of Great British Nuclear. Within this detail, the Government should clearly define what the role for Great British Nuclear will be on supporting new nuclear projects beyond the initial small modular reactors competition, including in relation to gigawatt size projects beyond Sizewell C and deployment of advanced modular reactors when technologically ready.* (Paragraph 57)

Information about roles, responsibilities and the split between HMG and GBN is clarified in the legislation. GBN will operate through British Nuclear Fuels Limited (BNFL) in the period ahead of legislation passing. Clauses for GBN were included as amendments to the Energy Bill that is currently passing through Parliament and should receive Royal Assent this session. The clauses relating to GBN set out its role in facilitating nuclear generation projects in furtherance of policy set by Government. Upon Royal Assent the Secretary of State will designate a company as GBN. In the meantime, work continues at pace within the existing legal framework to support delivery of HMG's ambitions. The government will set out further detail on the role of GBN in the Roadmap published later this year.

The government is going further by committing to consult in the autumn on alternative routes to market for new nuclear projects, in addition to that provided by the GBN Technology Selection Process. Government is particularly keen to understand where GBN and the government could support the private sector to bring forward projects, and to further explore the role of nuclear energy in industrial decarbonisation as well as low-carbon heat and hydrogen production. The evidence received will help shape future policy and ensure that the UK's nuclear programme is as comprehensive and inclusive as possible. Further details will follow on both this and the nuclear roadmap, which we have committed to publish by the end of the year and which aims to set out further next steps for civil nuclear.

9. In its July 2023 announcement on Great British Nuclear, the Government said that it would use the small modular reactor technology selection process (SMR TSP) to identify those reactor companies best able to reach a project Final Investment Decision (FID) by the end of 2029. The FID would include funding to support site access and site-specific design. Therefore, some of the more time-consuming aspects of building new nuclear projects, namely site-specific regulation and relevant licencing, would not begin for any successful SMR design until after 2029. This new timeline would go beyond the dates that many of the SMR developers have proposed is possible for SMR reactors to supply energy to the grid, namely the early 2030s. (Paragraph 58)

As set out on 18 July, the Contract Notice published by Great British Nuclear (GBN) sets out an intention to enter into a development contract with those successful bidders, with the option of pursuing a project through FID to construction and subsequently operations, providing a route to market for successful bidders. In practice, this means offering chosen technologies an unprecedented level of support: funding to support technology development and site-specific design; a close partnership with GBN, which will be ready and able to provide developer capability; and support in accessing sites. It is anticipated this process would include all relevant planning and regulatory approvals as required to reach FID by 2029.

10. *The Government should take steps to advance the ability for FIDs to be taken before 2029 and provide a detailed timeline of when it expects the winner or winners of GBN's SMR technology selection process to begin commercially supplying electricity to the UK.* (Paragraph 59)

In March this year, as part of the Powering Up Britain strategy, the government set up GBN. GBN will deliver the government's long-term nuclear programme, driving forward

nuclear projects in the UK. The organisation's first priority is to administer a competitive process to select the best small modular reactor (SMR) technologies from around the world.

This SMR Technology Selection Process (TSP) will underpin government's commitment to two nuclear Project Final Investment Decisions (FIDs) during the next Parliament. It will support the government's ambition to deliver up to 24GW of nuclear power in the UK by 2050. The Government recognises the importance of moving quickly to uphold our energy security and net zero ambitions, and is seeking to deliver the fastest competition of its kind in the world.

11. Gigawatt-scale nuclear power plants require UK experience—of the supply chain, regulatory processes and the wider energy sector—to deliver projects efficiently. However, the UK may benefit in the future from multiple operators of small and advanced, nuclear power technologies as they have the potential to provide market competition, collaboration opportunities and prevent a groupthink mentality. (Paragraph 63)

12. *The Government should provide sufficient resources to nuclear regulators, to support potential new operators of small and advanced modular reactor technologies to enter the UK energy market.* (Paragraph 64)

We are actively reviewing funding options for regulators to supplement existing arrangements to give them the funding they require to anticipate new technologies and future demand. We anticipate putting new funding in place from next year to support new nuclear. Additionally, a new process will be in place from December 2023 for vendors to access regulators prior to entering formal regulation, on a chargeable basis.

13. *The Government should provide clarity on how it plans to achieve its 24 gigawatt aim, and the expected timeline for these. This should include details of:*

- a) ***the target mix of reactor technologies, including the desired number of future gigawatt scale reactors, that the Government will support; and***
- b) ***a detailed timeline for when new projects are expected to be completed.*** (Paragraph 76)

The UK has set an ambition of having up to 24GW of nuclear capacity installed by 2050. This requires creating a pipeline of new nuclear capacity coming online up to 2050. HMG has committed to achieving two Final Investment Decisions in the next Parliament, at least one of which will be for SMRs. Achieving the UK civil nuclear programme means building a pipeline across the full spectrum of nuclear technologies, including large-scale, small modular reactors, and advanced modular reactor technologies.

We will support at scale the development of SMR technology as well as the design, engineering, and supporting infrastructure to ensure that we can deliver on our ambition for operational plants in the mid-2030s. With regard to Sizewell C, subject to project development and the timing of any positive final investment decision, we expect the project to be generating power by the mid-2030s.

We will set out further detail on future plans in the Roadmap published later this year.

14. **An essential requirement will be to resolve of the questions of whether a standardised fleet of nuclear power plants, using serial versions of the same reactor technology, has the potential to benefit the UK as new knowledge and resources can be transferred from one project to the next, reducing the risk of construction and cost overruns. The inevitable objection that such a strategy embeds the risk that operational issues identified with one power plant could affect the entire fleet can be mitigated by using tried and tested underlying technologies and engineering and careful sequencing of any innovation.** (Paragraph 77)

15. *The Government, through Great British Nuclear, must choose between the potential cost benefits of a standardised nuclear fleet of gigawatt reactors and the energy security and resilience that a diversity of reactor designs provides.* (Paragraph 78)

The government remains strongly committed to the full spectrum of nuclear technologies and is continuing to consider how all technologies could further contribute to UK energy security and meeting climate change targets.

16. **The UK is an international market leader in the manufacture of nuclear fuels and is uniquely positioned with the capability of delivering the entire nuclear fuel cycle. The nuclear fuel sector in the UK has the potential to increase enrichment capacity, which can provide security for domestic nuclear fuel supply chain and further export opportunities.** (Paragraph 89)

17. *By publishing a detailed Nuclear Strategic Plan, as we recommend, which includes the types and number of reactors to be built in the UK, the Government should provide a signal to the nuclear fuel industry to step up and increase its end-to-end fuel manufacturing capacity. The Government should set out in the Nuclear Strategic Plan how it will capitalise on the strengths of the UK's nuclear fuel supply chain to secure a resilient supply of nuclear fuel for any new planned reactors and develop further export opportunities.* (Paragraph 90)

A secure and resilient supply of nuclear fuel is a vital enabler of our ambitions to deploy civil nuclear power in the UK and is therefore essential to our energy security. The UK has many decades of experience in the nuclear fuel supply chain, carrying out enrichment at Capenhurst and manufacture of fuel at Springfields. However, we recognise that significant investment will be required to support the sector to develop and produce fuel for new reactor designs, across GW reactors, SMRs and AMRs.

We also recognise the strategic imperative to support our partners to diversify away from Russian fuel, and to ensure that we do not ourselves become dependent on Russian fuel in the future. We have therefore committed to working with our close partners to support the diversification of global fuel supply away from Russia, as outlined in the Sapporo Agreement, which was reached at the Nuclear Energy Forum in April this year. In the recent US-UK Atlantic Declaration, we also committed to support the development of full front-end fuel cycle capabilities in both continents by 2030 to substantially minimise global reliance on Russian fuel, supplies and services.

Through the Nuclear Fuel Fund, we have already invested over £35 million, match funded by industry, to strengthen our domestic fuel production capability and deliver on these

commitments. This includes over £10.5m to develop a supply chain for high-assay low enriched uranium ('HALEU') in the UK, which will be essential to ensure the UK can produce the advanced fuels of the future.

Advanced nuclear technologies

18. **The Government is at a cross-roads in its policy on small modular reactors (SMRs). So far it has funded a consortium led by Rolls-Royce with over £210 million of research and development funds to develop a concept SMR design, and now, to further develop the design to the extent that it can pass the generic design assessment process. That public funding was matched with £280 million from the private sector. It has subsequently announced that Great British Nuclear will launch and administer a competition in which other vendors' technology would be assessed. What is then required is a set of pivotal decision on the actual deployment of, rather than research into, SMRs.** (Paragraph 105)

19. **It is not uncommon, in the face of an unclear strategy or unresolved internal arguments about financing, for governments to defer decisions rather than take them. But this would be the wrong course. The UK risks losing the advantage of the public investment that has already been made; as well as contributing to the ambiguity in our future energy supply; and perpetuating a level of policy risk that is likely to drive a risk premium on costs, to the detriment of the taxpayer and billpayer.** (Paragraph 106)

20. *In developing a Nuclear Strategic Plan the Government should answer the questions of:*

- *what deployment of SMRs it wants to see, if any;*
- *what technologies and vendors it intends to deploy, and whether they will be from a single supplier or multiple suppliers;*
- *what sites should SMRs be located at; and*
- *what financial model would be used to support the contribution of SMRs to electricity supply?* (Paragraph 107)

The government sees SMRs as having a crucial role to play in our future energy mix as we transition to net zero and support our energy security.

GBN has launched a Small Modular Reactor Technology Selection Process (TSP) to identify those companies best able to reach a project FID by 2029, which could result in billions of pounds of public and private investment in SMRs. The Government will provide co-funding to be deployed by GBN to support the development of these selected technologies and will work with successful bidders on ensuring the right financing and site arrangements are in place.

The government has committed to consulting in the autumn to examine alternative routes to market for new nuclear projects in addition to the TSP. The evidence received will help shape future policy and ensure that the UK's nuclear programme is as comprehensive and inclusive as possible.

We are developing a new nuclear National Policy Statement (NPS), which will cover the deployment of new nuclear power stations beyond 2025. This new NPS will take into account the changes in the nuclear landscape since the current NPS was published in 2011, including the realistic potential for deployment of advanced nuclear technologies such as SMRs. We are intending to consult later this year on the future siting strategy. In addition, GBN will work with wider Government on access to potential sites for new nuclear projects to achieve our long-term ambition.

The Nuclear Energy (Financing) Act 2022 has introduced the Regulated Asset Base (RAB) funding model as an option for new-build nuclear projects in the UK. Consultation and further engagement with stakeholders in Autumn 2023 will help to confirm the most appropriate funding model for SMRs to assist their deployment for electricity generation and supply in the UK.

21. From the commissioning of Calder Hall in the 1950s, the UK has always had a strong capability in nuclear research and development. At a time where there is a global commitment to reduce carbon emissions and to reduce dependence on fossil fuels for reasons of energy security, the UK's capability in new nuclear technologies is a strength. (Paragraph 120)

22. Whilst investment by Government in early stage and demonstrator reactors will drive forward innovation for advanced modular reactors (AMRs), bringing them closer to commercialisation, what is also important is the UK having a regulatory environment and incentives for private investment. This has been demonstrated to work in the UK's fusion sector, where as well as strong Government funded demonstrator programme, the regulatory system, skills environment and developing supply chain, is attracting private companies and private investment to the UK. (Paragraph 121)

23. AMRs may offer new advantages in terms of cost and the potential for co-generation. But if they are to advance the research and development needs to move from the desk and the lab towards demonstrators, and this will require the Government to make decisions as to which technologies to fund. (Paragraph 122)

24. The Government should continue its support for the Advanced Modular Reactor Research, Development and Demonstration programme and ensure that it takes decisions on funding particular technologies and projects without delay, so that it keeps pace with competitors. (Paragraph 123)

The Government agrees with the findings from the committee and are working towards accelerating the Advanced Modular Reactor Research, Development and Demonstration programme. In July this year, funding was announced for USNC UK and NNL-JAEA for Phase B of the programme that aims to enable an AMR demonstration by the early 2030s.

25. The UK is a leading global player in uranium enrichment and nuclear fuel fabrication and has the potential to replace Russia's contribution to the global supply chain of advanced fuels. We welcome the launch and allocation of funding from the Nuclear Fuel Fund to support the development of the capabilities needed to meet current and future nuclear fuel demands. (Paragraph 128)

Fusion

26. **The work of the UK Atomic Energy Authority has resulted in a thriving research and development fusion cluster at the Culham Science Centre in Oxfordshire. As well as operating the world's leading torus and spherical fusion reactors, the Culham facility benefits from being part of a consortium of 30 fusion research organisations and universities from 25 European countries and has attracted private companies from around the world, many of which plan to build demonstrator reactors at Culham.** (Paragraph 142)

27. **Since 2010, the UK public investment into fusion research and development has totalled around £970 million. All such investment of taxpayer funds has alternative uses, whether in science, energy, or other fields. Sceptics of fusion argue, in the much-repeated phrase, that the benefits of fusion are always 20 years away—with the implication that such funds could be better spent elsewhere. It is true that fusion is highly unlikely to make a material contribution to electricity generation by 2050, in the time to contribute to our net zero commitment being met. It is also true that there are many risks, uncertainties, and dependencies—such as the development of materials—that mean that fusion may not in the foreseeable timeframe realise its tantalising potential.** (Paragraph 143)

28. **However, in recent months breakthroughs have been made in fusion research, including doubling of the record for power generated in a tokamak; there is a growing number of private fusion companies clustered in Culham and the UK is a leading nation in the ITER project.** (Paragraph 144)

29. **We believe that it is not the time to abandon our long-standing commitment to fusion, just at the point when it is giving cause for optimism; when the zero-carbon imperative is strong; when we have an internationally admired and well-run organisation in the UK Atomic Energy Authority, and when positive spill-over effects are being felt from the research.** (Paragraph 145)

30. ***To maximise the benefits that we gain from investment in fusion requires a long-term approach to give confidence and stability to investors and international partners and so we recommend that fusion is a part of the Government's long-term energy plan.*** (Paragraph 146)

Over 2021/22 to 2024/25, we are investing over £700 million to the UKAEA's cutting edge research programmes and facilities to grow the capability of UK industry and make the UK the global hub for fusion innovation. Included in this is a £240m commitment towards the first phase of the STEP Programme - to develop and build, by 2040, a prototype fusion power plant capable of delivering energy to the UK grid.

On top of the above allocation, in November 2022 we announced an additional £126 million to support UK R&D Programmes. In September, we announced that the UK has decided to pursue its own cutting-edge suite of new, alternative R&D programmes to support the UK's flourishing fusion sector. To deliver this, the government plans to invest up to £650 million until 2027.

Nuclear skills gap

31. It is not surprising that the nuclear sector has not been the industry of choice for many STEM specialists embarking on a career. At a time when no new nuclear plants had been approved for decades, this was a sector thought by some not to be one with a bright future in which to contemplate a lifetime career specialisation. (Paragraph 162)

32. However, if the Government and the nuclear industry credibly adopt a stable, long term plan of growing the nuclear sector, there are very significant attractions to recruitment: new build and new technologies involve innovation and technical advances; the timescales of nuclear commitments offers the prospect of enduring careers; the global revival of nuclear power offers international opportunities; and financial rewards are likely to remain high. (Paragraph 163)

33. *As part of a strategic approach to nuclear, the Government and the industry should set out steps deliberately to communicate to school-leavers, graduates and to those changing careers, the particular advantages of choosing to work in the nuclear industry.* (Paragraph 164)

34. It is highly desirable that, in expanding employment in the sector, opportunities should continue to be broadened to people from sectors other than nuclear. Apart from the wider pool of talent available, it is important there should be flows into and out of the nuclear industry from other industries. The risk for any industry that is too insulated from others is that it can be insular and impervious to different ways of thinking that are practiced in other industries. At a time of such rapid technological change and innovation, it is important that the nuclear industry participates in this movement, and avoids the degrees of groupthink in which a relatively small number of people move between a relatively small number of organisations within the same sector. (Paragraph 170)

35. *As a matter of strategic planning, the Government and the sector should, at a time of expansion, deliberately increase the permeability of the sector to other commercial, engineering and scientific sectors.* (Paragraph 171)

36. We were impressed by the obviously effective working relationship between the National College for Nuclear and the Hinkley Point C Project. In this case, the training provided, and the apprenticeships offered, are clearly tied to a specific employer and site. We were concerned that there was a lack of clarity on who should fund the development of the curriculum and teaching materials for courses mounted exclusively to serve the needs of a particular employer. *The Government and the Nuclear Skills Strategic Groups should develop a clear protocol on this. Should further nuclear new build proceed, with multiple organisations in the developer and in the supply chain requiring apprenticeships, there must be no delay in developing courses arising from ambiguity on who pays for that development.* (Paragraph 177)

[Response to 31, 32, 33, 34, 35, 36]

- The Government is committed to ensuring the UK nuclear industry has the required skills to deliver on its existing decommissioning requirements together with supporting the proposed programme of new nuclear.

- The Nuclear Skills Strategy Group (NSSG) an employer-led Nuclear Industry Skills lead and provides 'one voice' to government. The Government works closely with the NSSG on targeted actions that reflect the ambitions for the UK's civil nuclear programme to help identify skills gaps, required training programs and qualifications.
- The Nuclear Skills Taskforce, jointly launched by the Minister for Nuclear and Networks, Andrew Bowie MP, and the Minister for Defence Procurement James Cartlidge, has a remit to turbocharge the work already undertaken with industry and across government, including by the NSSG. The Taskforce will ensure we have the right people, with the right skills to deliver on our nuclear ambitions.

37. *In line with Sir Paul Nurse's recommendations for greater flexibility on pay with conditions for Public Sector Research Establishments, we recommend that a consistent set of pay flexibilities should be applied to public bodies in the sector with financial discipline applied through the overall budgets for bodies.* (Paragraph 185)

No response from skills team – beyond remit.

Financing

38. *Gigawatt-scale nuclear projects cost tens of billions of pounds to plan and construct before a single unit of electricity is generated. Their long period of construction, complexity, and subordination to potentially variable regulatory standards have been associated with large cost-over runs and delays. For all of these reasons, and more, the financing of gigawatt-scale new nuclear power has proved formidably challenging. Most civil nuclear nations have built new nuclear power stations on the public sector balance sheet, as did the UK for all of its existing nuclear power stations. Hinkley Point C has been financed off the Government balance sheet by the French Government-owned utility EDF and Chinese CGN. Its construction is proceeding in return for a 35 year Contract for Difference (CfD) fixed at £92.50/ MWh in 2012 prices. The conceived cost of construction has increased from £18 billion at the time of the final investment decision to £32 Billion in 2023 and its completion date is now forecast to be 2027, around two years after EDF's estimate at the time of Final Investment Decision (FID). It is important to note that the estimates of that cost overrun as result of the CfD model are not to be met by UK consumer or taxpayer, but by the companies. The CfD runs for 35 years from start-up during the 2025–2029 period. If the plant is not generating electricity by 2029 then the contract would be shortened by one year up until 2033 after which the contract will be cancelled and EDF will not receive any top-up revenues from the CfD.* (Paragraph 216)

The long-stop date for cancellation of the HPC Contract was agreed (in November 2022) to be extended by three years from November 2033 to November 2036. The long stop date triggers the right but not the obligation to cancel the CfD support package if not yet commissioned.

Having a long- stop date gives the developers an impetus to do everything they can within their control to keep to the schedule dates and deliver at pace rather than let the project

run on indefinitely. However, in this case the extension of the long- stop date gives the developers some bandwidth to take account of unexpected events such as the Covid-19 pandemic.

39. *Given the demonstrated unwillingness of private investors to take on all of the construction risk of gigawatt scale nuclear plants through the CfD model, it is inevitable that a public-private risk sharing model should be contemplated if new gigawatt-scale plants are to be constructed. The Regulated Asset Base (RAB) model— which has been given Royal Assent in the Nuclear Energy (Financing) Act is one such. However, the model entails significant uncertainties and downsides. Chief among these is that although the financing of a plant should be cheaper in headline terms than a model in which the private sector shoulders all construction risk, the extent to which this represents value for money depends on the financial value of the construction risk being absorbed by the public balance sheet. The consumer or taxpayer is taking an unknown and uncertain risk of cost overruns, yet disburses funds from day one without earning a return.* (Paragraph 217)

- In establishing the RAB model for use on nuclear projects, we have followed the recommendation of the National Audit Office, that models like RAB, which share more construction risk with consumers, could provide better value for money than the Contract for Difference (CFD) model which allocates risk to project developers only.
- The Nuclear Energy (Financing) Act 2022 requires the Secretary of State firstly to determine whether a project is likely to represent value for money when designating a project to benefit from the RAB model, and to take the interests of existing and future consumers (including in terms of cost and security of supply) when modifying the licence of a project company to use the model.
- Satisfying these tests entails statutory consultations with named consultees, including Ofgem as the regulator of nuclear RAB agreements, and robust due diligence of the project in line with Green Book guidance. In addition, during construction of any project.
- We have also committed that a full value for money assessment will be published for any project using the RAB model, at the point of a final investment decision.
- Other measures taken by Government will help to mitigate the risk of uncertainty viz. potential cost overruns. For instance, in replicating Hinkley Point C, Sizewell C would be able to incorporate all the lessons learned from HPC, and that project's established supply chain, providing much higher levels of maturity and substantially de-risking the project – the benefits of replication are already being demonstrated between reactors 1 and 2 of Hinkley Point C.
- The Government also plans to take a programmatic approach to the delivery of new nuclear projects beyond Sizewell C through Great British Nuclear, which will reduce project costs through learning and replication.

40. *The Government should show how this offers value for money to taxpayers and should be open to other alternative partnerships between the public and private sectors as practised in other countries (including those set out in Table 2). The choice to proceed*

with gigawatt-scale nuclear power should not be made without robust estimates of its value for money, including the financial value of the construction risk being assumed by taxpayers or billpayers. A headline lower cost than Hinkley Point C is not justified if the value of the risk is too great. This is true even if it forces a conclusion that—for all its other advantages—gigawatt scale new nuclear is not financeable on defensible terms, and that the UK's nuclear ambition would need to be pursued through other nuclear technologies.(Paragraph 218)

The illustrative costs of building and financing a new nuclear power plant using the RAB model as compared to a CFD are outlined in paragraphs 72 - 74 and tables 2 - 4 of the Impact Assessment (IA) for the Nuclear Energy (Financing) 2022 (the Act). Furthermore, Annex 3 of the IA for these Regulations, and section 4.1 of the IA for the Act has a summary of the modelling assumptions.

The IA highlighted that a gigawatt scale nuclear plant financed by a RAB approach could save upwards of £30bn (in 2021 prices) on the cost of building and financing compared to a CfD, thereby reducing the overall cost of the project.

A RAB model can provide a revenue stream during construction which will avoid compound interest and therefore reduce financing costs (the main driver of nuclear project costs) compared to a CFD, which only provides revenue in operations.

To designate a nuclear company in relation to a project, the Secretary of State must be of the opinion that doing so is likely to result in Value for Money. The department has undertaken an analysis of the Sizewell C project to determine this, which was published in November 2022. This analysis has been completed in line with HMT Green Book principles on how to appraise and evaluate projects. Based on this analysis, the Secretary of State is of the opinion that designating NNBG SZC in relation to the Sizewell C project is likely to result in Value for Money. This is because proceeding with a RAB funded Sizewell C Project:

- is estimated to reduce costs to consumers of a low-carbon electricity system, in the majority of scenarios which have been modelled.
- has an estimated return on government investment which is positive in the majority of scenarios which have been modelled.
- has substantial non-monetised benefits, in particular protecting security of supply of the GB electricity system.

41. So far, the Government has not published financial figures which allow the cost of this risk transfer to be known. The Government must publish figures, before signing contracts for new gigawatt-scale nuclear, which allow a proper assessment of value for money to be made, including setting out the level and potential cost of construction risk to be borne by the consumer or taxpayer. (Paragraph 219)

The capital costs for Sizewell C are subject to continued scrutiny and due diligence, and are taken account of as part of value for money approvals.

During passage of the Act, the Government committed to publish value for money assessments “at two key points in the approval process: both when designating a project company in its final designation notice, and once the outcome of negotiations and market engagement have been reflected in project costs.”

For Sizewell C, we have fulfilled the first part of this commitment, by publishing our summary value for money assessment in the reasons for designating Sizewell C to use RAB – this analysis shows that the project is likely to be value for money, in all but a remote scenario where cost of capital is high and energy demand is low. We have also committed to set out an assessment of Sizewell C's value for money prior to taking a final investment decision in the project.

As was argued during passage of the Act, it is important that the Secretary of State – with their responsibility for designating projects to use the RAB model and for negotiating project licence modifications to implement RAB's – has the freedom and authority to negotiate the best deal for consumers and taxpayers. Publication of potentially sensitive information prior to a final investment decision could undermine this objective.

Rigorous due diligence and development of the project is ongoing, and we started the pre-qualification process for potential investors on 18th September 2023, as the first stage of an equity raise process for the project. Our approach has potential to result in a positive value-for-money outcome for consumers and taxpayers, with private investors bringing experience of large-scale nuclear or energy project delivery and the RAB structure incentivising.

42. It may be the case that the size of capital outlay means that private investors will not repeat a CfD contract for new nuclear, whatever the price. But the lack of alternative choices should not mean that any terms will be acceptable for a RAB financed plant. The Government should make, and disclose, its best estimate of the value of the risk that would be taken on by the public, and a clear plan of how those risks can be managed through incentives during the development, construction and operational phase of the project's lifetime. (Paragraph 220)

In establishing use of the RAB model for use on nuclear projects, the Government followed the recommendation of the National Audit Office that such a model could represent better value for money to consumers than the Contract for Difference model used at Hinkley Point C, by reducing the cost of project finance, the biggest driver of new nuclear project costs.

The Act requires the Secretary of State to take the interests of existing and future consumers (including in terms of cost and security of supply) into account when implementing a RAB model for a designated project.

As a shareholder in Sizewell C, Government will ensure the interests of consumers and taxpayers are protected, and there will be multiple mechanisms to ensure that consumers don't bear unacceptable costs.

These include continuing our robust due diligence of the project and its costs and schedule before making a final investment decision, and, if the project is approved, implementing any appropriate incentives regime to manage project costs and schedules.

43. *The Government should publish details of how the estimated savings from using the RAB model for funding Sizewell C were calculated, and provide clarity for the funding structure, by publishing the Heads of Terms for the agreed RAB funding model for that project.* (Paragraph 221)

The illustrative costs of building and financing a new nuclear power plant using the RAB model as compared to a CfD are outlined in paragraphs 72 - 74 and tables 2 - 4 of the Impact Assessment (IA) for the Act.

The IA highlighted that a gigawatt scale nuclear plant financed by a RAB approach could save upwards of £30bn (in 2021 prices) on the cost of building and financing compared to a CfD, thereby reducing the overall cost of the project.

A RAB model can provide a revenue stream during construction which will avoid compound interest and therefore reduce financing costs (the main driver of nuclear project costs) compared to a CFD, which only provides revenue in operations.

This analysis uses a range of estimates for the cost of finance and capital cost of project. The capital cost is based on estimates for Hinkley Point C at the point of FID, uplifted by 20–100% to account for potential cost overruns, informed by data on actual overruns from almost 200 nuclear plants around the world. It includes an assumed 60 years of operation, as well as assumed 13–17 year construction period.

Annex 3 of the IA for these Regulations, and section 4.1 of the IA for the Act has a summary of the modelling assumptions.

It should be noted that the figures in the IA are for an illustrative/generic gigawatt scale nuclear plant rather than any specific project. The legislation is not specific to any individual project, each nuclear RAB project would be different and have different cost estimates.

The Secretary of State will make decisions on a case-by-case basis as to which projects are suitable for a RAB. These decisions will be based on the designation criteria in the NEFA, including a judgement on the maturity of a project, and whether designating a nuclear company for a RAB is likely to result in value for money.

The costs of the Sizewell C project are subject to ongoing development, and commercially sensitive project negotiations – we cannot disclose these at this time.

44. *This is an important moment for the future of small modular reactors (SMRs) as we set out in Chapter 3. Following the £500 million Government and investor funded development of an SMR concept through to the beginning stages of regulatory approval. Clarity is needed on the Government's plans to deploy the technology if it completes the generic design assessment. This includes deciding on what financing model will be made available should the policy be to deploy SMRs in supplying power to the grid. The Contracts for Difference (CfD) model has proved successful in financing and driving down the costs of clean energy. Key to the success of CfDs for renewables to date has been competition between potential operators which has driven down the price paid for electricity generation.* (Paragraph 225)

Hinkley Point C is being funded under the 'contracts for difference' (CfD) model where the developers bear all of the risks associated with such projects, particularly in the early

development and construction stages with the difficulty of predicting and controlling the out-turn costs and are only entitled to receive the 'strike price', that is, a guaranteed price for electricity output once power generation has begun.

In its report of 23 June 2017 on Hinkley Point C, the National Audit Office, reported that the "Department for Business, Energy and Industrial Strategy (Department) has not sufficiently considered the costs and risks of its deal for consumers...the Department aligned its approach to the Hinkley Point C deal with its support for other low-carbon technologies. This means the private sector bears the risk that construction costs overrun. The NAO's analysis suggests alternative approaches could have reduced the total project cost. ."

A funding model is necessary to provide certainty over the future revenue stream to any long-term investor/owner of a power plant. HMG have engaged with technology vendors, developers, and prospective investors to develop a delivery model and funding strategy for SMRs that addresses market needs. The introduction of The Nuclear Energy (Financing) Act 2022 has established the Regulated Asset Base (RAB) funding model as an option for new nuclear projects. The RAB funding model takes a different approach than CfD whereby in order to attract more private investment from a wider range of sources, it provides for sharing of risks between investors and consumers, with consumers contributing indirectly towards the construction cost of the nuclear project by paying a small amount through their bills. The intention is for these initial consumer contributions to provide greater certainty for investors by allowing for a lower and more reliable rate of return in the early stages of a new-build nuclear project.

45. If a single supplier of SMRs were to be available, either through Government choice or following the Generic Design Assessment process, the CfD auction model will not be suitable. As part of a clear and specific strategy for SMRs, the Government should come to a view quickly on what financial model would be available for the initial deployment and communicate this clearly to developers. (Paragraph 226)

The government has acted to enable more than a single supplier to be involved in the development of SMR programmes in the UK. In July 2023, Great British Nuclear launched a technology selection process (TSP) to select the best Small Modular Reactor technologies from around the world and is not limited to a single supplier. At the same time, the Government committed to consult in the autumn on alternative routes to market for new nuclear projects, in addition to that provided by the TSP. The government has also announced that The Future Nuclear Enabling Fund has shortlisted applications to accelerate advanced nuclear technologies business development in the UK including supporting advanced nuclear technology designs through Generic Design Assessment (GDA). The Nuclear Energy (Financing) Act 2022 has established the Regulated Asset Base (RAB) funding model as an option for new nuclear projects, including SMRs, and this is a first across the world. The RAB model is a promising model for SMRs. The Alternative Routes to Market consultation, due for publication in Autumn 2023, is an opportunity to take views from the sector on the appropriate business model for SMRs. This will help to deliver a coordinated nuclear programme to meet the UK's ambitions on energy security.

46. **We welcome the proposed inclusion of nuclear energy generation in the UK Green Taxonomy as it reflects the low-carbon contribution of nuclear power and may make new building projects more attractive to private investors as with other low-carbon energy generators.** (Paragraph 234)

47. ***The Government should conduct and publish the results of its consultation quickly, and during this time review nuclear energy's access to the Green Financing Framework with a view to ensuring consistency and addressing the contradiction between the two.*** (Paragraph 235)

As set out in the 2023 Green Finance Strategy, the Government expects to consult on the UK Green Taxonomy in Autumn 2023. The Chancellor also announced at Spring Budget 2023 that nuclear energy will be included in the green taxonomy, subject to consultation, to encourage private investment.

A green taxonomy is a common framework, setting the bar for economic activities that can be defined as environmentally sustainable. The taxonomy sets out a broader set of principles than the Green Financing Framework, which sets out eligibility criteria for just one green financing programme. Any changes to the Framework in future, including due to changes in sustainable investor demand, would be transparently published by the Government.

Regulation and location

48. **The Office for Nuclear Regulation (ONR) Generic Design Assessment's (GDA) goal-based approach is well regarded internationally and is intended to be adaptable for any new technology. We welcome the work that the ONR has done to modify the GDA to allow more flexibility for new reactor designs that seek to enter the UK market.** (Paragraph 248)

49. **Some witnesses are concerned that the GDA has capacity constraints and is a lengthy and expensive process given that there are no site-specific guarantees afterwards. Whilst acknowledging the need for UK sovereignty over regulations, witnesses pointed out the considerable overlap of the technical approval process for new reactors between established nuclear nations.** (Paragraph 249)

50. ***The Government should consider how it could reduce the GDA application timelines and the required resources through international collaborations between regulators, and should provide access to pre-engagement for new nuclear developers prior to entering the GDA. The ONR should examine ways to recognize, in whole or part, safety approvals for mature reactor designs granted by partner countries with similarly high standards to capitalise on work previously done.*** (Paragraph 250)

In July 2023, the Government committed to consult in the autumn on alternative routes to market for new nuclear projects, in addition to the GBN led Technology Selection Process. The government is keen to understand where government could support the private sector to bring forward new nuclear projects and to further explore the role of nuclear energy in industrial decarbonisation as well as low-carbon heat and hydrogen production. The evidence received will help shape future policy and ensure that the UK's nuclear programme is as comprehensive and inclusive as possible. The government continues to

seek ways to streamline the GDA process. However, there are multiple variables that drive the GDA timetable. This is why the nuclear regulators work closely with the developer towards meeting the developer's scheduled timelines. The UK nuclear regulators are internationally renowned and have significant positive working relationships with a range of international regulators. Every GDA is different and therefore the possibility for collaboration with international regulators to speed up GDA can vary. Vendors are encouraged to share their international regulatory cases to the ONR to help potentially accelerate GDA timelines. The government accepts the recommendation to examine pre-engagement for new nuclear developers. The department and regulators are currently undertaking several projects to examine the feasibility and best available processes for pre-engagement.

51. *The Government should ensure as part of a specific and detailed nuclear strategy that the ONR, the Environment Agency and Natural Resources Wales have the necessary resources to process applications from the growing range and number of applicants in a reasonable timeframe.* (Paragraph 251)

We are actively pursuing funding options for regulators to supplement existing arrangements to give them the funding they require. A set of recommendations have been produced and discussions are progressing to put funding in place from next year.

52. *Whilst the ONR has recently adapted the GDA to be more suitable for small modular reactor (SMR) technologies, to date no SMR design has completed the entire three step process. The ONR should reflect, both during and after the first SMR has completed the GDA, on the lessons to be learned on efficiency and applying appropriate safety cases for these smaller technologies, from other similar bodies, such as the Environment Agency and Health and Safety Executive that regulate Fusion energy facilities.* (Paragraph 252)

As an independent organisation, this should be for ONR and other regulators to comment on their processes for lessons learned and government should not comment.

53. *Although the reputation and integrity of UK nuclear regulation must be maintained, there are opportunities to improve the efficiencies of nuclear regulation by running processes such as the Generic Design Assessment (GDA), and site licencing, in parallel.* (Paragraph 257)

54. *The Government should work with regulators, devolved administrations, local authorities, industry leaders, and others to streamline planning and environmental requirements wherever possible. The Office for Nuclear Regulation should look for opportunities to run the Development Consent Orders and the GDA in parallel for experienced vendors who have already successfully completed the GDA with other reactor designs or who have reactor technology that has been approved by other regulators.* (Paragraph 258)

A Development Consent Order (DCO) serves as the avenue to secure authorisation for projects classified as Nationally Significant Infrastructure Projects (NSIP), encompassing energy initiatives. The decision-making authority for DCO applications rests with the Planning Inspectorate (PINS) and the Secretary of State.

In contrast, the Generic Design Assessment (GDA) process operates independently and falls under the jurisdiction of nuclear regulators. The primary objective of the GDA is

to evaluate the feasibility of implementing a proposed technology within Great Britain, ensuring it can be constructed, operated, and decommissioned while upholding rigorous standards of safety, security, and environmental protection.

The ONR and EA are currently reviewing GDA processes further following the significant streamlining they have already put in place, and will be reporting in April 2024. Amongst options considered is to introduce increased flexibility e.g. to allow for acceleration of the 'bridge' between GDA and Nuclear Site Licensing where technological and organisational maturity allows.

As outlined in the British Energy Security Strategy, Government will work with the regulators to understand the potential for any streamlining or removing of duplication from the consenting and licensing of new nuclear power stations, including possibly new harmonisation on international regulation, without impacting the robust safety, security and environmental protections offered by the UK regulatory regime. Furthermore, in July 2023, the Government committed to consult in the autumn on alternative routes to market for new nuclear projects, in addition to the GBN led Technology Selection Process. The government is keen to understand where government could support the private sector to bring forward new nuclear projects and to further explore the role of nuclear energy in industrial decarbonisation as well as low-carbon heat and hydrogen production.

Opportunities for streamlining and reducing regulatory and administrative burdens for new nuclear power are currently being explored to facilitate future projects. Without impacting the robust safety, security and environmental protections offered by the UK regulatory regime, the Government will work closely with regulators to understand the potential for any streamlining or removing of duplication from the consenting and licensing of new nuclear power stations, including possibly harmonising on international regulation. Close engagement continues for example with the EA and ONR to improve the pre-application service to benefit applicants progressing through the regulatory process.

55. *Given that the Minister envisaged a three-year timeline to develop, consult upon, and designate a new nuclear National Policy Statement (NPS), and that as of 18 July 2023 the consultation stage had not even started, we are concerned that there may be a creeping delay in updating the NPS for new nuclear. This would not only send the wrong signal to a sector poised for investment but could cause delays in deployment. New nuclear developers require knowledge of where a reactor can be built if they are to advance their plans.* (Paragraph 266)

56. *The Government should progress the consultation on the new NPS EN-7 for nuclear power and should meet its previously stated deadline of early 2025, and ideally publish the new NPS earlier than the deadline. Any update should identify where reactors smaller than 1 GW can be sited, as well as sites for larger reactors.* (Paragraph 267)

As an initial step in the development of the new nuclear National Policy Statement, the Government plans to consult on its proposed approach for determining how new nuclear developments could be sited in future. The intention is to publish this consultation before the end of 2023. This consultation will also address the possibility of deploying Small Modular Reactors (SMRs) and other advanced nuclear technologies.

Our intention is to consult on the draft NPS in 2024 and complete the parliamentary scrutiny process to enable the designation of the new nuclear NPS in 2025. We believe this is an ambitious but realistic timeline to ensure that an updated planning framework is established to support projects scheduled for deployment after 2025.

GBN will work across Government to support access to potential sites for new nuclear projects to achieve its long-term ambition.

Nuclear decommissioning and waste

57. Decades of mismanagement of nuclear decommissioning in the UK—from inadequate provision for decommissioning costs, to record keeping so negligent as to have left ponds of radioactive waste whose content is unknown—has made the responsibilities of the Nuclear Decommissioning Authority (NDA) some of the most challenging, complex and consequential of any organisation in Britain today. The NDA has made progress in the last five years in simplifying its structure, making more credible estimates of the costs of decommissioning, and replacing complex and opaque subcontractor arrangements with more straightforward ones. The vast annual budget for the NDA—necessarily between £3.5 billion and £4 billion—and the critical importance of its work means that the performance of the NDA must be kept under close review by the Government and Parliament, and that it should have a strong relationship with the Department for Energy Security and Net Zero, the Treasury and the Prime Minister's office. (Paragraph 280)

The NDA have strong relationships with DESNZ but also with other Government Departments including the Treasury and the Ministry of Defence. This includes regular interactions with ministers and senior officials as well as close engagement on both overarching strategy and investment decisions.

58. The experience and expertise which the NDA has in civil nuclear decommissioning is more than any other country in the world, as a result of the head start the UK has had in being the world's first civil nuclear nation. As countries who were later in constructing civil nuclear power stations have to turn to safely and economically decommission them, the NDA's expertise can be deployed globally. This is a tremendous export opportunity for the UK expertise which can raise revenue. (Paragraph 281)

59. The NDA should establish, with the involvement of government, a long-term plan to expand this international work while monitoring a thorough and dependable service within the UK. (Paragraph 282)

The NDA already engage with other nations across the world including the provision of support to Japan with respect to the decommissioning challenges at the Fukushima Daiichi site. We will continue to work with the NDA to consider how the organisation might enhance their international capabilities. In the meantime, the NDA will continue to explore opportunities to work with international counterparts, sharing best practice through the suite of co-operation agreements and memoranda of understanding that it holds with equivalent authorities across the globe, as well as through its participation in expert technical groups and working parties of international organisations, such as the International Atomic Energy Agency and the OECD's Nuclear Energy Agency.

60. **Most of the nuclear waste that the UK must safely handle and dispose of has already been produced by previous nuclear installations. The incremental waste generated by new nuclear power plants is not likely to be a material factor in decisions on approving new gigawatt-scale plants. We note, however, evidence presented to us that indicated that small modular reactors and advanced modular reactors would produce waste which may require different handling.** (Paragraph 283)

61. *It is imperative that a clear understanding of the waste consequences of new nuclear technologies, how it will be dealt with and at what cost, should be part of the decision-making on approving the case of these technologies.* (Paragraph 284)

Decommissioning and radioactive waste management are key parts of the nuclear life cycle, including for advanced nuclear technologies. The UK government agrees that new and advanced nuclear power plants should be designed, approved, and operated with decommissioning and waste management in mind.

Under the Energy Act 2008, operators of all new nuclear power stations are required to have a Funded Decommissioning Programme (FDP) approved by the Secretary of State before nuclear-related construction can begin. The purpose of the FDP is to ensure that new nuclear power station operators have a plan to deliver the decommissioning and waste management associated with nuclear power stations and secure funding arrangements in place to meet the full costs of decommissioning, waste management and the disposal of spent fuel.

The Nuclear Decommissioning Authority provides expert advice to the UK Government on nuclear new build operators' decommissioning and waste management plans as part of the FDP approvals process. Nuclear Waste Services (NWS) is able to offer advice to waste producers and potential vendors on the suitability of their waste conditioning proposals for future disposal in a Geological Disposal Facility.

The UK government is committed to ensuring that society can continue to benefit from the use of nuclear power without leaving an undue burden on future generations.

62. *Since 2006, Government policy has been to establish a Geological Disposal Facility (GDF) for the long-term storage of nuclear waste. Despite this, Nuclear Waste Services, which is the body responsible for establishing a GDF, is not at the point of having found a community willing to host a GDF or to be able to conduct the detailed geological investigation required to establish a suitable site for a GDF. The timelines and costs for building a GDF are also uncertain.* (Paragraph 296) and 63.

The first waste is not expected to be placed into a Geological Disposal Facility (GDF) until the 2050s and until then, there is sufficient interim storage for both current and predicted future nuclear waste. The Government should continue work to identify a site for a GDF which will be geologically safe, and which will enjoy the confidence of the local community. Given that interim storage has been used for over 50 years and that waste from new nuclear facilities would be a small addition to the stock of waste held, we do not believe that new nuclear plants should be halted until a GDF facility has been established. (Paragraph 297)

The current process to identify a location in which to develop a GDF was launched in England in December 2018, and in Wales in January 2019. The estimated timescale for

development of a GDF compares favourably with other countries that are implementing geological disposal using a siting process similar to the UK. For example, Finland began its process in 1983 and began construction in 2016. Their facility is expected to be operational by the mid-2020s. Sweden began their siting process in 1992 and identified a suitable site in 2009 and construction was approved in January 2022.

By 2026–27, we are aiming to have selected sites we want to take forward for more detail site characterisation (involving the drilling of deep investigatory boreholes around 2029–30) so that we can fully understand the geology before committing to a site. The GDF will operate for over 100 years and needs to provide protection for the radioactive waste it will contain, which will remain hazardous for hundreds of thousands of years. That means investing in finding a suitable site that has been properly investigated to ensure it provides the necessary geological characteristics to keep the waste safe and secure. Our policy requires both suitable geology and a willing community. It requires Nuclear Waste Services (NWS) to work in partnership with communities that enter the siting process as it investigates possible locations in the area. This allows the community to develop its understanding of a GDF and the economic benefits inherent in hosting it. The current estimate is that construction will begin in the 2040s with a GDF operational in the 2050s, but timing may change depending on the complexity of the geological investigations and community support.

The Government agrees that new nuclear power plants should not be halted until a GDF has been established. As noted, the UK has been producing and managing radioactive waste arising from nuclear power stations and other sectors for many decades. Around 94% of this waste is low in radioactivity and is disposed of safely every day in existing facilities. The remaining higher activity waste and spent nuclear fuel is currently stored safely and securely in facilities around the UK. Until such time a GDF is available, nuclear operators will continue to do this.

The process to identify a suitable site for a GDF in England and Wales has a number of areas that are interested in hosting this facility and have entered the siting process. Geological investigations in the shape of a marine geophysical survey were conducted last summer in some of these areas.