



Decom Futures

NDA Business Planning and Strategy

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About NDA

In 2005, the Nuclear Decommissioning Authority (NDA) was formed as a public body to clean up the UK's earliest nuclear sites (some from the 1950s) safely, securely and cost effectively.

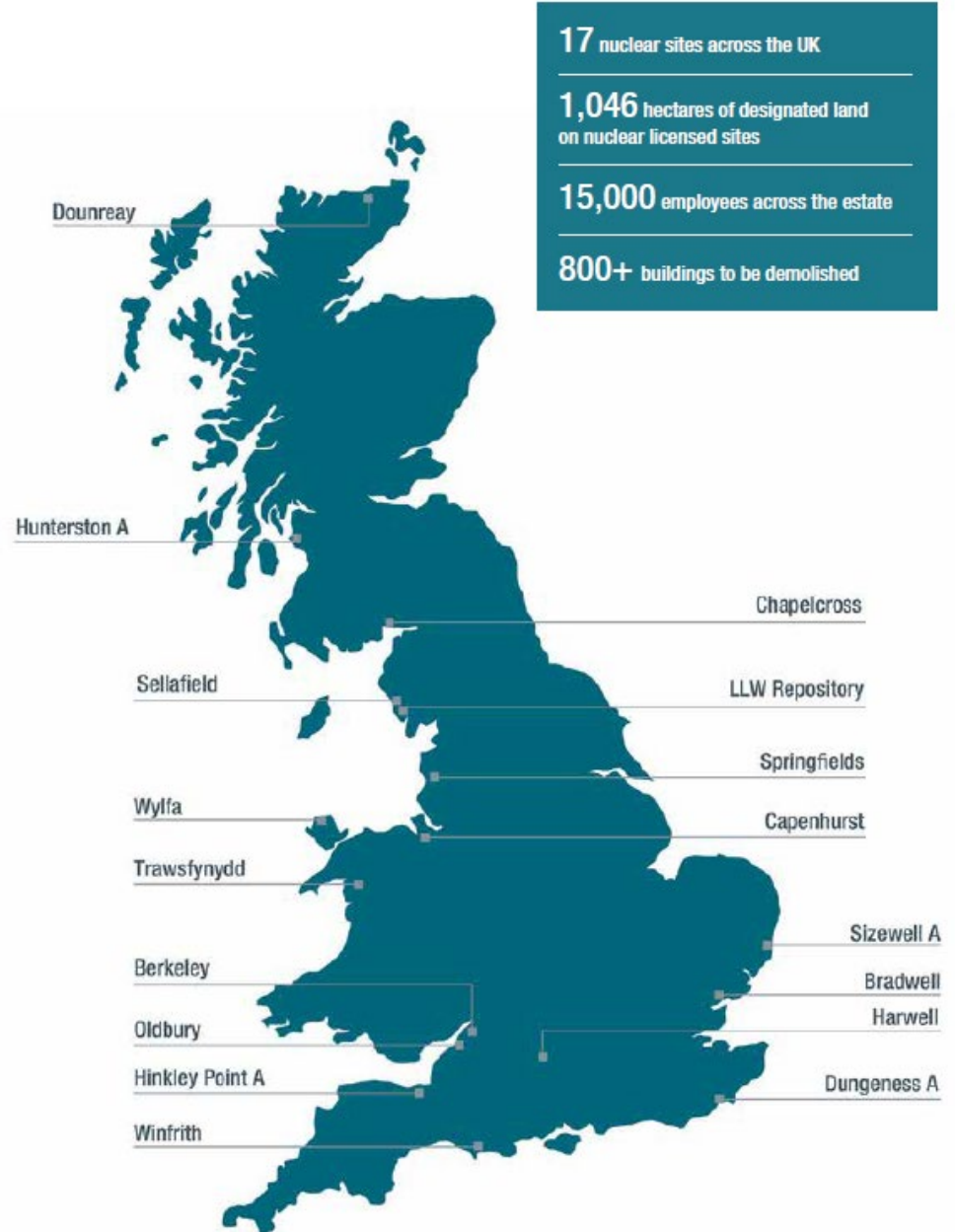
Our clean-up mission covers 17 sites throughout England, Scotland and Wales.

Current estimates are that it will take ~120 years and cost £130bn (within a range from £115bn to £245bn, reflecting the inherent uncertainty of much of what we have to do)

We also have a range of additional functions including supply chain development, research and development, skills, socio-economic support for local communities, and stakeholder engagement.

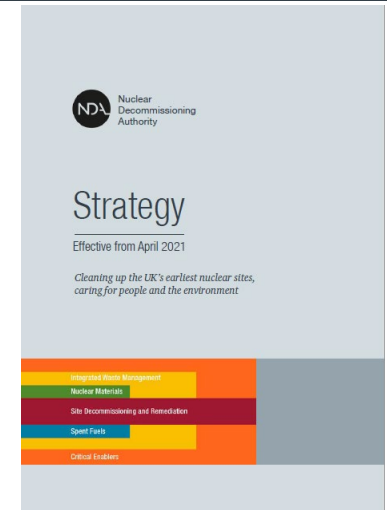
We are also responsible for implementing geological disposal

Our Estate



NDA Strategy

- Strategy development is a structured continuous optimisation approach to develop a range of policy, strategy, innovation and technology interventions to enhance mission delivery
- We are required to review and publish our Strategy at least every 5 years, including publicly consulting with stakeholders
- We have just concluded our latest consultation where we presented the overall challenges we face and our proposed approach to improve delivery of our strategic outcomes, and actions we are planning to take
- Our work is grouped under four driving Strategic themes and a critical enablers supporting theme:
 - *Spent Fuels*
 - *Nuclear Materials*
 - *Integrated Waste Management*
 - *Site Decommissioning & Remediation*
 - *Critical enablers (R&D, Socio Economics etc)*
- *The series of 47 strategic outcomes, highlighted in our Mission Progress Report, use the themes to demonstrate progress against completion of our overall mission*

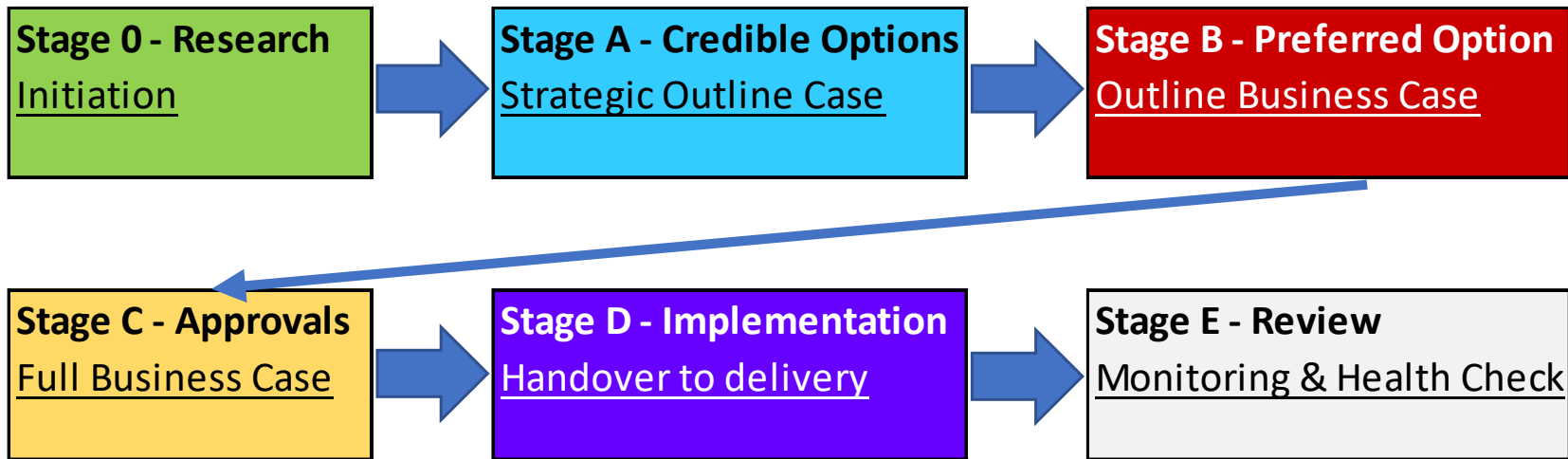


NDA Strategic Outcomes

Spent Fuels		Nuclear Materials		Integrated Waste Management		Site Decommissioning and Remediation	
SPENT MAGNOX FUEL	End date	PLUTONIUM	End date	LOW LEVEL WASTE	End date	OPERATIONAL AND PLANNED	End date
1 All sites defueled	COMPLETED	16 All plutonium produced	2021	26 All LLW produced	2125	40 All planned new buildings operational	2090
2 All legacy Magnox fuel retrieved	2025	17 All plutonium consolidated	COMPLETED	27 All LLW diversion completed	2125	41 All buildings primary function completed	2125
3 All Magnox fuel reprocessing completed	2021	18 All plutonium repacked	2060	28 All LLW disposed	2125	DECOMMISSIONING AND DEMOLITION	
4 All remaining Magnox fuel in interim storage	2025	19 All plutonium in modern interim storage	2060	29 All VLLW disposed	2125	42 All buildings decommissioned	2125
5 All remaining Magnox fuel disposed	2125	20 All plutonium reused or disposed	2120	INTERMEDIATE LEVEL WASTE		43 All buildings demolished or reused	2125
SPENT OXIDE FUEL		URANICS		30 All ILW produced	2120	SITES	
6 All EDFE Oxide fuel received	2035	21 All uranium produced	2021	31 All legacy waste retrieved	2046	44 Selected sites in state suitable for deferred decommissioning	2125
7 All legacy oxide fuel retrieved	COMPLETED	22 All uranium consolidated	2025	32 All ILW treated	2120	45 All sites mission completed	2125
8 All oxide fuel reprocessing completed	COMPLETED	23 All uranium treated	2055	33 All ILW in interim storage	2120	46 All contaminated land remediated	2125
9 All remaining oxide fuel in interim storage	2035	24 All uranium in interim storage	2055	34 All ILW disposed	2125	47 All land dedesignated or reused	2125
10 All remaining oxide fuel disposed	2125	25 All uranium reused or disposed	2120	HIGH LEVEL WASTE			
SPENT EXOTIC FUEL				35 All HLW produced	2090		
11 All exotic fuel defueled	2022			36 All HLW treated	2090		
12 All exotic fuel consolidated	2028			37 All HLW waste in interim storage	2090		
13 All exotic fuel reprocessing completed	2021			38 All overseas HLW exported	2025		
14 All remaining exotic fuel in interim storage	2028			39 All HLW disposed	2104		
15 All remaining exotic fuel disposed	2125						

To develop the Strategy we use a gated process – the NDA Strategy Management System (SMS)

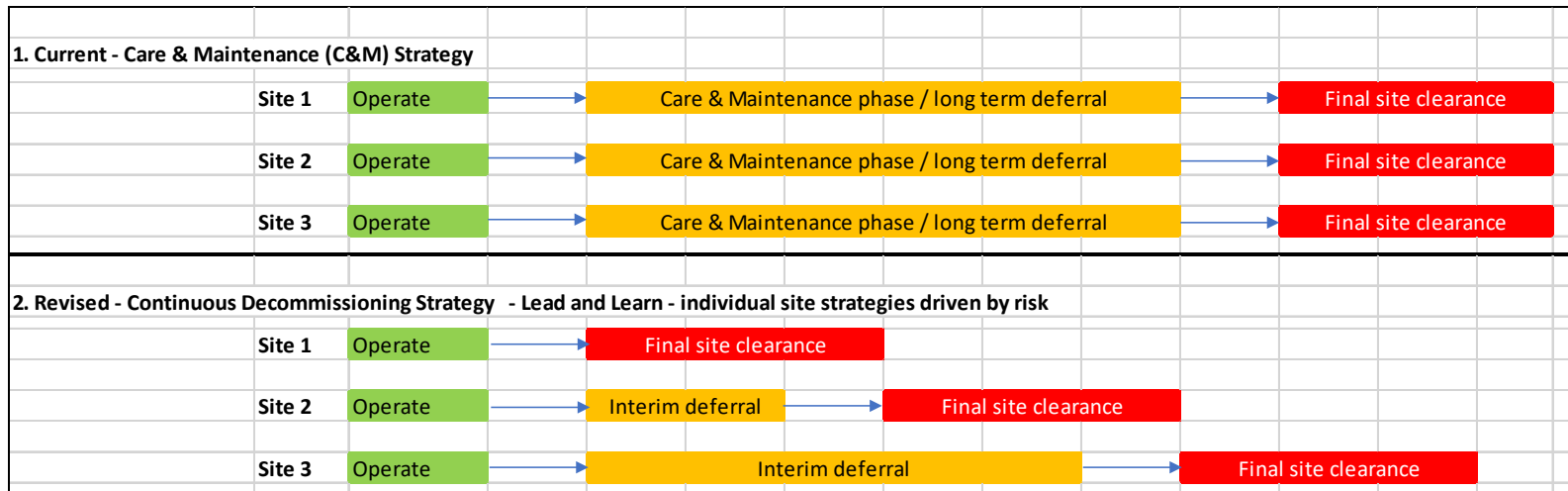
- SMS ensures a robust & coherent strategy and provides underpinning for strategic decisions
- Designed to be flexible enough to allow us to respond to strategic needs and prescriptive enough to manage the effects of internal and external influences
- The SMS process is based on a Business Case approach using criteria from our Value Framework (Safety, Environment, cost, social impact etc.) which aligns with requirements set out in the Treasury Green Book



- Strategy flows down to the implementing businesses / sites through a Strategic Outcome Specification (the outcomes we want the site to achieve)
- The sites build plans showing how they will deliver the required Strategic Outcomes
- The strategy can (and will) change as we progress through our mission and understand more about the challenges of decommissioning the sites and implement new ideas and approaches

Example of evolving strategy – Magnox decommissioning

- The previous strategy for decommissioning Magnox reactor sites was developed over 30 years ago and involved deferring reactor decommissioning at all sites for approximately 85 years from reactor shutdown
- In 2016, we committed to reviewing this strategy with Magnox Limited to take account of new experience and developments in the decommissioning landscape
- We concluded that the deferred decommissioning strategy is not appropriate as a blanket strategy for all reactors in the Magnox fleet, instead endorsing a site-specific approach to Magnox reactor decommissioning which will involve a mix of decommissioning strategies.



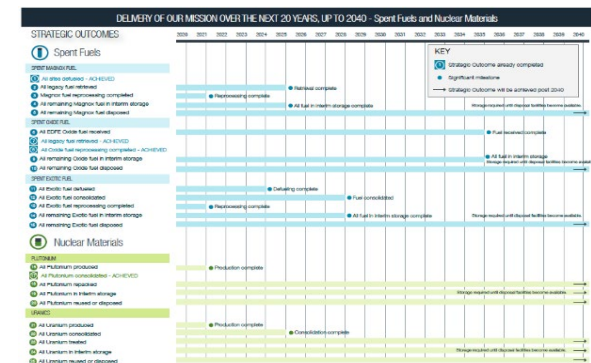
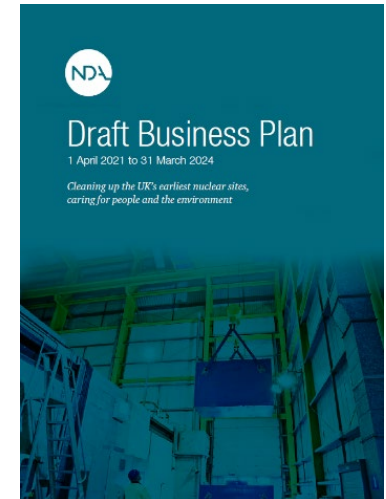
- We are therefore in the process of changing the Strategic Outcome Specification for the Magnox sites so that we can test the revised strategy – one lead site proposed

NDA Business Plan

We are required to prepare annually and publicly consult on a high level Business Plan, to include:

- A summary of the work intended to be carried out
- An estimate of the expenditure expected to be incurred

- Open for consultation now until mid February
- Final version to be published annually by the end of March
- We aim to show a “golden thread” of activities linked to the 47 Strategic outcomes

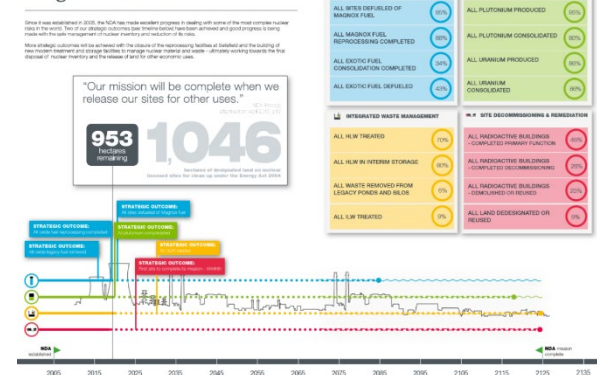


Mission Progress Report

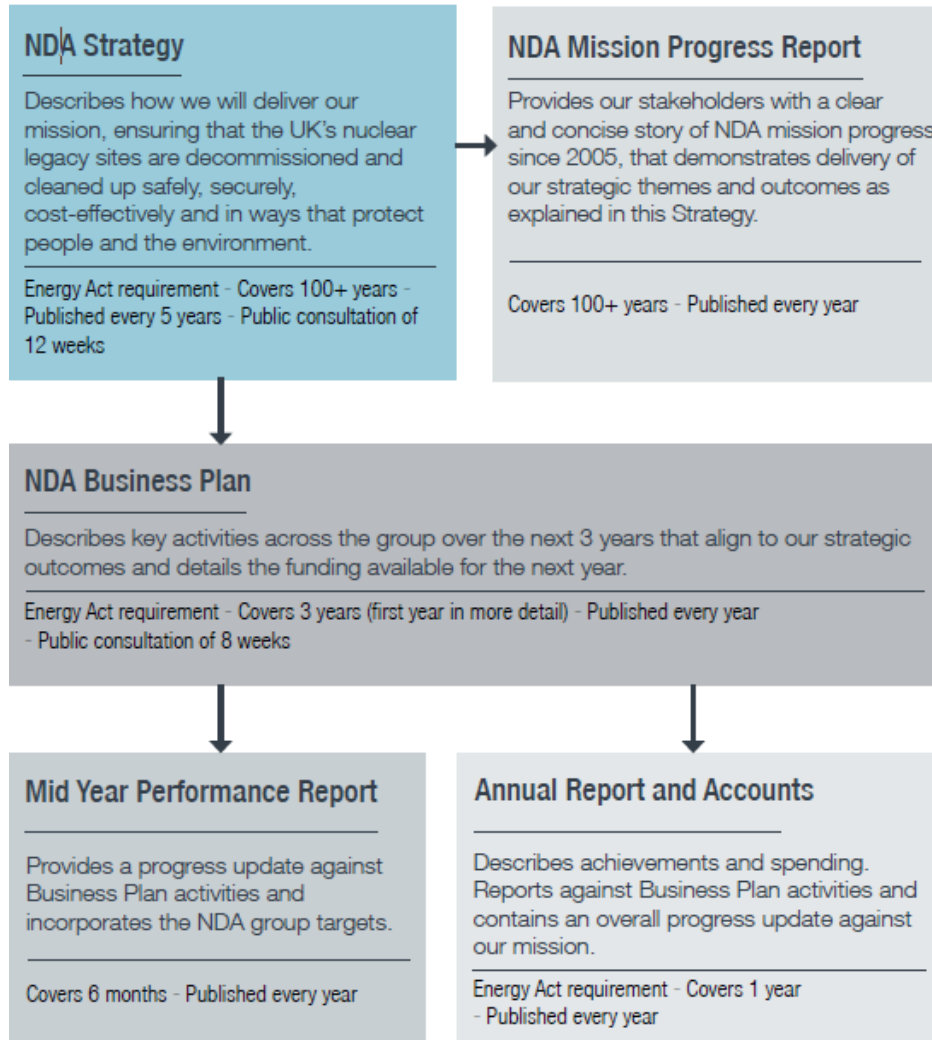
- In 2019 we introduced a new approach to reporting progress against our mission
- We focused on the four themes we outline in our strategy that are common across all sites and enable us to measure our achievements
- Working with our businesses and key stakeholders, we generated this report which demonstrates how far we have travelled since 2005, and how much more there is left to go over the next 120-plus years



Progress to 2019



Our key documents





Making a difference

