



# Business Plan

1 April 2019 to 31 March 2022

**One NDA**



# Nuclear Decommissioning Authority

## Business Plan

Financial year beginning April 2019 to financial year ending March 2022

Business Plan presented to Parliament pursuant to Schedule 3 of the Energy Act 2004.

Business Plan laid before Scottish Parliament by the Scottish Ministers pursuant to Schedule 3 of the Energy Act 2004.

March 2019



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# Response to the Consultation

## General

The consultation on our 2019-2022 draft Business Plan ran from **03 December 2018** to **04 February 2019**, receiving **17 formal responses**. We have considered feedback and made appropriate changes to amend the document since the draft was published.

The Plan received a positive reception with support for its new style and format.

NDA is conscious that the timing of our annual Business Plan consultation may cause difficulties for some stakeholders wanting to respond, but we are constrained to the current planned period due to the timing of seeking consultation responses and following the required approvals process. We will continue to review and improve the consultation process within the current constraints.

If respondents feel that their feedback has not been adequately addressed, then enquiries can be submitted to us via [businessplanning@nda.gov.uk](mailto:businessplanning@nda.gov.uk).

**Our responses to the feedback to the consultation are covered below.**

## Activities and requests for more information on targets

A number of respondents asked for more information on detailed targets to be included in the Plan. The Business Plan's purpose is to provide a summary of activities and expected progress for all 17 of NDA's nuclear sites over the next 3 years, in line with the funding agreed (until the end of the 2019/2020 financial year) with HM Treasury and the Department for Business, Energy and Industrial Strategy.

We have included an additional page (page 21), prior to 'Delivering our Mission' which provides an overview of our plans and how we report progress, highlighting where our stakeholders can review performance against those activities detailed in the Plan.

We have also provided additional information by publishing our group Key Targets; this is a summary of NDA's top 25 targets for 2018/19. We hope stakeholders find this addition to the Mid-Year Performance Report helpful. Links to all documents mentioned on page 20/21 can be found on page 51.

## **Funding**

There were a number of respondents that asked for a more detailed split of expenditure. The Business Plan outlines planned allocations of available funding. We must retain some flexibility in final allocations through the year by operating a portfolio funding approach across the group to maximise value for money whilst focusing on our highest hazards and risk.

## **Socio-economics**

There was interest in how NDA approaches this work and allocates its budget for these activities. NDA is producing a revised group Socio-economic Strategy that will be drafted in 2019/20, but in the near term here is an update on the positive work that continues in this area.

We have been working closely with our businesses to streamline our approach to socio-economics, to make it clearer and more consistent. This will be reflected in the application process, where we will have consistent guidelines and criteria, as well as in the resulting monitoring activities. We have improved our socio-economic reporting, with further, significant, improvements imminent, including the ability to apply an independently calculated financial proxy to the social impact of our larger projects, better demonstrating their contribution to our communities.

Our website has been improved, particularly with annual spend reports and case studies of some of our completed socio-economic projects and their results. Socio-economic activity will become even more transparent: it will

be much easier to see what contribution NDA is making in its communities and how much impact that contribution is having.

We now have economic impact assessments for all of our sites, which show clearly the benefits that having an NDA site in the community brings, what the impacts of downturn in site activity will be and what support the community is likely to need in the future. This evidence now guides our socio-economic decision making and will enable our funding and other resources to be effectively targeted at areas of clear need. Those Economic Impact Assessments are available on our website (links to these can be found on page 51). These will be updated periodically.

## **Changes in activities**

We've added 2 activities at Sellafield site under regulatory control 'Continue joint working between Office for Nuclear Regulation, Environment Agency, Sellafield Ltd, NDA, UKGI and BEIS with the overriding objective of accelerating risk and hazard reduction' and 'Regulatory permissioning in support of decommissioning and demolition activities'.

## **Other changes in the Plan**

The information on page 17 'Delivering value to our businesses' has been moved onto 2 pages and now includes the addition of 'Supply Chain' and the wording for the 'HSSSEQ' and 'Socio-economics' sections has been updated (supplementary information also included above).

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**“our  
mission  
remains  
absolutely  
unchanged**

**- to clean up the legacy  
from the UK’s earliest  
nuclear sites, safely,  
securely and with care  
for people and the  
environment ”**





**David Peattie**  
**Chief Executive**

## Sharing our forward plan

This document outlines the main activities at all 17 NDA sites over the next 3 years, and the progress we expect to achieve. It also sets out our projected income and expenditure for the financial year ahead.

# A word from our CEO

The NDA group will be heading in a new direction over the next 3 years as a number of significant strategic decisions begin to take effect. However our mission remains absolutely unchanged - to clean up the legacy from the UK's earliest nuclear sites, safely, securely and with care for people and the environment.

The Nuclear Sector Deal, published by the government, provides a framework for continued collaboration with our supply chain and the broader nuclear industry, and aligns with our drive for improved mission delivery and commitment to maximising export opportunities for the sector.

The last fuel shear in the Thermal Oxide Reprocessing Plant in November 2018 moved Sellafield closer towards the end of reprocessing. This will be followed by the Magnox Reprocessing Plant, which will end operations in 2020.

These two landmark developments will transform Sellafield, the UK's largest and most complex nuclear site, from an operational business into an organisation that is primarily focused on decommissioning.

We took huge pride in marking the entry of Bradwell into the passive care and maintenance (C&M) phase at the end of 2018, the UK's first Magnox site to reach this milestone. Preparations for C&M spanned many years and have provided valuable lessons that will shape our approach to the remaining 10 sites in the fleet. Full site clearance will take place in around 80 years' time.

In the next 3 years, we also look forward to the start of waste retrievals from the Pile Fuel Cladding Silo and Magnox Swarf Storage Silo, two of the group's most hazardous facilities and a priority for the UK.

Following our termination of the Parent Body Organisation (PBO) contract for the Magnox Ltd reactor and research sites, transition of the business to a wholly

owned NDA subsidiary is underway and will be complete by September 2019. We are confident the subsidiary model will deliver improved performance and accountability across the Magnox sites.

At the close of 2018, the Department for Business, Energy and Industrial Strategy (BEIS) published a new framework to identify a suitable site for a Geological Disposal Facility (GDF), where the nation's higher activity radioactive waste will be disposed of. This is an important step forward for the country, and our subsidiary, Radioactive Waste Management (RWM) has now started an engagement programme with local communities to gauge interest in hosting a GDF.

We have quite rightly been subjected to scrutiny from independent regulatory authorities who have challenged NDA's strategic governance. While we continue to await the conclusion of the Magnox Inquiry, we have already implemented measures to strengthen our commercial capability and organisational resilience. The new NDA Executive is now in place, with an expanded focus on legal and contractual areas, benefitting from the transfer of a full commercial team from our transport subsidiary International Nuclear Services (INS).

Our 4th strategy is due to be published in 2021 and we are already exploring new opportunities as we take into account the latest technological developments and changing political and economic climates.

We have started to work alongside the government in preparation for this year's Spending Review. This will establish the scope of our budget and will help us prioritise our future programme of activities.

It will be a busy few years ahead as we work to deliver our mission and become a stronger NDA group. We will continue to collaborate with our businesses, suppliers, communities and regulatory stakeholders in this process. We cannot succeed alone and we value their challenge as well as their support.

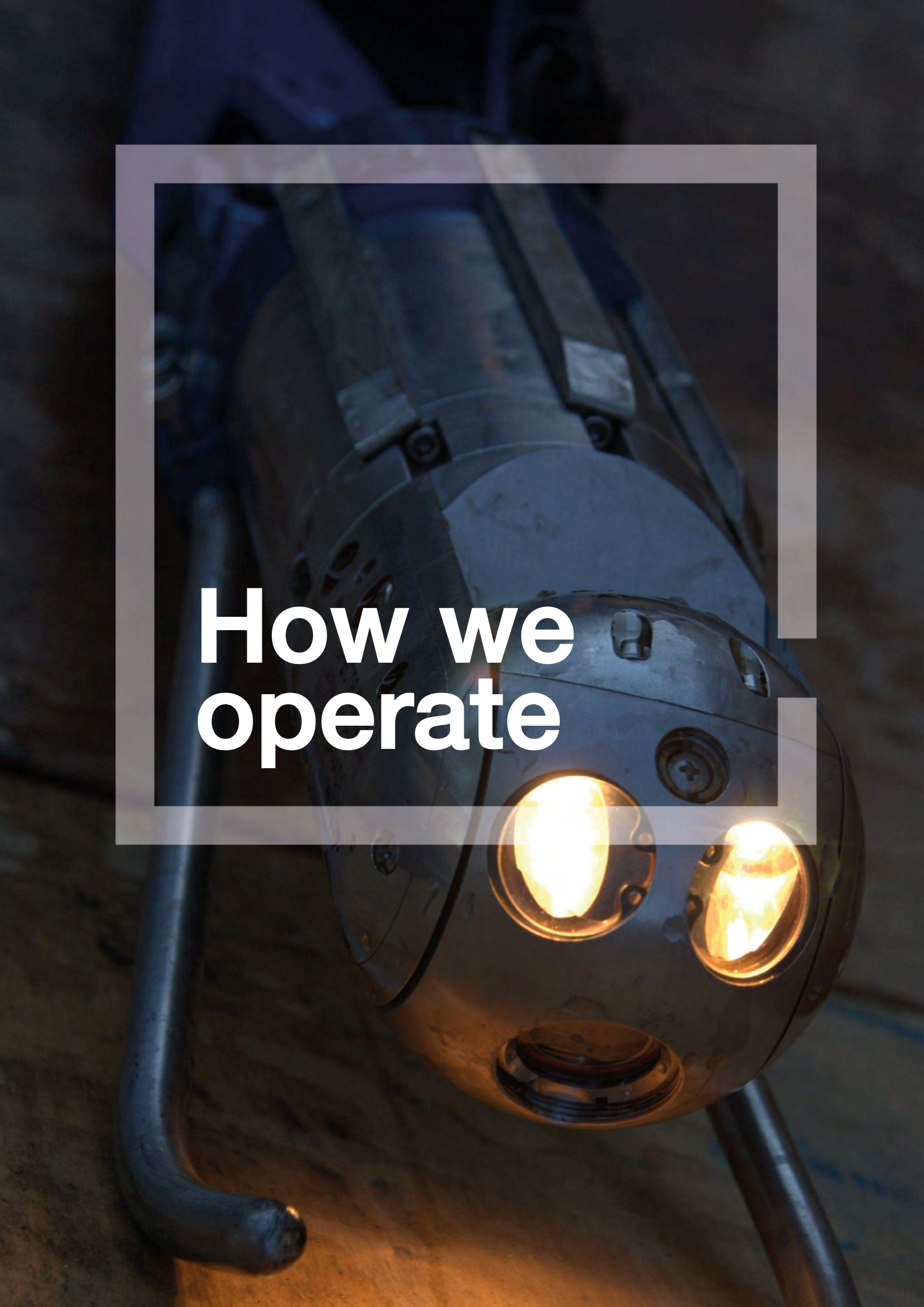


**We're  
one  
NDA  
group**

**Our mission is complex.  
Our challenges are ongoing.  
We're making positive  
progress.**

**Together with our site  
licence companies  
and subsidiaries,  
we're addressing one  
of the most complex,  
long-term environmental  
challenges in Europe.**

We are responsible for decommissioning 17 nuclear sites spread across England, Wales and Scotland, some dating back to the 1940s, plus associated liabilities and assets. This includes the first generation of Magnox power stations, various research and fuel facilities and our largest, most complex site, Sellafield.



**How we  
operate**

## How we operate

NDA is a non-departmental public body created through the Energy Act 2004 (*ref 1*) and sponsored by the Department for Business, Energy and Industrial Strategy (BEIS).

The Energy Act 2004 transferred the assets and liabilities of all the businesses included in this business plan to NDA.

Our plans must be approved by BEIS and Scottish Ministers, who also provide a policy framework for NDA.

## Site activities are closely regulated by:

- the Office for Nuclear Regulation (ONR)
- the Environment Agency (EA)
- the Scottish Environment Protection Agency (SEPA)
- Natural Resources Wales (NRW)
- Department for Transport (DfT).

Their views are an important part of our consideration and we seek to involve them in open dialogue.



Dounreay



Hunterston A



Sellafield

LLW Repository



Wylfa



Trawsfynydd



Berkeley



Oldbury



Hinkley Point A



Chapelcross



Springfields



Capenhurst



Sizewell A



Bradwell



Dungeness A



Harwell



Winfrith

# 1,046

hectares of nuclear licensed land

# 15,255

employees across the estate

# 17

sites dating from post-war decades

# 12

businesses

## Businesses

- Sellafield Ltd
- Magnox Ltd
- Dounreay Site Restoration Ltd
- LLW Repository Ltd
- Springfields Fuels Ltd
- Capenhurst

# Delivering value to our businesses

We're becoming a stronger and more efficient NDA, to make the UK's legacy nuclear sites safer, quicker.

**NDA has 5 offices located across the UK with its headquarters in Cumbria. We employ around 248 staff and are accountable for annual expenditure of circa £3 billion.**

**Taking over direct ownership of Magnox Limited in September 2019 will allow us to further use our unique advantage of having a group-wide view to simplify and standardise the way we work - removing barriers, supporting research and development and seeking innovation.**

**By sharing best practice across our entire group, we can enable our supply chain partners to work smarter and more efficiently with all of our Site Licence Companies (SLC's).**

**Our businesses are responsible for delivering progress against our mission at their respective sites. And we're here to provide group leadership, governance and to drive progress across all of our sites.**

**Using our expertise and group oversight, we will focus on the following:**



## Setting strategy

Our strategy, which is reviewed every 5 years, provides the overall framework for our mission and influences planning at site level. It sets out our long-term objectives and how we will support BEIS policies. Our strategy management system assists the development of options and the associated decision-making process. Detailed plans set out how we will deliver the objectives outlined in the strategy, in the right timeframe and within the funding allocated by the government.

---

## Manage and report performance

We have introduced Quarterly Performance Review (QPR) meetings with our businesses. The QPR's are at the heart of performance management, enabling us to hold our businesses to account effectively, drive discipline around targets, direction, culture and clarity.

We report the performance of our businesses to government and stakeholders.

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## Delivery optimisation

Our businesses range from SLCs led by private-sector Parent Body Organisations (PBOs), to NDA-owned subsidiaries and affiliates. These management arrangements provide a framework for setting out our requirements and are designed to deliver our strategic outcomes.

NDA's group oversight enables optimised, prioritised decision-making over the short and long-term.

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## Governance, risk and assurance

Our governance regime ensures that we meet legal, regulatory and public service responsibilities to protect the interests of government and taxpayers, employees and stakeholders. We carry out appropriate scrutiny of delivery to ensure that we and our businesses deliver the outcomes required for the mission. Risk-based planning and assurance, along with specialist support, provides confidence to our stakeholders that we have the right people, processes and plans in place to enable risk reduction as planned and deliver our objectives.

We measure performance to ensure work is achieved in line with plans and that programmes will deliver value-for-money within the agreed funding limits.





# Delivering value to our businesses

## Health, safety, security, safeguards, environment and quality (HSSSEQ)

We are committed to encouraging the highest standards of safety, security and environmental responsibility in all our activities. Our open and transparent approach aims to secure the support of our stakeholders.

We discharge our HSSSEQ obligations through the monitoring, audit and review of environment, health, safety, security and safeguards at SLC and subsidiary level. Good performance and effective management systems are contractual obligations and assist in the implementation of our strategy. Our broader role is to provide leadership to our SLCs and subsidiaries and across the decommissioning sector.

We are also focused on getting the right technology, skills and resources in place to help in our mission, as well as ensuring that local communities are supported socially and economically during and after the clean-up work.

## Research and Development (R&D)

One of our responsibilities is to ensure the right amount of R&D is carried out to deliver the full decommissioning programme. Many 'never-done-before' projects require significant innovation and novel engineering approaches.

The aim is to solve the challenging technical problems more effectively, more efficiently and where possible, for less cost to taxpayers. To maximise the benefits of R&D and avoid duplication, NDA promotes the group-wide sharing of good practice and, where appropriate, the adoption of innovative ideas across multiple sites.

## Skills

Ensuring we have the capability and capacity to deliver our mission is paramount, as well as ensuring that local communities are supported socially and economically to be sustainable, successful and inclusive during and post decommissioning.

Our mission needs a diverse range of individuals and organisations to provide the capability and capacity to deliver effectively, so having the right skills at the right time within the NDA group and our supply chain is a priority.

Attracting the right calibre of people, developing future skills and enabling existing employees to continue to develop as the mission progresses are key to our success.

## Supply Chain

Our strategy is to help maintain and, where necessary, create and develop a healthy, vibrant, effective, and competitive supply chain.

We need the support of a supply chain that's dynamic, creative and able to meet our current and future decommissioning needs for decades to come.

We are proud to rely upon some of the largest international companies and equally SMEs.

We're connecting our sector with academia, other industries and other countries seeking decommissioning solutions.

We aim to establish a common approach to key supplier management across our SLC's and with Government. By integrating supply chain development and contracting strategies, we will work more closely together with procurement teams across all of our businesses to foster an effective supply chain for the UK's nuclear decommissioning sector.

## Socio-economics

NDA's socio-economic mission is to support the maintenance of sustainable communities up to and after site closure.

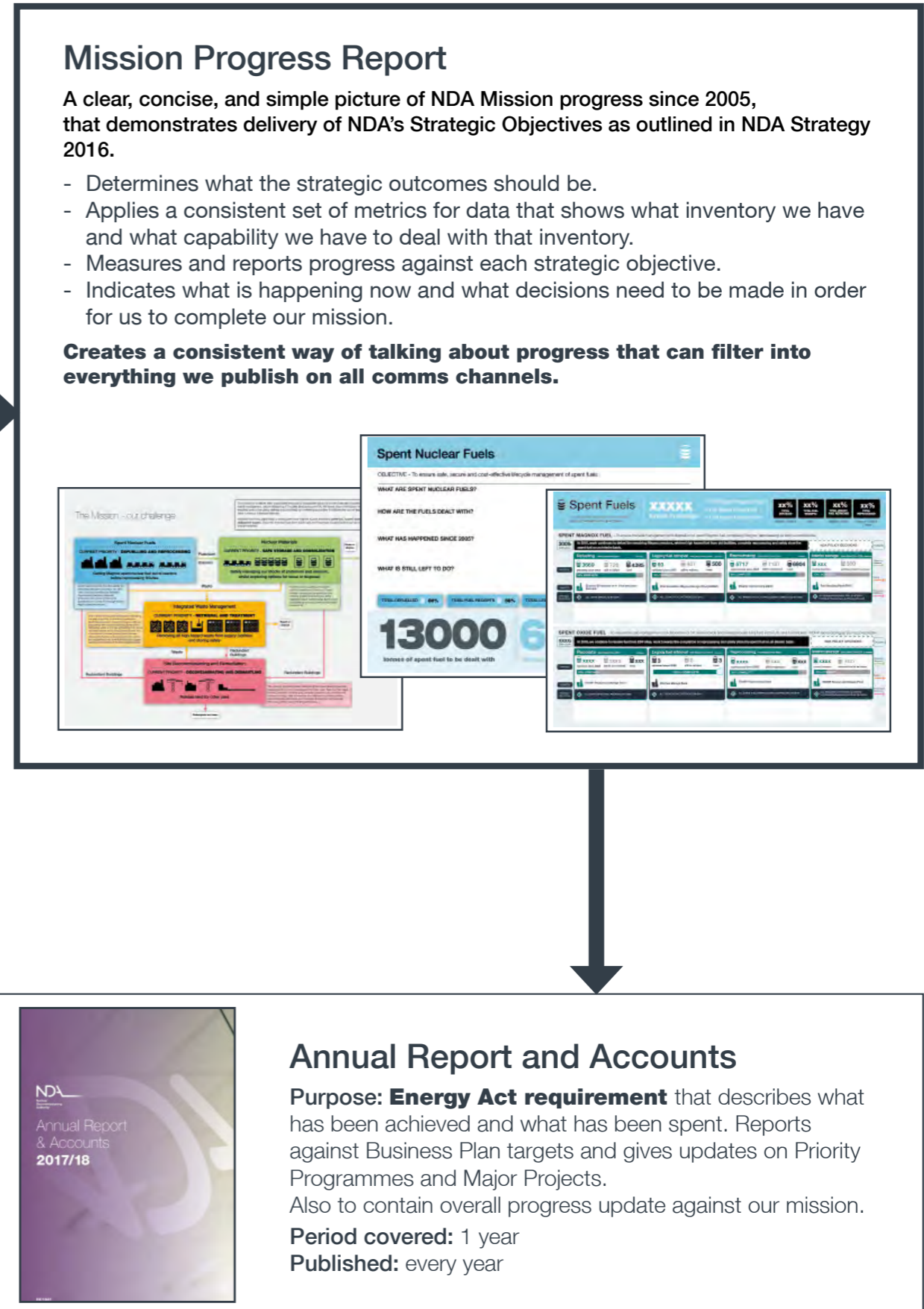
The group-wide socio-economics strategic objectives have been simplified into 3 categories:

- **Sustainable Incomes**  
To improve access to sustainable incomes by increasing skills, knowledge, aspirations and access to opportunities
- **Resilient Economies**  
To enable local wealth-building and inclusive growth in the capacity, diversity and capability of our local economies
- **Thriving Communities**  
To assist our communities to thrive by supporting sustainable activities that create self-reliance and independence.

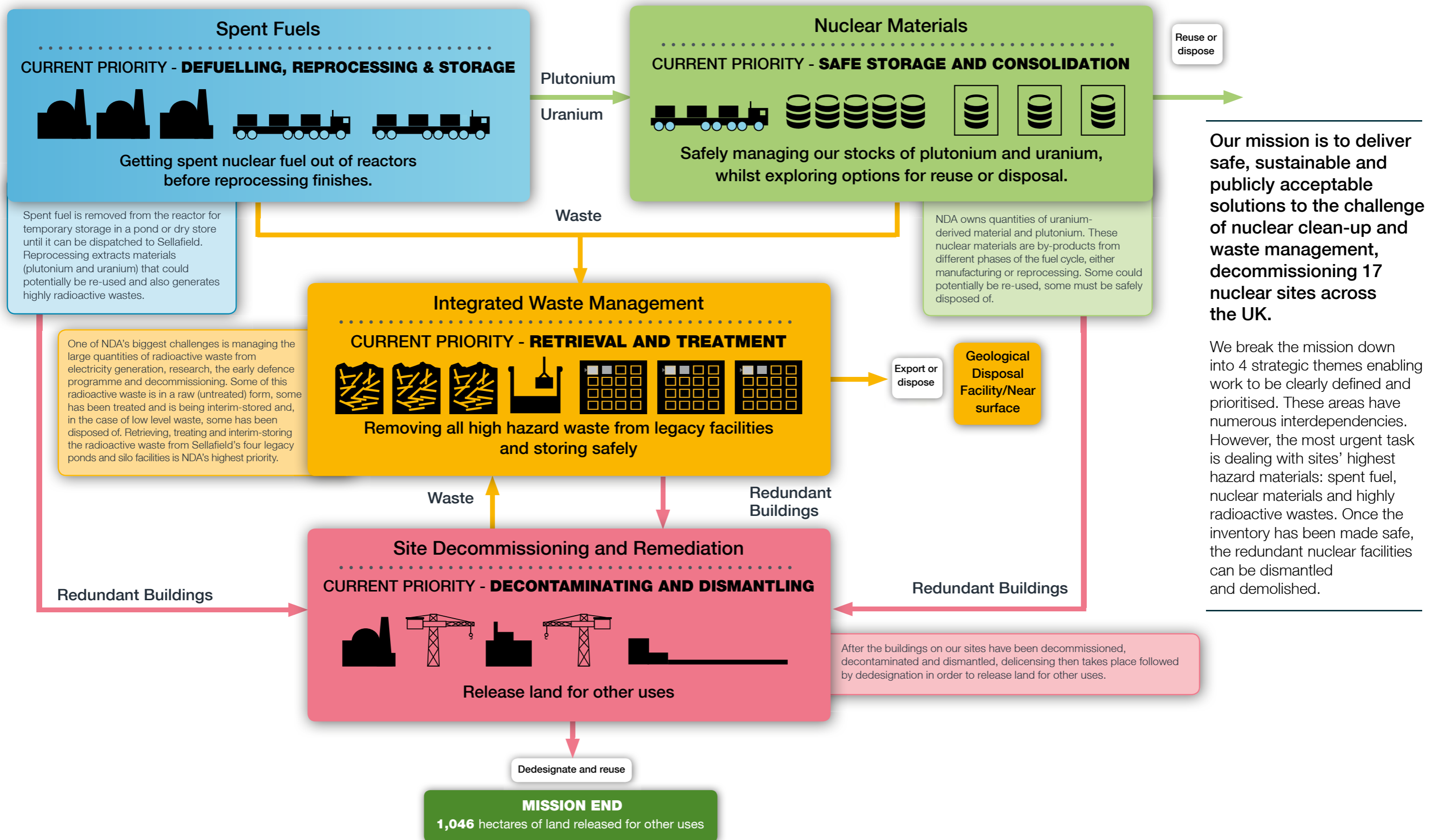
In 2019/20 we will produce a group Socio-Economic Strategy. It will be firmly based upon our **LEGO** principles; based on **Local need**, with **Evidence-based** interventions, strong **Governance** and a clear focus on **Outcomes**.

# Telling the story of progress against our Strategy

This diagram shows the suite of publications we create to explain how we move from setting strategy to reporting on the performance in delivering that strategy. An important addition this year will be information on mission progress.

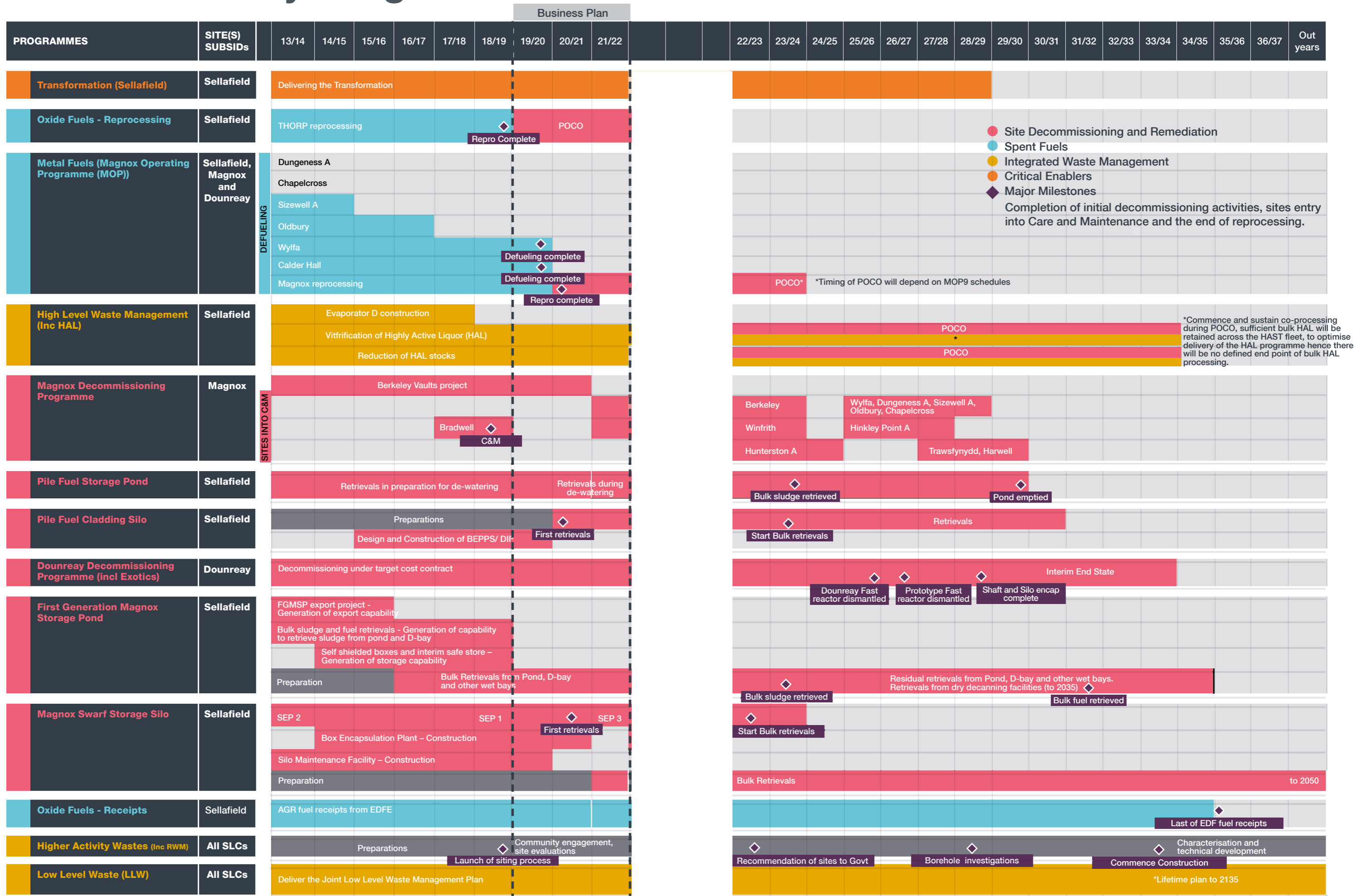


# Delivering our mission



# NDA Estate Key Programmes:

# 20 Year Overview



# **NDA Corporate Centre: Key Activities**

# Focus for our mission

Funding  
Planned expenditure for 2019/20  
**£3.112 billion (circa)**

<p><b>Spent Fuels</b></p> <p>to ensure safe, secure and cost-effective lifecycle management of spent fuels.</p>	<p><b>Integrated Waste Management</b></p> <p>to ensure that wastes are managed in a manner that protects people and the environment, now and in the future, and in ways that comply with government policies and provides value for money.</p>	<p><b>Nuclear Materials</b></p> <p>to ensure safe, secure and cost effective lifecycle management of our nuclear materials.</p>	<p><b>Site Decommissioning and Remediation</b></p> <p>to decommission and remediate our sites and release them for other uses.</p>	<p><b>Critical Enablers</b></p> <p>to provide the stable and effective implementation framework that enables the delivery of our mission.</p>
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NDA's key activities for the next 3 years are set out below:

Key Activities	Timescale
<b>Nuclear Materials</b>	
Work with government to develop a long-term management solution for separated plutonium in the UK.	2019-2022
<b>Integrated Waste Management</b>	
NDA will work with group Businesses to explore alternative disposal options for Higher Activity Waste.	2019-2022
<b>Critical Enablers</b>	
Review of NDA operations and implementation of the accepted recommendations from the Magnox Inquiry, NAO landscape report and Public Accounts Committee.	<b>2019-2020</b>
Manage the existing Magnox Limited contract through to termination; and transition to new arrangements.	2019-2022
Development of strategic opportunities that optimise delivery of the mission.	2019-2022
Manage special nuclear materials consolidation in agreed locations.	2019-2022
Implementation of a group Equality, Diversity and Inclusion (EDI) Strategy.	2019-2022
Implement Government led reforms of public sector pensions and exit caps across the NDA group.	2019-2022
Provide support to government on nuclear new build decommissioning plans.	2019-2022
Working to embed the capability to proactively protect, detect, respond and recover against current and evolving cyber threats.	2019-2022
Implementation of our strategic people delivery plan to enable resource planning, skills development and flexibility and mobility across the group.	2019-2022
Support Small and Medium Enterprise organisations by increasing overall spend with them in line with the government Growth Agenda.	2019-2022
Performance management of group Businesses.	2019-2022
Embed the key tenets of the Industrial Strategy, including active participation in the Nuclear Sector Deal to help achieve HMG key deliverables.	2019-2022
Support implementation of forthcoming new nuclear emergency preparedness standards across the NDA group, as part of the UK's implementation of the Basic Safety Standards Directive 2013.	2019-2022
International support, sharing knowledge and expertise in decommissioning and clean-up activities.	2019-2022
<b>Regulatory Control</b>	
Continue working with regulators and government to determine institutional controls appropriate to restoration of nuclear sites.	2019-2022
Contribute to sustainability performance under the Greening Government Commitments (GGC).	2019-2022

# Our funding

## Funding framework

We are publicly funded through the Department for Business, Energy and Industrial Strategy (BEIS), our total planned expenditure is voted upon annually by Parliament and in line with **Spending Review** totals agreed in 2015.

The revenue we generate through our commercial activities reduce the level of public funding required from Government.

## Commercial income

We maximise revenue from our existing assets and operations to help fund decommissioning and clean-up, in order to reduce the level of public funding required to meet the scope of our plans and delivery of the NDA mission.

Our commercial operations are primarily spent fuel and nuclear materials management with additional opportunities identified in providing transportation services.

We will pursue all commercial opportunities using our existing assets, operations and people where it does not materially impact on our core mission or increase our liabilities. The nature of our current commercial activities means we have to manage a significant degree of income volatility, largely due to our operations relying on ageing assets and infrastructure.

## Prioritisation and allocation of funding

Within affordability constraints, we will seek to maintain progress and maximise value for money through the effective implementation of our strategy. This means focusing on reducing our highest hazards and risks, whilst ensuring that safe, secure and environmentally responsible site operations are maintained.

## Planned income and expenditure in 2019/2020

This business plan sets out our anticipated income and expenditure for 2019/2020 as agreed with HM Treasury and BEIS.

Our total planned expenditure for **2019/2020** is **£3.112 billion**, of which **£2.210 billion** will be funded by UK Government and **£0.902 billion** by income from commercial operations.

Planned expenditure on site programmes will be **£2.901 billion**, while non-site expenditure is expected to be **£0.211 billion**.

This non-site expenditure includes skills development, socio-economic, research and development (R&D), insurance and pension costs, fees to businesses, implementing geological disposal and NDA operating costs as detailed on page 30.



## Planned income and expenditure summary 2019/20

£M Businesses/Sites	Decom & Clean-up Costs <b>(A)</b>	Total Operations Costs		2019/20 Plan Total <b>(A+B+C)</b>	2018/19 Plan Total
		Running Cost <b>(B)</b>	Capex <b>(C)</b>		
Sellafield Ltd (including gas costs for steam)	1135	584	282	<b>2,000</b>	2,000
Trading and Gas Costs (Sellafield)	23			<b>23</b>	24
Magnox Ltd	475			<b>475</b>	490
Dounreay Site Restoration Ltd	185			<b>185</b>	192
LLWR Ltd	68			<b>68</b>	79
Springfields Fuels Ltd	20			<b>20</b>	20
Capenhurst	41			<b>41</b>	55
Nuclear Transport and Contract Management (4)		89		<b>89</b>	109
Non-Site Expenditure	211			<b>211</b>	179
<b>TOTAL</b>	<b>2,158</b>	<b>672</b>	<b>282</b>	<b>3,112</b>	<b>3,146</b>
<b>Income</b>				<b>902</b>	<b>877</b>
<b>Net</b>				<b>2,210</b>	<b>2,269</b>

### Notes:

1. Numbers may not cast due to rounding
2. Final Annual Site Funding Limits issued in March 2018 may be adjusted to reflect efficiency, performance and portfolio pressures.
3. NDA reserves the right to reallocate funding to meet prioritised programme needs.
4. Transfer of INS staff to NDA

## Summary of NDA funding (2019/20 onwards)

Summary of NDA funding	2019/20 £M	2020/21 £M	2021/22 £M
Income	<b>902</b>	TBC - will be confirmed in next spending review	
Government Funding	<b>2,210</b>		
Expenditure	<b>3,112</b>		
<b>Balance</b>	<b>0</b>		

# Our funding

## 2019/20 breakdown of non-site expenditure

Non-site expenditure	2019/20 Plan £M	2018/19 Plan £M
NDA Operating Costs (1)	51	41
Radioactive Waste Management Limited	34	30
Socio Economic, Skills, Research and Development, Knowledge Management, Other	31	31
Estate Insurance	17	16
NDA Properties, Policy Support, NDA Asset decommissioning	28	17
Contractor Fees	51	43
<b>Total</b>	<b>211</b>	<b>179</b>

Notes:

1. Increase in NDA operating costs resulting from transfer of INS commercial staff to NDA and capability improvement resulting from Magnox Inquiry.

## 2019/20 breakdown of planned income by category

Income source	2019/20 Plan £M	2018/19 Plan £M
Reprocessing and Fuel Management Services	802	761
Electricity Generation	0	0
NDA - INS Transport	64	74
Intra Site Services	35	42
<b>Total</b>	<b>902</b>	<b>877</b>

# Our businesses



## Sellafield Limited

On the 1 April 2016 Sellafield Limited became a wholly owned subsidiary of NDA.

**Planned expenditure for 2019/20  
- £2 billion**

265 hectare site in Cumbria.  
All 265 hectares remain covered  
by the nuclear site licence.  
Modifications of designating  
direction signed by the Minister in  
Jan 2012.

### Current key milestones

**2019** - Progress the transformation of Project delivery on site and embed PPP (Programme and Project Partner)

**2020** - Begin retrievals from the Pile Fuel Cladding Silo and Magnox Swarf Storage Silos

**2020** - Completion of Magnox reprocessing including defuelling of Calder Hall

**2021-2022** - Continue with improvements to the site utilities infrastructure including new Steam Generating

**2022** - Commence Bulk Retrievals from Magnox Swarf Storage Silo

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
The areas of principal focus are the redundant Legacy Ponds and Silos facilities, made up of the Pile Fuel Storage Pond, Pile Fuel Cladding Silo, First Generation Magnox Storage Pond and Magnox Swarf Storage Silo. These facilities supported the development of the nuclear programme in the UK from the early 1950s. Latterly, they have supported the generation from the fleet of Magnox power stations. The programmes include the removal of nuclear fuel, sludge and solid material which require the provision of equipment to retrieve the various wastes and then treat and store them in passive condition. This process needs to take into account the role of Integrated Waste Management in achieving hazard reduction and long-term safety, security and environmental protection requirements.	
<b>Pile Fuel Storage Pond</b> <ul style="list-style-type: none"> <li>Continue sludge and solids retrievals from the pond and wetbays.</li> <li>Complete Bay Dewatering Trial.</li> </ul>	<b>2019-2022</b> <b>2020-2022</b>
<b>Pile Fuel Cladding Silo</b> <ul style="list-style-type: none"> <li>Completion of Inactive Safety commissioning of the Box Encapsulation Plant and Product Store (BEPPS)/Direct Import facility.</li> <li>Commence inactive commissioning of waste retrieval equipment.</li> <li>Begin retrievals from the Pile Fuel Cladding Silo. ◆</li> </ul>	<b>2020-2022</b> <b>2019-2020</b> <b>2020-2022</b>
<b>First Generation Magnox Storage Pond</b> <ul style="list-style-type: none"> <li>Continue bulk sludge removal from D Bay.</li> <li>Continue to export fuel and sludge from the pond.</li> </ul>	<b>2019-2022</b> <b>2019-2022</b>
<b>Magnox Swarf Storage Silo</b> <ul style="list-style-type: none"> <li>Commence SEP1 (Silo Emptying Plant) Phase 1 active commissioning.</li> <li>Volume manufacture of 3m<sup>3</sup> boxes.</li> <li>Begin retrievals from Magnox Swarf Storage Silo (MSSS). ◆</li> </ul>	<b>2020-2022</b> <b>2019-2022</b> <b>2019-2020</b>

Key Activities	Timescale
<b>Decommissioning and Remediation</b> <ul style="list-style-type: none"> <li>Complete decommissioning and demolition of the upper diffuser section of the Windscale Pile Chimney Number 1</li> <li>Complete demolition of the SEP Head End Stack.</li> </ul>	<p>2020-2022</p> <p>2020-2022</p>
<b>Spent Fuels</b>	
<b>All of the spent fuels discharged from the operating Advanced Gas-Cooled Reactor (AGR) power stations and defueling Magnox power stations reactors are sent to Sellafield for management. The management of AGR fuel under contracts with EDF Energy provides a significant income stream to NDA.</b>	
Continue to receive and prepare for receipt of Dounreay spent fuels.	2019-2022
Continue to receive / manage AGR spent fuel from EDF Energy and prepare for receipt of bulk defueling.	2019-2022
Completion of Magnox Reprocessing. ◆	2020-2022
Commence POCO of Magnox Reprocessing Plant.	2020-2022
Complete defueling of Calder Hall. ◆	<b>2019-2020</b>
<b>Nuclear Materials</b>	
<b>Sellafield is the custodian of the majority of the UK's stockpile of plutonium which is held in safe and secure storage. Consolidation of special nuclear materials making use of Sellafield's expertise is an ongoing activity and will continue to be part of the site's mission.</b>	
Continue the safe and secure storage of plutonium in line with UK policy.	2019-2022
Continue to receive and securely store special nuclear materials from Dounreay before treatment and repackaging.	2019-2022
Ensure safe, secure management of our uranics inventory.	2019-2022
<b>Integrated Waste Management</b>	
<b>The various activities of the site produce wastes in many forms. These require varying degrees of treatment and onward processing. The site will continue to focus on safe, efficient management of these wastes, including: the conversion of Highly Active Liquor (HAL) into passively safe vitrified waste; the return of vitrified material overseas; and the management of on-site intermediate and low level wastes.</b>	
Continue the programme to repatriate overseas owned vitrified waste to its country of origin.	2019-2022
Prepare and commence the co-processing of HA POCO solids.	2020-2022
Continue to generate savings and preserve capacity at the LLW Repository by diversion of materials into the supply chain.	2019-2022
Continue the programmes to receive and treat waste materials from Harwell and AWE Aldermaston.	2019-2022

**KEY**

◆ Major milestones

Key Activities	Timescale
<b>Critical Enablers</b>	
<b>A number of key enabling activities require specific focus, ranging from infrastructure refurbishment or replacement projects, in support of the above activities, through to key change programmes which aim to improve operational delivery and efficiency on site.</b>	
Continue the Sellafield Limited transformation to support future business requirements including the development and embedding of a value-led culture.	2019-2022
Develop and embed the long-term partnership with the supply chain.	2019-2022
Progress the transformation of Project delivery on site and embed PPP (Programme and Project Partnership).	2019-2022
Support Small and Medium Enterprise organisations by targeting overall spend with them in line with the government Growth Agenda.	2019-2022
Continue the Sellafield Security Enhancement Programme.	2019-2022
Continue with improvements to the site utilities infrastructure and new Steam Generating. ◆	2020-2022
Continue the programme to ensure the Analytical Services capability is available to support the mission.	2019-2022
Continuation of information assurance activities and supporting processes.	2019-2022
Embed the key tenets of the Industrial Strategy, including facilitation under the Nuclear Sector Deal.	2019-2022
Working to embed the capability to proactively protect, detect, respond and recover against current and evolving cyber threats.	2019-2022
Maintain an asset management regime that takes into account the impact of asset condition on meeting regulation.	2019-2022
<b>Regulatory Control</b>	
Ensure discharges are in line with UK discharge strategy.	2019-2022
Reduce environmental risk (including retrieval and treatment of legacy wastes, reduction of HAL stocks).	2019-2022
Continue joint working between Office for Nuclear Regulation, Environment Agency, Sellafield Ltd, NDA, UKGI and BEIS with the overriding objective of accelerating risk and hazard reduction'.	2019-2022
Regulatory permissioning in support of decommissioning and demolition activities.	2019-2022

# Magnox Ltd

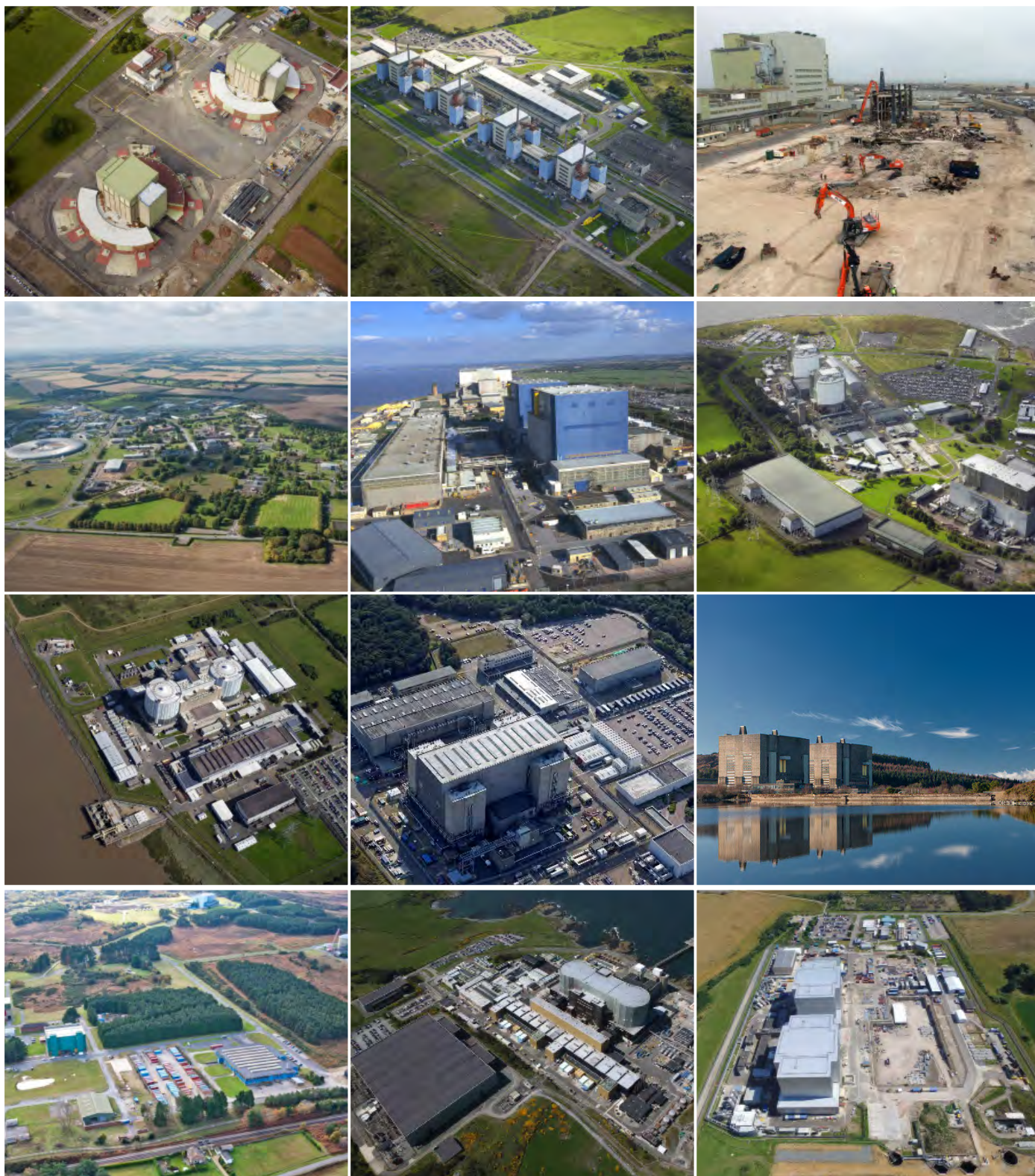


**(Operated by PBO: Cavendish Fluor Partnership - Cavendish Nuclear and Fluor Corporation) until 31 August 2019. On the 1 September 2019 Magnox Limited will become a wholly owned subsidiary of NDA.**

sites: Berkeley, Chapelcross, Dungeness A, Harwell, Hinkley Point A, Hunterston A, Oldbury, Sizewell A, Trawsfynydd, Winfrith and Wylfa (see pictures below reading left to right, top to bottom), and managing Bradwell site in Care and Maintenance.

Magnox Ltd is responsible for the operation of 11

Planned expenditure for 2019/20 - **£475 million**



Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Continuation of estate decommissioning and demolition activities working towards Interim States.	2019-2022
Continue preparations for Winfrith to enter its Interim State.	2019-2022
<b>Spent Fuels</b>	
Management of MOP9 (ref 2) and co-ordination of Magnox fuel management activities with Sellafield and Dounreay complete.	<b>2019-2020</b>
Transfer Magnox fuel flask fleet management responsibility to Sellafield Ltd.	<b>2019-2020</b>
Completion of Wylfa defueling. ◆	<b>2019-2020</b>
<b>Nuclear Materials</b>	
Continuation of the programme for the transfer of nuclear materials.	2019-2022
<b>Integrated Waste Management</b>	
Delivery of the Magnox elements of the estate-wide low level waste management plan including diversion to alternative treatment.	2019-2022
Progression of activities to retrieve, process and package wastes.	2019-2022
Asbestos management – Continued focus on the major risk of asbestos including production of an optimised, underpinned strategy for asbestos, without detriment to Care and Maintenance.	2019-2022
<b>Critical Enablers</b>	
Support to the Government in activities to deliver the new build agenda and preparations for decommissioning the AGR fleet.	2019-2022
Continuation of information governance activities and supporting processes.	2019-2022
Develop and implement a “Sift & Lift” programme to rationalise all Magnox records and transfer as appropriate to NDA Archive in Wick.	2019-2022
Support Small and Medium Enterprise organisations by targeting overall spend with them in line with government Growth Agenda.	2019-2022
Support to NDA in property activities to reduce NDA decommissioning liability and achieve best value on asset disposal.	2019-2022
Development of Interim State approaches, utilising revised management arrangements.	2019-2022
Monitoring management arrangements for sites in Care and Maintenance.	2019-2022
Implement a change in management arrangements to smoothly transition from a PBO to becoming an NDA subsidiary.	2019-2022
Support closure of Magnox Operations and Maintenance Contract with Cavendish Fluor Partnership.	<b>2019-2020</b>
<b>Regulatory Control</b>	
Ensuring the management arrangements for Interim States are determined and agreed with Regulators.	2019-2022
Regulatory permissioning in support of the transfer of Nuclear Materials between sites.	2019-2022
Regulatory permissioning in support of the Interim End State definition and arrangements for Winfrith.	2019-2022

**KEY**

◆ Major milestones



# Berkeley

27 hectare site in Gloucestershire.  
 11 hectares have been de-designated.  
 Modification of Designating Direction signed by the Minister in January 2012.  
 16 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2023 - Site enters Care and Maintenance
- 2070 - Final Site Clearance begins
- 2079 - Final Site Clearance achieved

Key Activities	Timescale
<b>Integrated Waste Management</b>	
Continuation of retrieval and packaging activities in the active waste vaults.	2019-2022
Complete design and commissioning of shielded area waste retrieval equipment.	<b>2019-2020</b>
Retrieval of waste from shielded area (caves).	2019-2022
Continuation of waste retrieval plant design, commissioning and packaging.	2019-2022
Complete Design and Build of encapsulation facility.	<b>2019-2020</b>
Encapsulation of ILW packages.	2020-2022
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities ongoing in preparation for entry into Care and Maintenance.	2019-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Berkeley ILW Management Programme.	2019-2022
Regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.	2019-2022

# Bradwell

## in Care and Maintenance

20 hectare site in Essex.  
 All 20 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2083 - Final Site Clearance begins
- 2092 - Final Site Clearance achieved

Key Activities	Timescale
<b>Integrated Waste Management</b>	
Ongoing monitoring of Care and Maintenance phase.	2019-2022
Receipt and storage of other ILW waste packages in line with planning permission.	2019-2022

# Chapelcross

96 hectare site in Dumfries and Galloway.  
All 96 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2025 - Site enters Care and Maintenance
- 2085 - Final Site Clearance begins
- 2095 - Final Site Clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
Preparations for pond draining and stabilisation.	2019-2022
Commence pond draining and stabilisation.	2020-2022
<b>Integrated Waste Management</b>	
Encapsulation facility Design and Build complete.	2019-2020
Progressing of ILW retrievals, processing and storage activities.	2019-2022
Interim Storage Facility commissioned and complete.	2020-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.	2019-2022

# Dungeness A

20 hectare site in Kent.  
All 20 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2025 - Site enters Care and Maintenance
- 2087 - Final Site Clearance begins
- 2097 - Final Site Clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
Ponds cleaned and stabilised.	2019-2020
<b>Integrated Waste Management</b>	
Commence preparations for Boiler Annexe removal.	2019-2020
Complete retrievals, treatment and transport of ILW.	2019-2022
Complete bulk asbestos removal from reactor buildings.	2019-2020
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.	2019-2022

# Harwell

108 hectare site in Oxfordshire.  
22 hectares have been de-designated.  
Modification of Designating Direction signed by the Minister in December 2012 and July 2017.  
86 hectares remain covered by the nuclear site licence.

## Current key milestones

**2027** - Primary facilities decommissioning complete

**2027** - Reactor decommissioning complete

**2027-28** - Interim State achieved

**2064** - Final site clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Continuation and completion of Liquid Effluent Treatment Plant (LETP) area environmental restoration.	2019-2022
Decommissioning (including asbestos removal) and demolition activities.	2019-2022
<b>Nuclear Materials</b>	
Continuation of the programme for the transfer of nuclear materials and ILW.	2019-2022
<b>Integrated Waste Management</b>	
Recovery, processing and packaging of solid ILW.	2019-2022
Complete preparations for decommissioning of radium chemistry facilities.	<b>2019-2020</b>
Decommissioning of radium chemistry facilities.	2020-2022
Commence receipt of packaged ILW from Winfrith in the Harwell store.	2020-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of decommissioning and demolition activities.	2019-2022

# Hinkley Point A

20 hectare site in Somerset.  
All 20 hectares remain covered by the nuclear site licence.

## Current key milestones

**2027** - Site enters Care and Maintenance

**2081** - Final Site Clearance begins

**2090** - Final Site Clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
Complete deplant and demolition of Turbine Hall.	<b>2019-2020</b>
<b>Integrated Waste Management</b>	
Continuation of FED retrieval activities.	2019-2022
Continue and complete ILW skip management.	2019-2022
Complete waste conditioning facility construction and commissioning.	<b>2019-2020</b>
Continue preparations for Sludge Canning Building waste retrievals.	2019-2022
Complete Interim Storage Facility construction and commissioning.	<b>2019-2020</b>
Complete receipt of ILW packages from other sites into the Interim Storage Facility complete.	2020-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Care and Maintenance entry definitions and arrangements.	2019-2022

# Hunterston A

15 hectare site in Ayrshire.  
All 15 hectares remain covered by the nuclear site licence.

## Current key milestones

2024 - Site enters Care and Maintenance

2071 - Final Site Clearance begins

2080 - Final Site Clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
Commence and complete Weather Envelope repairs.	2019-2022
<b>Integrated Waste Management</b>	
Completion of solid ILW encapsulation plant construction and mechanical and electrical installation.	2019-2020
Completion of inactive commissioning of solid ILW encapsulation plant.	2019-2020
Progressing of ILW retrievals, processing and storage activities.	2019-2022
Commence and complete Weather Envelope repairs.	2019-2022
Completion of Solid Active Waste Bunker Retrieval Operations excluding Post Operational Clean Out.	2019-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.	2019-2022

# Oldbury

47 hectare site in South Gloucestershire.  
32 hectares have been de-designated.  
Modification of Designating Direction signed by the Minister in January 2012.  
15 hectares remain covered by the nuclear site licence.

## Current key milestones

2027 - Site enters Care and Maintenance

2092 - Final Site Clearance begins

2103 - Final Site Clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
Complete ponds decommissioning preparations.	2019-2020
Complete ponds draining, cleaning and stabilisation.	2019-2022
Commence and complete Weather Envelope repairs.	2019-2022
<b>Integrated Waste Management</b>	
ILW retrieval enabling works complete.	2019-2022
Progression of activities supporting consolidated ILW storage.	2019-2022
Commence retrievals, treatment and transport of ILW.	2019-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.	2019-2022

# Sizewell A

14 hectare site in Suffolk.  
All 14 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2027 - Site enters Care and Maintenance
- 2088 - Final Site Clearance begins
- 2097 - Final Site Clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
Continue and complete ponds decommissioning.	2019-2022
Ponds draining and stabilisation complete.	<b>2019-2020</b>
Commence preparation for asbestos removal.	<b>2019-2020</b>
Commence asbestos removal.	2020-2022
<b>Integrated Waste Management</b>	
Continue preparation for FED retrievals.	2019-2022
ILW retrieval enabling works complete.	2019-2022
Progression of activities to support consolidation of ILW storage.	2019-2022
Commencement of retrievals, treatment and transport of ILW.	2019-2022
Management of receipt of waste packages at Bradwell Site.	2019-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Care and Maintenance entry definitions and arrangements.	2019-2022

# Trawsfynydd

15 hectare site in North Wales.  
All 15 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2029 - Site enters Care and Maintenance
- 2074 - Final site clearance begins
- 2083 - Final site clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Complete developing strategy for ponds End State conditions.	<b>2019-2020</b>
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
<b>Integrated Waste Management</b>	
FED retrievals and encapsulation complete.	2019-2022
Continued recovery and treatment of ILW.	2019-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of decommissioning and demolition activities.	2019-2022

# Winfrith

96 hectare site in Dorset.  
7 hectares have been de-designated.  
Modification of Designating Direction signed by the Minister in March 2014.  
89 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2022** - DRAGON reactor complex decommissioning complete
- 2023** - Steam Generating Heavy Water Reactor (SGHWR) complex decommissioning complete
- 2023** - Interim End State achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
DRAGON – continue reactor decommissioning.	2019-2022
SGHWR – complete design and build of reactor decommissioning equipment.	<b>2019-2020</b>
SGHWR – continue decommissioning of the primary and secondary containment areas.	2019-2022
Decommissioning (including asbestos removal) and demolition activities.	2019-2022
<b>Integrated Waste Management</b>	
Consolidation of packaged ILW to the Harwell store complete.	2019-2022
Commence shipments of LLW drums to LLWR.	<b>2019-2020</b>
<b>Regulatory Control</b>	
Regulatory permissioning in support of decommissioning and demolition activities.	2019-2022
Regulatory permissioning in support of the Interim End State Definition and arrangements for Winfrith.	2019-2022

# Wylfa

21 hectare site in Anglesey.  
All 21 hectares remain covered by the nuclear site licence.

## Current key milestones

- 2026** - Site enters Care and Maintenance
- 2097** - Final Site Clearance begins
- 2105** - Final Site Clearance achieved

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	2019-2022
Provision of support and assets to nuclear new build.	2019-2022
<b>Spent Fuels</b>	
Defueling activities in line with MOP9 (ref 2) complete.	<b>2019-2020</b>
Completion of Wylfa defueling in line with MOP9 (ref 2).	<b>2019-2020</b>
<b>Integrated Waste Management</b>	
Continuation of ILW retrievals and packaging.	2019-2022
Continue and complete waste retrieval enabling activities.	2019-2022
Bulk asbestos removal from Turbine Hall complete.	2019-2022
Commence admin and ancillary buildings decommissioning.	2020-2022
<b>Regulatory Control</b>	
Regulatory permissioning in support of the Care and Maintenance entry definitions and arrangements.	2019-2022
Complete fuel free verification agreement with the ONR.	2019-2022



**Dounreay Site Restoration Limited (DSRL is owned by a Parent Body Organisation (PBO) - Cavendish Dounreay Partnership Limited comprising Cavendish Nuclear, Jacobs & AECOM)**

DSRL is contracted to carry out the decommissioning of the Dounreay site as well as the operation of the Low Level Waste (LLW) disposal facility next to the licensed site. In March 2015, a revised Lifetime Plan was approved, incorporating scope to move material from Dounreay to

Sellafield, that had not been agreed or finalised when the original contract was signed. In July 2015, this scope was further updated. Dounreay will continue to deliver within its assigned annual site funding limits, while also delivering the additional scope. The contract extension required for the additional scope is still earlier than the pre-competition baseline for achieving Interim End State. The activities below give the current understanding of the updated plans and are subject to change.

**Planned expenditure for 2019/20  
£185 million**

60 hectare site (plus 12 hectares designated for LLW facility) in Caithness.

60 hectares remain covered by the nuclear site licence, the 12 for the LLW facility are designated but not licensed. Modification in designating direction signed by the Minister in Jan 2012.

**Current key milestones**

**2025** - All fuel in long-term storage or shipped off site.

**2025** - Dounreay Fast Reactor (DFR) dismantled.

**2026** - Prototype Fast Reactor (PFR) dismantled.

**2028** - Shaft and Silo encapsulation complete.

**2030** - Site clearance and environmental restoration phase 3 complete.

**2030-33** - Interim End State achieved.

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
D1225 Demolition complete.	<b>2019-2020</b>
Complete shaft and silo Hazop Studies.	<b>2019-2020</b>
Commence DCP ILW Store Extension.	<b>2019-2020</b>
D1211 Suction Sump Decommissioning.	<b>2019-2020</b>
Decontamination of PFR Pond suitable for Final Disposal.	<b>2020-2022</b>
<b>Spent Fuels</b>	
Continued removal of Breeder Fuel elements from DFR.	<b>2019-2020</b>
Completion of delivery of all in reactor DFR Breeder Fuel to Sellafield.	<b>2020-2022</b>
Complete delivery of all fuels from DFR.	<b>2020-2022</b>
<b>Integrated Waste Management</b>	
Continued transfer of LLW to LLW vault.	<b>2019-2020</b>
<b>Nuclear Materials</b>	
Continued consolidation of special nuclear materials.	<b>2019-2020</b>
<b>Critical Enablers</b>	
Support small and medium enterprise (SME) organisations by measuring and reporting overall spend with them, in line with the government growth agenda.	<b>2019-2022</b>
<b>Regulatory Control</b>	
NDA and Regulatory permissioning in support of the Interim End State Definition and arrangements for Dounreay.	<b>2019-2022</b>



**Low Level Waste Repository Limited**  
**(Operated by PBO - UK Nuclear Waste Management Limited - AECOM, Studsvik AB, Orano SA)**

Low Level Waste Repository Limited (LLWR) is responsible for both the operation of the LLW site and the delivery of the National Low Level Waste Programme on behalf of NDA.

**Planned expenditure for 2019/20 £68 million**

99 hectare site in Cumbria.  
 All 99 hectares remain covered by the nuclear site licence.

**Current key milestones**

- 2019** - PCM decommissioning complete.
- 2019** - Security programme complete.
- 2024** - Type B programme complete.
- 2025** - Final capping of Vault 8.
- 2135** - Final site clearance achieved.

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Ongoing site preparation for phased construction of the final cap for trenches 1 to 7 and Vault 8.	2019-2022
<b>Integrated Waste Management</b>	
Delivery of the National LLW Programme to optimise LLW Strategy implementation. Work with consigning SLC's to improve waste forecasts and inventory and continue segregated waste, treatment and disposal services.	2019-2022
Work with NDA to support innovation in approaches to waste management.	2019-2022
Type B Programme fleet commences key transport scope.	2019-2022
<b>Critical Enablers</b>	
Support hazard reduction across the NDA group.	2019-2022
Manage and operate LLWR safely to provide an effective UK disposal service.	2019-2022
Consideration of options to further optimise operations at the LLWR.	2019-2022
Continue to pursue overall cost savings in delivery of the Lifetime Plan.	2019-2022
Support Small and Medium Enterprise organisations by targeting overall spend with them in line with the government Growth Agenda.	2019-2022



# Springfields



## Springfields Fuels Limited (Owned by Westinghouse Electric UK Holdings Ltd)

Planned expenditure for 2019/20 **£20 million**

Springfields is a nuclear fuel manufacturing site and is located near Preston in Lancashire. The site is operated by Springfields Fuels Limited (SFL) and used to manufacture a range of fuel products for both UK and international customers and decommissioning historic uranic residues and redundant facilities.

From April 2010, NDA permanently transferred ownership of the company to Westinghouse Electric including the freedom to invest for the future under the terms of a new 150 year lease. SFL is contracted to provide decommissioning and clean up services to NDA to address historic liabilities, prior to the transfer.

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Complete Post Operations Clean Out of Residues Recovery Plant (RRP).	2020-2022
Continue decommissioning of the Magnox Island.	2019-2022

# Capenhurst



## Urenco Nuclear Stewardship Ltd (Owned by URENCO Ltd)

Planned expenditure for 2019/20 **£41 million**

The NDA Capenhurst site is located near Ellesmere Port in Cheshire, and was formerly home to uranium enrichment plant and associated facilities that ceased operation in 1982.

In 2012, the site was transferred to URENCO, owners of the adjacent licensed site, and was amalgamated into a single nuclear licenced site, paving the way for URENCO to invest in new facilities, in order to meet future

customer demand. As part of this transfer, URENCO established Urenco Nuclear Stewardship (UNS), formerly known as Capenhurst Nuclear Services, to provide responsible management of uranic materials and carry out remediation work on behalf of NDA. UNS manages 95% of NDA's uranic inventory and provides broader decommissioning and remediation works for redundant facilities, in order to utilise space to maximise efficiency.

NDA and UNS have also signed an agreement for the processing of UK Government-owned by-product/legacy material from uranium enrichment (known as 'Tails') through URENCO's Tails Management Facility.

Key Activities	Timescale
<b>Site Decommissioning and Remediation</b>	
Continued safe storage of uranic materials.	2019-2022
<b>Nuclear Materials</b>	
Prepare EPC and FEED tender for the Legacy Cylinder Facility, to treat 'Tails' prior to processing through the Tails Management Facility.	2019-2020

## Radioactive Waste Management Limited

RWM's vision is a safer future by managing radioactive waste effectively, to protect people and the environment with our mission to deliver geological disposal and provide radioactive waste management solutions.

Delivering a GDF for the UK is of national importance for both the Government and NDA.

NDA currently has a major programme of decommissioning and waste management across Great Britain; retrieving, packaging and storing waste ready for disposal. A GDF provides an end point for that programme. A safe disposal route for waste is also critical to supporting the Government's nuclear new build programme, making sure the UK has access to safe, secure, affordable, low-carbon energy.

Waste is being retrieved and packaged now. Over 70,000 packages are already secured, safely in surface stores awaiting a GDF, and are accumulating at 3,000 packages per year. RWM works with the producers of radioactive waste to ensure that waste being packaged now is suitable for disposal in a future GDF. We also work with NDA in support of waste management strategy development.

The UK Government's 2014 White Paper, "Implementing Geological Disposal" established NDA's role as the implementer in a consent-based process to develop a Geological Disposal Facility (GDF) for the UK's higher activity radioactive waste. In 2014, NDA established Radioactive Waste Management Limited (RWM) as its delivery body for a GDF.

The White Paper set out a programme of 3 initial actions to be completed before the siting process could begin (National Geological Screening led by RWM and two BEIS-led actions to clarify the role of communities in GDF siting and the land-use planning process to be applied to geological disposal infrastructure in England). These initial actions are now complete and the GDF siting process launched in England in December 2018 alongside publication of the updated UK Government policy document – 'Implementing Geological Disposal: Working With Communities'. Separate Welsh Government policy on 'Geological Disposal of Higher Activity Radioactive Waste: Working With Communities' was published in January 2019, thus opening the GDF siting process in Wales.

This approach does not apply in Scotland. The Scottish Government has published 'Scotland's Higher Activity Radioactive Waste Policy 2011'. Scottish Government Policy states that: "The long-term management of higher activity radioactive waste should be in near-surface facilities. Facilities should be located as near to the site where the waste is produced as possible".

Any future policy decisions in relation to geological disposal in Northern Ireland would be a matter for the Northern Ireland Executive, which is currently suspended. Accordingly there is currently no active GDF siting process in Northern Ireland.

## Key Activities 2019-2022

### Critical Enablers

Implement government policy on geological disposal of Higher Activity Waste (HAW) through effective engagement with willing communities in the delivery of a site for the construction and operation of a GDF.

Deliver a robust technical programme to drive our design and safety assessment work.

Develop Radioactive Waste Management Limited into a competent delivery organisation.

Work pro-actively with waste producers, planning for and delivering disposability assessments for their range of wastes.

## Direct Rail Services Limited

Direct Rail Services (DRS) Limited was established in 1995 to provide a rail service for the transportation of nuclear material. DRS operates in non-nuclear business where it enhances our ability to deliver the core mission, through developing a critical mass that ensures we attract and retain people of the highest calibre and provide an environment that fosters innovation and operational excellence.

DRS has developed and maintained an industry leading reputation for providing safe, secure, reliable and cost effective services within both the nuclear and non-nuclear related markets.

Over this plan period DRS's business objectives are:

- To continue to provide NDA with a long-term capability to meet the lifetime requirements of the nuclear mission with respect to the provision of rail logistics services
- To develop our reputation in order to act as an advisor to the UK Government on rail related logistical matters
- To enhance and maintain a vehicle asset capability that offers improved safety, security and environmental performance and reliability
- To ensure continued capability in respect of nuclear rail logistics and fulfil our obligation to provide value for money to deliver an appropriate portfolio of services into non-nuclear sectors.

## Key Activities 2019-2022

### Critical Enablers

Delivery of the rail transport element in support of the completion of MOP (*ref 2*).

Support national nuclear material rail movements for Harwell, Winfrith and DSRL.

Support AGR fuel movements by rail for EDF from stations to Sellafield.

Support the discharge of NDA obligations with respect to MOD Nuclear rail transportation.

Provide value for money to the tax payer through the execution of identified non-nuclear work that complements the skills and capabilities required to support the core nuclear mission.

Provide rail authority expertise to NDA and consider areas of synergy between DRS and INS in support of NDA's strategic transport capability review.

Operate and maintain technology leading fleet of locomotives to support NDA operations.

Attract and retain the necessary skills, capability and diversity of talent to deliver our rail logistics business in a safe, secure and reliable manner.

Delivery of the rail transport element in support of the special nuclear fuels programme.

Provision and maintenance of locomotives for TransPennine Express.

**NDA Archives Limited**

NDA Archives vision is to optimise value from NDA knowledge and information assets in a compliant and secure manner, investing only in that which needs to be retained to deliver NDA's mission.

NDA Archives Ltd operates as a separate delivery organisation for the provision of archive and records management services, primarily to the NDA estate. We have established a number of Service and End User Agreements and are overseeing the management of a Commercial Partner (Restore Scan Limited) who is operating a purpose-built archive facility in Wick; Nucleus, the Nuclear and Caithness Archive.

NDA owns and is accountable for the records from across the estate and, currently, very few of these information assets are managed to the standards required of us as a public authority. The principal role of Nucleus is to consolidate and appropriately store these records ensuring that they remain secure, that their integrity stays intact (many of them will be required for 300+ years) and that they can be accessed in line with legislation and the relevant business needs.

Nucleus became operational in early 2017 and work has progressed since then on the 'sift and lift' of archived records from around the NDA estate. The principal focus over the next 3 years will be concerned with the completion of the first term of the commercial contract and how we can aspire to develop a world-class archive service to the civil nuclear industry and, potentially, others.

Key Activities 2019-2022
Critical Enablers
Work with The National Archives of both England and Scotland in working towards relevant Accreditation Standards and Regulatory best practice.
Continue the work on the commercial model review (make vs buy options) and develop the plan and future options as we approach the end of the first contract period in June 2020.
Continuing to collaborate with interested third parties to consider providing services to other organisations outside the NDA group. This will include analysing the potential for commercial contracts and Agreements.
Develop the Archive 'service' to the NDA group.

**NDA Properties Limited**

NDA Properties Limited primarily acts as a property manager for assets outside the nuclear licence site boundaries, in accordance with NDA's Land and Property Management Strategy. Over the next 3 years, the company will continue to optimise the use of assets for the benefit of NDA, whilst disposing those surplus to requirements. Selective capital projects will be completed.

Key Activities 2019-2022
Critical Enablers
Effective and proactive management of the property portfolio to include projects for repair work and improved environmental stewardship.
Development of Off Site Command Facility at Moresby for Sellafield Ltd.
Completion of snagging to the Nuclear Archive and CNC facility.
To proactively dispose of surplus assets when no longer required by the NDA group.

# Rutherford Indemnity Limited

## Rutherford Indemnity Limited

Rutherford Indemnity Limited is a regulated Guernsey insurance company dedicated to the provision of property, nuclear liability and other insurance to NDA and group. Over the next 3 years, Rutherford will continue to focus on the provision of insurance cover, at competitive rates, to support NDA's programme, with particular focus on nuclear liability cover and provision of support for changes arising from expected revisions to the Nuclear Installations Act 1965.

### Key Activities 2019-2022

#### Critical Enablers

Provide optimal insurance coverage to NDA to support its group-wide insurance programme and exploit opportunities to reduce overall cost of insurable risk.

Explore all avenues to develop potential innovative solutions to the increased financial security or insurance requirements resulting from the Nuclear Installations (Liability For Damage) Order 2016 and to respond to emerging demands for new or additional policy cover.

Continue to deliver the target return on the investment portfolio, protecting Rutherford's ability to offer insurance on a cost effective basis, maintaining liquidity in order to be able to respond promptly to major loss.

Continue to explore ways to use a prudent proportion of Rutherford's investment portfolio to support infrastructure investment in the NDA group.

Implement new ways of working following changes in the group broking arrangements designed to improve efficiency and reduce costs.



## International Nuclear Services Limited

INS contributes to delivering NDA's strategy by providing specialist nuclear transport, design and licensing services. This involves the domestic and international transportation of a range of nuclear materials in support of UK decommissioning. INS operates a subsidiary company, Pacific Nuclear Transport Limited (PNTL), the world's most experienced marine transporter of specialist nuclear materials.

Its refreshed strategy sets out how it will consolidate its position as a key strategic asset and use the expertise and capabilities it has built up in the past to become the best global provider of nuclear transport solutions in the future. INS will retain its primary objective to support NDA's mission, but its refreshed strategy will set out how it intends to develop new transport and consultancy business opportunities in the UK and overseas to deliver value to NDA as shareholder.

To achieve these strategic objectives the next 3 years will see INS take steps to create an even higher performing, diverse and innovative organisation whilst continuing to deliver key transport services in support of the UK decommissioning programme and for existing international customers.

### Key Activities 2019-2022

#### Critical Enablers

Support NDA's decommissioning programme by providing transport and technical solutions for movements of nuclear material in the UK.

Continue to deliver important international transports of nuclear materials including Spent Fuel, Mixed Oxide (MOX) fuel, vitrified High Level Waste (HLW) and conditioned Intermediate Level Waste (ILW).

Seek opportunities for new international business within nuclear shipping, packaging and design and establish a consultancy that provides transport enabling solutions to UK and international markets.

Maintain a leading fleet of specialist nuclear transport vessels and crews that, by undertaking regular shipments, meets the highest standards of quality, safety and security.

Continue to develop a strategic partnership with Direct Rail Services including the creation of a joint consultancy offering that combines the nuclear transport capabilities of both organisations.

Implement a series of transformation activities that make INS more competitive, innovative and efficient whilst ensuring it has the right skills, capability and diversity of talent to deliver in a safe, secure and reliable manner.

# Glossary

AGR	Advanced Gas-Cooled Reactor	MOD	Ministry of Defence
BEIS	Department for Business, Energy and Industrial Strategy	MOP9	Magnox Operating Programme
BEPPS	Box Encapsulation Plant Product Store	MOX	Mixed Oxide Fuel
C&M	Care and Maintenance	NDA	Nuclear Decommissioning Authority
DFR	Dounreay Fast Reactor	ONR	Office for Nuclear Regulation
DIF	Direct Import Facility	PBO	Parent Body Organisation
DMTR	Dounreay Material Test Reactor	POCO	Post Operational Clean Out
DRS	Direct Rail Services Ltd	PCM	Plutonium Contaminated Material
EPS	Encapsulated Product Store	PFR	Prototype Fast Reactor
FED	Fuel Element Debris	PNTL	Pacific Nuclear Transport Ltd
GDF	Geological Disposal Facility	PPP	Programme and Project Partner
HAL	Highly Active Liquor	QPR	Quarterly Performance Review
HAST	Highly Active Liquor Storage Tanks	R&D	Research and Development
HAW	Higher Activity Waste	SEP	Silo Emptying Plant
HLW	High Level Waste	SGHWR	Steam Generating Heavy Water Reactor
ILW	Intermediate Level Waste	SLC	Site Licence Company
INS	International Nuclear Services Ltd	THORP	Thermal Oxide Reprocessing Plant
LETP	Liquid Effluent Treatment Plant	UK	United Kingdom
LLW	Low Level Waste	UKGI	UK Government Investments
LLWR	Low Level Waste Repository		

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# Useful links and documentation

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