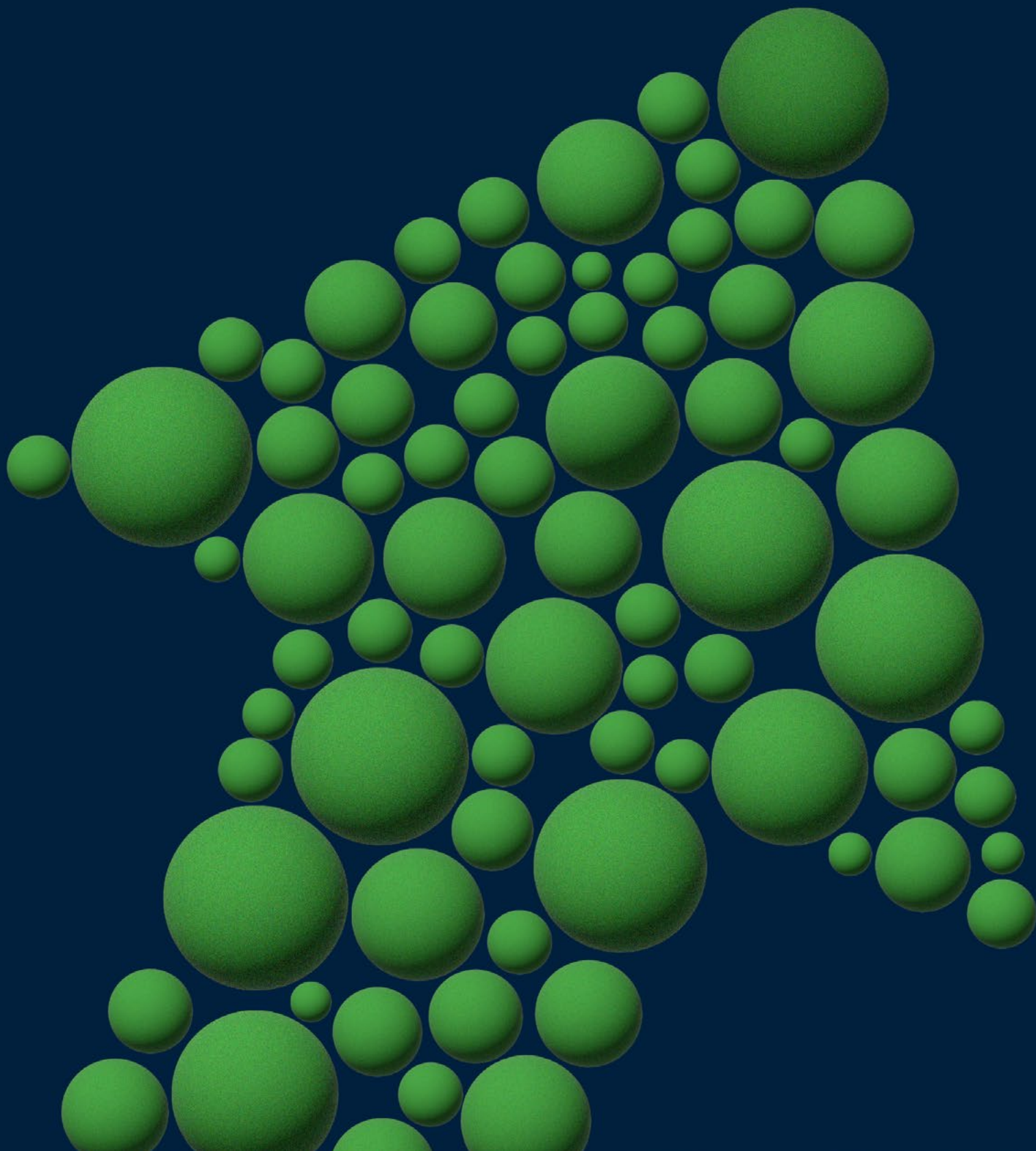


Report and Financial Statements

NATIONAL NUCLEAR
LABORATORY 

Year Ended 31 March 2023

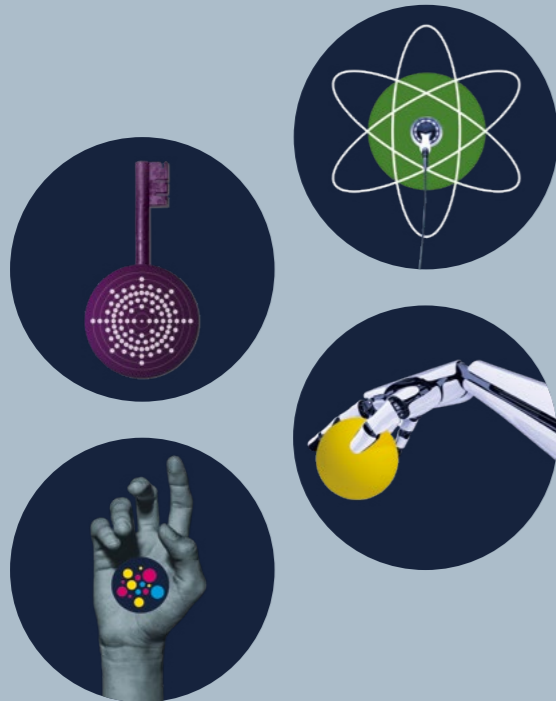


Contents

1.0 Strategic Report

- 1.1 Purpose
- 1.2 Chair's Welcome
- 1.3 Chief Executive's Overview

1.4 Who we are and what we do



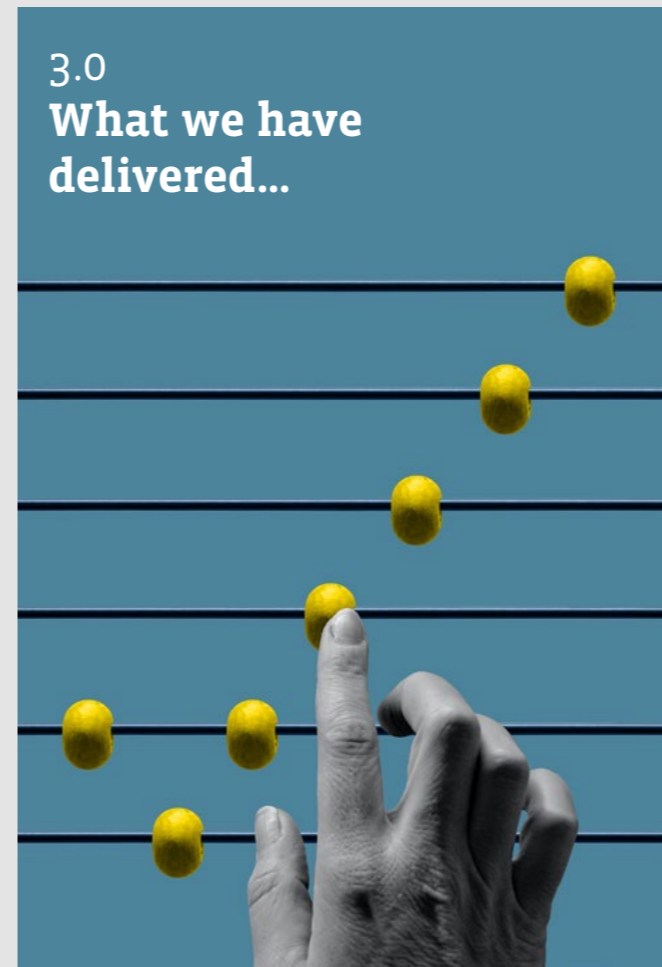
- 1.4.1 Our strategy
- 1.4.2 Our business model
- 1.4.3 Our stakeholders
- 1.4.4 Our customers
- 1.4.5 Our capabilities

- 1.5 How we have performed
 - 1.5.1 Business performance summary
 - 1.5.2 Key Performance Indicators
- 1.6 Financial review
- 1.7 Future outlook
- 1.8 Risks and uncertainties
- 1.9 Going concern

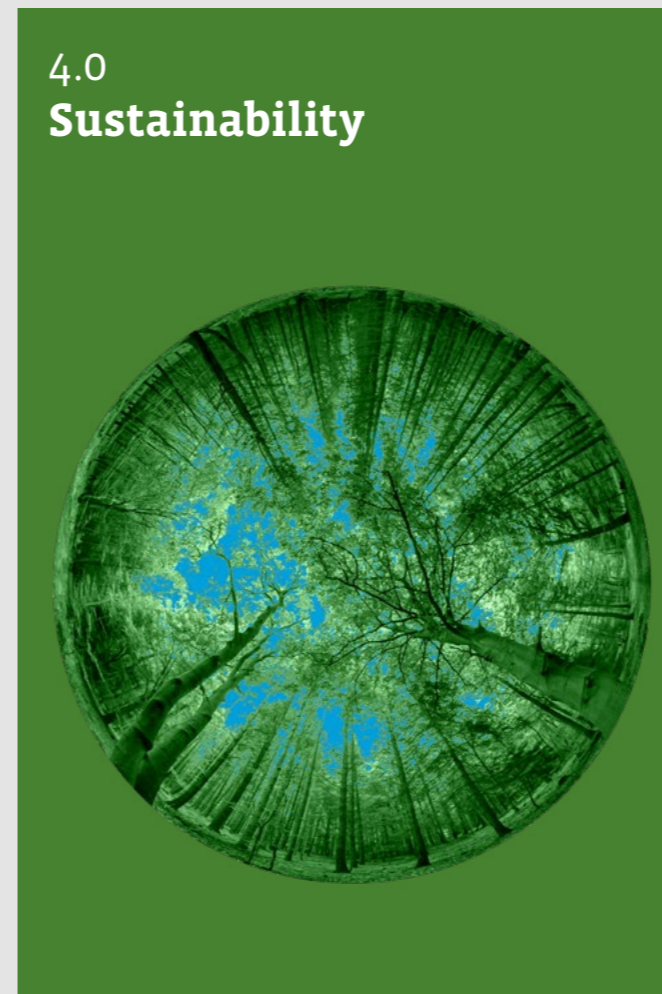
2.0 Environment, Health, Safety, Security and Quality



3.0 What we have delivered...



4.0 Sustainability



5.0 Our people



- 6.0 Our Board
- 7.0 Governance statement
- 8.0 Directors' report
- 9.0 Independent auditors' report to the members
- 10.0 Financial Statements
 - Statement of Comprehensive Income
 - Statement of Financial Position
 - Statement of Cash Flows
 - Statement of Changes in Equity
 - Notes to the Financial Statements

Nuclear Science to Benefit Society

Country of Incorporation and Legal Form

National Nuclear Laboratory Limited is a Private Limited Company incorporated and domiciled in the United Kingdom.

Directors

Ian Funnell	Chair
Paul Howarth FREng	Chief Executive Officer
Clare Barlow	Chief Human Resources Officer
David Beacham	Chief Customer Officer (<i>resigned on 3 May 2023</i>)
Matthew Miller	Chief Financial Officer
Fiona Rayment OBE, FREng	Chief Science and Technology Officer
Iain Clarkson	Non-Executive Director
Edward Emerson	Non-Executive Director
Claire Flint	Non-Executive Director (<i>resigned 21 April 2023</i>)
Stephen Garwood FREng	Non-Executive Director
Ann Cormack	Non-Executive Director (<i>appointed on 21 April 2023</i>)

Secretary

David Dukes

Registered office and principal place of business

Chadwick House, Warrington Road, Birchwood Park, Warrington, WA3 6AE

Company registration number

03857752 Registered in England and Wales

Independent Auditors

Saffery Champness, Trinity, 16 John Dalton Street, Manchester, M2 6HY

As at 31 March 2023 the ultimate shareholder of NNL was the Secretary of State for Business, Energy and Industrial Strategy (BEIS). On 3 May 2023 the ownership of NNL was transferred from the Secretary of State for Business, Energy and Industrial Strategy to Secretary of State for Energy Security and Net Zero (DESNZ) by way of a Transfer of Functions Order. For the purposes of these financial statements we have referred to NNL being owned by DESNZ (Shareholder).

1.0 Strategic Report

1.1 Purpose

National Nuclear Laboratory Limited's (NNL)'s financial statements include a strategic report that sets out the business's purpose and objectives as well as highlighting key aspects of our progress and performance during the 2022/23 financial year.

The directors have prepared this report to meet the requirements of Section 414 of the Companies Act 2006. NNL's independent auditors are required by law to report on whether the information given in this strategic report has been prepared in accordance with applicable legal requirements and is consistent with the financial statements. The auditors' report is included later in this document.



1.2 Chair's Welcome

I am very pleased to present this Annual Report and Accounts, in what is my first full year as Chair of NNL since joining the board in January 2022. It covers a period of significant importance for the organisation and, indeed, for the sectors in which we operate. The profile of nuclear has increased significantly in the short time I have been with NNL. Having emerged from the shadow of the pandemic in a strong position – but, like every other organisation, still dealing with its repercussions – we were then quickly pushed headlong into the challenges and threats that emerged from the impact of geopolitical events in Ukraine.

For the first time since the Cold War, the concept of energy sovereignty was uppermost in the general public's mind. Likewise, for the first time since the oil crises of the 1970s, rapid inflation caused by uncertainty in the supply of energy has created genuine fear for households and businesses alike. This has coincided with the increasing priority that government and society are placing on nuclear

to play a key role in the future energy mix, as we seek a secure and affordable portfolio that supports the UK's legally binding net zero commitment.

Thus, the importance of energy sovereignty, of clean energy, and the world's interdependency for the future is at the forefront of the public's minds and priorities in ways that we would not have expected 18 months ago.

This has been encapsulated in the government's Integrated Review Refresh. The result is that NNL's mission to harness the potential of nuclear science to benefit society has a broader and deeper resonance than ever, crystallising the need for our work and our place at the heart of the UK nuclear sector. This is not only true among our existing customers and partners, but also in our wider role as a national laboratory, where the profits we reinvest drive strategic research, core science and advocacy on behalf of the UK.

This has therefore been a year of opportunity and challenge for NNL, in which we have enhanced our organisational capability through a record level of recruitment to meet the significant increase in output. Throughout this period of growth, I am constantly struck by the dedication and commitment of colleagues in every part of NNL and in their shared belief in our purpose. Our ambition is to become a genuinely purposeful organisation in everything we do and in how we behave, and this is developing in strength

across all our business functions as we strive to achieve sustainable impact across our portfolio of work. We are looking at how we can become a net zero business and are supporting individual action, for example through use of the Giki Zero platform.

Every hour of every day, our commitment to safety remains paramount. I am pleased to report that the organisation performed well, with no reportable incidents, both on nuclear safety and on our wider environmental, health, safety, security and quality responsibilities. This is testament to the priority placed on this vital aspect of the organisation's work and the professionalism and dedication of our skilled teams. Equally, the health and wellbeing of our people is a key priority and has been the focus of a range of initiatives and campaigns throughout the year.

As custodians of the UK's world-leading combination of nuclear facilities, we must also continue to improve and develop this sovereign infrastructure so that it is fit for purpose and for the future. With investment made available through grant funding, we are continuing to invest in asset management and care, as well as developing our existing systems and processes.

During the course of the year, NNL conducted its first external board evaluation since my appointment. The evaluation concluded that

“The importance of energy sovereignty, of clean energy, and the world's interdependency for the future is at the forefront of the public's minds and priorities in ways that we would not have expected 18 months ago.”

the board governance arrangements within NNL continue to be correctly constituted and efficiently run. The review recognised that NNL is going through a period of change and provided some useful guidance and recommendations to manage this change and to strengthen the NNL board as we move forward.

In a year that has seen the nuclear landscape evolve significantly, we have matched this with significant investment in our business operations to ensure NNL has the capabilities and capacity the UK needs within its national laboratory. So, as nuclear's profile and presence within the UK increases, so does the importance of NNL's role in supporting its use, development, safety and security and in public trust and understanding in it. ○

1.3 Chief Executive's Overview

As our Chair Ian Funnell has set out in his introduction, this past year has been important for everyone involved in the nuclear sector. For those of us who have been advancing nuclear science throughout our careers, it is gratifying that the promise of nuclear is once again receiving recognition in energy strategies worldwide and that the UK is laying the foundations for its own nuclear renaissance.

Our financial year has been bookended with two important government announcements, which we have strongly welcomed, as evidence of this progress in the UK. Firstly, April 2022 saw the launch of the British Energy Security Strategy, which reflected the need for a complementary programme of low-carbon technologies, including an acceleration of large, small and advanced nuclear. Then, towards the end of our financial year, a machinery of government change saw the creation of both a Department for Energy Security and Net Zero and a Department for Science, Innovation and Technology. For the first time, the UK now has a dedicated Minister

for Nuclear and we await the establishment of a new delivery body in Great British Nuclear.

But the enormity of the energy challenge ahead remains stark, so we recognise that there is no time for complacency. As the prominence and importance of nuclear begins to be realised, we will all need to redouble our efforts to ensure it efficiently fulfils its promise as a solution to the issues that have so defined global and national events over the past twelve months. The current landscape demands an even greater focus on resilience across UK capabilities, as set out in the government's Integrated Review Refresh. For NNL, this



reaffirms the significance of our position as a Public Sector Research Establishment and as a partner for supporting the entirety of the UK nuclear sector.

I could not ask for a stronger team around me to be delivering on our agenda. As a growing business, we are committed to delivering excellence for our customers, and as a national laboratory, we are also a key strategic partner and advisor for government, for industry and for academia. Over the year, therefore, we have been prioritising resource and investment to be able to deliver in the short term whilst addressing the longer-term requirements of the UK's national laboratory. This has included progress on the ongoing enhancements to our critical nuclear facilities, as well as a dual focus on building organisational capacity and forecasting future nuclear skills needs. In doing so, we look to support economic activity within the communities where our sites are based both through our own recruitment and in the supply chain. Cutting across all our operations is of course our commitment to sustainability, where we are making worthwhile

progress on transforming environmental, social and governance outcomes.

Our four focus areas have continued to help set the strategic direction, prioritisation and impetus through which we can ensure we deliver on NNL's purpose whilst achieving value for money and impact. Environmental Restoration remains a proving ground for so many vital nuclear skills and is where we deliver significant work to support the Nuclear Decommissioning Authority's estate. Equally, our specialist expertise in Post Irradiation Examination continues to support the Ministry of Defence and EDF in their work to keep the UK safe and the lights on.

At the same time, we are driving advancements in areas of strategic importance for the UK. In clean energy this ranges from our collaboration with the UK Space Agency developing the world's first space battery powered by Americium-241, to pioneering work on achieving UK active uranium kernel casting at our Preston Laboratory, for the first time since the 1950s. Combined with promising developments in health and nuclear medicine, as we continue to scale up process for the UK's first home-grown supply of Lead-212 for cancer treatment, these advances continue to demonstrate the immense potential of UK expertise and leadership in nuclear. All of this is underpinned by our expertise and thought leadership in security and non-proliferation.

Likewise, through the statutory basis on which we operate – reinvesting all the profit that we make into UK science and technology – we are constantly building UK sovereign capabilities to set the foundations for the next wave of nuclear. Our science and technology agenda has widened in scope to encompass more areas of core science, reflecting the significance of NNL's own technical expertise and the opportunity for UK-led innovation across the sector and in the supply chain.

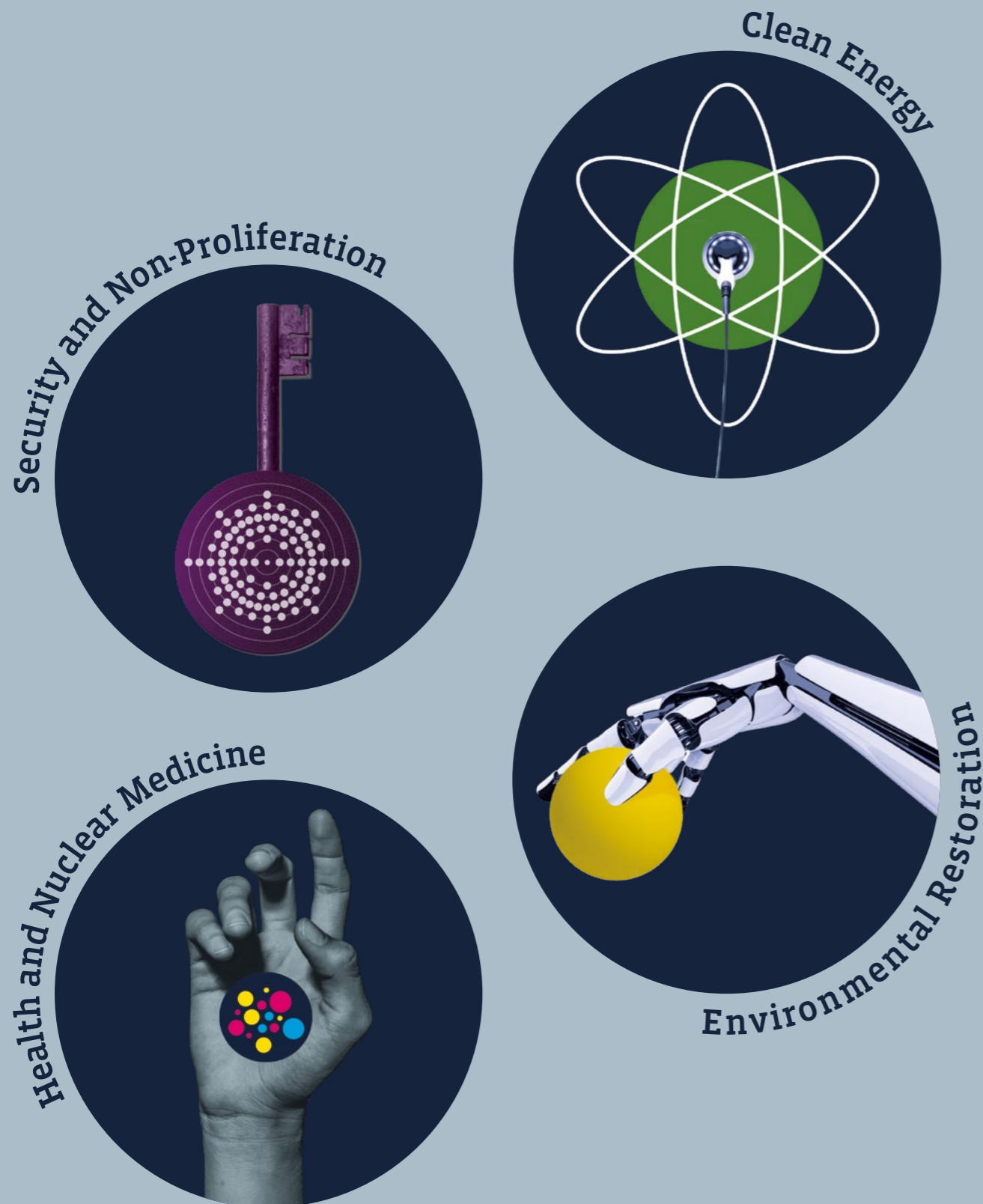
“I could not ask for a stronger team around me to be delivering on our agenda. As a growing business, we are committed to delivering excellence for our customers.”

Linking much of our work across the year is the development of strategic partnerships which deliver impact and value, accelerate progress and maximise learnings from other stakeholders, sectors and indeed countries. This includes improvements in how we work alongside our customers – such as through our long-term partnership agreements with Sellafield Limited and the Atomic Weapons Establishment – but also our UK leadership on the international stage. Our engagements at COP27 in Egypt, as part of our Integrated Energy Systems Forum, is an example of this. Equally, we have continued our long-standing relationship with the International Atomic Energy Agency and other international counterparts, such as the Japan Atomic Energy Agency with whom we are working closely to accelerate high temperature gas reactors for the UK.

It is this spirit of collaboration that rightly underpins our science and technology approach, and indeed everything we do as the UK's national laboratory in service of driving innovation and scientific advancement. I would therefore like to end by thanking all colleagues, our board, our sponsors, partners and customers for their commitment to NNL and for their support in harnessing nuclear science to benefit UK and global society. ○

1.4

Who We Are and What We Do



NNL is the UK's national laboratory for nuclear fission. It is the country's principal nuclear fission research and development organisation.

Our purpose is to use nuclear science to benefit society. We do this by providing the technical knowledge and capability to support the country's civil nuclear programmes and ensure they are delivered safely and cost-effectively.

We are responsible for unique critical infrastructure and equipment. Our people have world-leading nuclear skills and we are proud to employ many internationally recognised experts in their fields.

We use our broad knowledge and capability to independently and authoritatively advise government and stakeholders in the UK and worldwide, and we work with universities to enable academic access to our services.

We occupy a unique position in the nuclear innovation environment, spanning Technology Readiness Levels three to six and beyond: taking science from inactive laboratory-scale demonstration to prototype deployment with real nuclear materials.

NNL hosts the Nuclear Innovation and Research Office (NIRO), a specialist unit

funded by DESNZ (formerly the Department for Business, Energy and Industrial Strategy) which is separated from our commercial operations by a series of ethical barriers. NIRO is staffed by experts from both NNL and the broader nuclear industry and provides technical advice and guidance to government.

NNL is owned by DESNZ via a holding company, NNL Holdings Limited. The company is overseen by a board of directors, the majority of whom are appointed by the UK government. The framework within which NNL operates, including governance arrangements, is set out in a framework document which is publicly available on NNL's website. ○

1.4.1

Our strategy

NNL's purpose – nuclear science to benefit society – reflects our ongoing commitment to serve the greater good. Our mission is to support policy and provide long term sustainable value for the UK.

We achieve this through five broad areas of impact:

- Undertaking the practical science that supports the safe and secure operation and decommissioning of civil and military fleets
- Facilitating future nuclear innovation through conducting the research and development that will stimulate and enable the UK's nuclear ambition
- Driving first stage demonstration of technical innovation for the benefit of UK plc
- Acting as the public sector advocate for nuclear fission by contributing to policy development and coordinating public-facing communications
- Stewardship of sovereign capability (infrastructure, equipment and talent) to deliver current and future national policy

We have developed these impact roles over the last year. They make explicit the varied ways in which we work in the national interest and support government and the nuclear sector, and articulate the value we create for our stakeholders.

Throughout the year we have been developing a Long Term Value Framework which will provide a balanced view of the value we create for our stakeholders. We have been working with both internal and external stakeholders to identify the key categories of value together with a set of metrics which will enable both the board and the organisation as a whole to assess and articulate value creation. It has four categories that are aligned to our purpose: societal value, human value, customer value and financial value.

A set of strategic and enabling imperatives have been developed to ensure effective delivery of our impact roles. Objectives throughout the business are aligned accordingly and progress in their achievement is monitored. We will be piloting the new Long Term Value Framework metrics during 2023/24 with a view to implementing in 2024/25.

All of the work of the laboratory falls into one of our four focus areas. These describe the types of work we do and why. Within each focus area we have defined long term objectives:

Environmental restoration – driving a step-change in the clean-up and management of the UK's nuclear legacy, underpinning the export of UK expertise to support decommissioning on a global scale

Clean energy – securing the UK's place as a global leader in the clean energies of the future by developing advanced nuclear technologies and leading their deployment, including our work in space, where we are powering the next generation of space missions with UK nuclear systems, and defence, where we are supporting the operation and disposal of reactors used for submarine propulsion

Security and non-proliferation – enabling the peaceful use of nuclear materials and technology, domestically and abroad, by providing cutting edge technology, industry leading expertise, and authoritative advice

Health and nuclear medicine – advancing medical science and establishing an indigenous UK supply of vital medical radionuclides.

By reinvesting our earnings in science, innovation, facilities and people, we continue to grow our unique capabilities for the good of the global nuclear industries. Our science and technology agenda drives our investment to ensure we remain at the cutting edge and deliver value for the UK.

We are delivering a major refurbishment and upgrade to our world-class national infrastructure and striving to provide our people with stimulating, rewarding careers. ○

1.4.2

Our business model

The NNL business model is unique for a national laboratory. We are purpose led and we are here to use nuclear science to benefit society.

With our unique set of facilities and capabilities we enable ground breaking nuclear research and development in support of UK national programmes and generate our own funding.

Delivering to time, cost and quality for our customers generates earnings, which we reinvest to enhance capability and innovation across the sector.

We target our internal investment towards growing capability in the business and continuing to promote a safe, healthy and diverse workforce.

The broad categories of re-investment are:

Science and technology – investment in pushing forward the science and technology agenda for nuclear science to support future fuels development, improve techniques in environmental restoration and explore new uses for nuclear technologies

Facilities – the facilities in which NNL operate require constant upgrade and renewal through both maintenance and new technologies and equipment

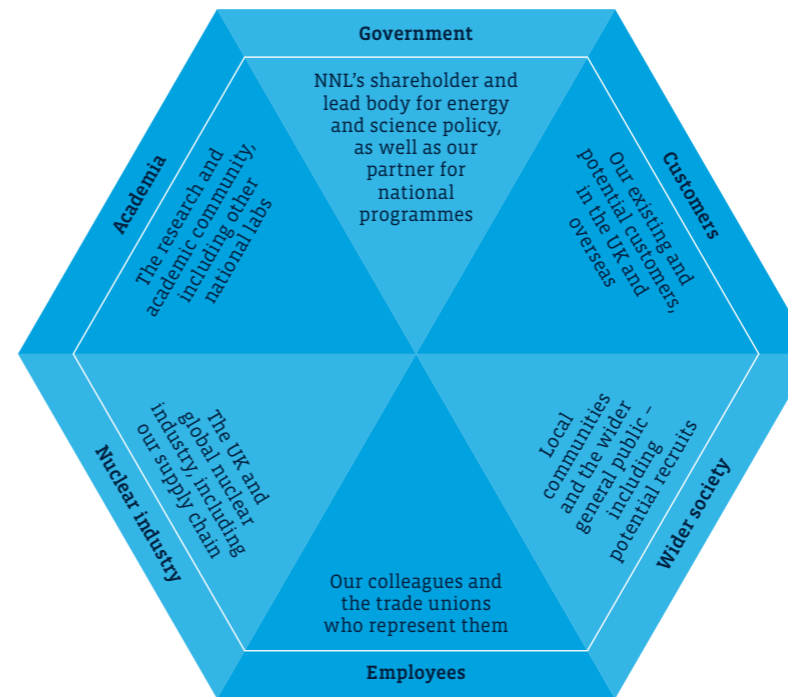
Skills and capability – as the national laboratory for nuclear research and development, NNL takes the lead in maintaining and developing skills and capabilities across the nuclear sector with a key focus on developing the next generation of talent and increasing diversity through early careers programmes

Innovation – investment in innovative technology development and technology transfer from other sectors.

1.4.3

Our stakeholders

We work closely with a wide range of stakeholders, which we have broadly categorised as follows:



We are a UK public corporation, so it is important that we hear and act on external views. Throughout 2022/23 we have developed our stakeholder engagement plans to identify, plan, manage and monitor our interactions. In particular, we have worked closely with our colleagues in DESNZ and UK Government Investments (UKGI) to align our strategy with government policy. We are adopting this same approach across all of our stakeholder groups.

Government: Our senior level engagement with government provides insight into the regional, national and global policy landscape. We feed this intelligence back into the business to support operational activity and

wider strategic thinking. Likewise, NNL's views and priorities are fed back through these interactions to inform and influence the actions and positions of government's own decision-making bodies.

Customers: We have a number of key customer relationships which are increasingly taking the form of long term strategic partnerships. We continue to strengthen these relationships and over the past year have looked to adopt the strategic partnership approach with more of our customers.

Employees: We recognise that our people are our most important asset. We have a well-developed engagement strategy for our employees. Regular leadership briefings are cascaded throughout

the workforce and we share news and information through "roadshow" events, a CEO vlog, and NNL executive and board site visits.

Academia: Academic partnerships in priority technology areas are an important component of our science and technology agenda and a key enabler to the ambitions set out for our four strategic focus areas. Successful collaborations with universities will drive cutting edge science and enhance a future nuclear talent pipeline for higher level skills.

Over the last five years NNL has invested over £25 million in 47 universities supporting PhDs, PDRAs and contract research, delivering significant value to NNL.

Nuclear industry: NNL is actively involved across the nuclear sector with bodies such as the UK Nuclear Industry Association, the World Nuclear Association, the International Atomic Energy Agency (IAEA) and Organisation of Economic Cooperation and Development Nuclear Energy Agency (ECD-NEA). Engagement across the nuclear sector is a key enabler for each of our focus areas.

Wider society: NNL aims to be a responsible and open member of the communities where our colleagues live and work, and to be transparent about our work and how we do it. We participate in meetings of the West Cumbria Site Stakeholder Group, and engage with other communities in different ways, such as through careers fairs and school visits. ○

1.4.4

Our customers

We provide strategic advice, technical services and expert support to customers across most of the nuclear fuel cycle – from fuel and reactor analysis through post-irradiation examination of fuel and reactor materials, to waste management, clean-up and decommissioning support. We continue to broaden our customer base and are developing long term strategic partnerships with key customers who include:

Sellafield and Nuclear Decommissioning Authority (NDA)

The legacy business area represents just under half of our overall customer revenue. This covers key customers including Sellafield Limited, the NDA (including wider NDA estate), other UK waste management and decommissioning customers and international customers (Japan, US, Europe). We evaluate available UK grants and leverage opportunities.

The wider NDA estate (including Sellafield Limited) is our largest customer. We specialise in the disposition of fuels and special nuclear materials. We have increased our work to store and manage special nuclear materials (including plutonium) in recent years.

Sellafield Limited accounts for around one third of our total turnover delivered under a long-term collaborative technical services agreement (TSA). This commercial agreement has a 17-year commitment and a potential lifetime value in excess of £600m.

The TSA allows us to engage and to deliver value at a strategic level. We are embedding the TSA ethos and approach across the portfolio of Sellafield Limited technical work. We see this as a potential model for our relationships with other customers, particularly those in the public sector where we are working collaboratively in support of national programmes.



EDF

The UK's civil nuclear reactor fleet is operated by EDF and now comprises four Advanced Gas-Cooled Reactors plus one Pressurised Water Reactor (Sizewell B). Our work for EDF includes post-irradiation examination (PIE) of fuel, components and graphite supporting continued operation, enhancing reactor performance, and – where appropriate – supporting the case for potential lifetime extension. Our work in support of EDF's advanced gas-cooled reactor (AGR) safety case is critical to EDF's lifetime extension strategy and the UK's energy security.

Ministry of Defence / Rolls-Royce and Atomic Weapons Establishment (AWE)

In the same way that we provide materials examination services to operating civil reactors, helping to keep the UK's nuclear energy generation fleet running, we provide a similar service to the Ministry of Defence in respect of the nuclear reactors which power the UK's submarine fleet. This contract is managed via Rolls-Royce for whom we are currently developing specific capabilities and preparing for post-irradiation examination (PIE) operations in NNL's Active Handling Facility (AHF). NNL is also supporting AWE as Government looks to align civil and military nuclear programmes to drive value for money.

DESNZ

NNL has previously delivered a number of significant contracts led by DESNZ (formerly Department of Business, Energy and Industrial Strategy). During this year NNL has continued to deliver the Advanced Fuel Cycle Programme (AFCP) to develop advanced fuels. NNL also led a programme of work under the Advanced Modular Reactor (AMR) Research, Development and Demonstration (RD&D) programme. This work has continued to allow NNL to work with the supply chain and academia, in the UK and beyond, to engage and deliver at a strategic level, creating a single point of entry for the wider supply chain, and marking a significant step in fulfilling NNL's impact roles.

Others

NNL undertakes work for other businesses in the UK nuclear sector, including the NDA Estate, Westinghouse, Urenco, and Rolls Royce's UK SMR. These are valued relationships which we are keen to build on, including establishing a presence close to customers to support delivery and build the relationships. Globally we have customers in the USA, Japan and continental Europe, and we work with overseas governments and utilities as well as other national laboratories. ○

1.4.5

Our capabilities

World class nuclear knowledge and experience

NNL is the custodian of much of the UK's expertise and experience in nuclear fission technology. We have a great many of the UK's subject matter experts – the national and international leaders in their specialist fields – many of whom have decades of experience. Collectively, their subject areas cover much of the nuclear fuel cycle, including nuclear waste management. In many cases their experience comes from time spent at operational nuclear plants, often coupled with working in – or with – academia. NNL also has a growing capability in advanced reactor technology.

Our technical expertise is matched by our operational pedigree, and by our capabilities across all of our professional services and supporting functions. For one of our expert scientists to simply put his or her hands into a glovebox in an active lab facility requires the combined efforts of a vast range of dedicated professionals in every discipline from safety case preparation to procurement.

Technical excellence and operational excellence work most effectively together, as two sides of the same coin. The fact that NNL possesses a huge breadth and depth in each gives the organisation an “indivisibility” making us unique

Science and Technology

Science, technology and innovation are collectively the heartbeat of what we do at NNL, bringing together critical infrastructure, equipment and expertise to underpin safety cases, minimise risk and underpin decision making. At NNL we re-invest our earnings to further our understanding of nuclear science. Our science and technology agenda focuses

on core science, disruptive innovation and nationally important strategic research that enable national nuclear outcomes. Our approach is to do this collaboratively, enabling and leading partnerships nationally and internationally making best use of expertise, infrastructure and investment.

Critical Nuclear R&D Infrastructure

NNL is the custodian on behalf of the UK for a suite of critical nuclear research infrastructure which, collectively, is globally unique and ranges from lab-based to production scale and a full range of activity levels. These facilities are capable of carrying out work across the nuclear fuel cycle and using many different materials. These are used to deliver a diverse portfolio of work from large scale, inactive demonstrations and technique development through to very small-scale measurement of highly active nuclear fuel.

Working with universities and research institutions, we are increasing access to these unique assets which include:

The Windscale Laboratory (*active handling and inspection*)

The Preston Laboratory (*uranium research and advanced fuel development*)

The Central Laboratory (*special nuclear materials research and radiochemical analysis*)

The Workington Laboratory (*non-radioactive test rig services*)

We also have office-based facilities at Warrington, Stonehouse, Culham, Anglesey and Leicester. ○

1.5 How we have performed

1.5.1

Business performance summary

Through the financial year we have continued to see growth across our revenue and investment activities. This builds on the growth that has been achieved over the last three financial years. Our focus this year has been on improving our business processes and efficiencies to support this growth. We have delivered this support through investment in business improvement, capital projects and science and technology.

NNL measures its performance not only in financial terms but also in relation to the impact NNL delivers to its stakeholders. As highlighted throughout this strategic report we have seen strong performance in delivery to all of our stakeholders. This includes delivery to our customers, where we have seen our relationship with Sellafield strengthened through the reaccreditation to ISO44001 (collaborative working standard) of our TSA, the expansion of our collaborative working arrangements to include AWE, the completion of Phase A of AMR Programme, continued support to EDF with both its fuel and graphite programme as well as working collaboratively with MoD, Rolls-Royce and NDA Group to prepare for post irradiation examination operations.

We have also successfully launched our science and technology agenda, delivered unprecedented levels of investment in our facilities and embarked upon our journey to become a purposeful and sustainable business. In terms of our people, we continue to see record growth, circa 15% this year, as well as an increase in the percentage of women within our business from 29% to 31%. During the year we have focused on the development of our Employee Value Proposition by introducing a suite of family friendly policies as well as supporting personal growth through our skills agenda.

Our financial performance has been impacted this year as a result of a legacy issue with the radiological shielding of manipulator ports within our Active Handling Facility (AHF). Operations were immediately paused whilst we investigated this issue. We have mobilised an engineered Return to Service Programme to bring the plant back into full use as quickly and safely as possible. However, the facility has not been fully available throughout the financial year and this has had a significant adverse impact on customer programmes, particularly those for MoD/ Rolls-Royce and EDF that are reliant on the AHF. Progress against the Return to Service Programme has been positive allowing us to undertake a phased return to operations at the AHF. Nevertheless, this legacy issue will continue to impact customer deliveries through 2023/24.

NNL secured multi-year grant funding from DESNZ (formerly Department of Business, Energy and Industrial Strategy) to invest in critical national infrastructure in 2021 and this has, in part, been utilised to address the legacy AHF issue. Overall, capital spending on our estate has almost quadrupled from an average of £6 – 8m to £25 – 30m enabling ageing buildings to be refurbished and investments to be made in facility assets and enabling software systems. This has yielded significant improvements but investment will continue into the future to address the technical debt.

Our business continues to evolve in readiness for further change. As our purpose – nuclear science to benefit society – becomes firmly embedded in our organisation we strive to think and operate as a national asset.

All of our key targets on safety, security, quality and environmental performance were achieved. ○

1.5.2 Key Performance Indicators

The table includes the metrics used by management to monitor business performance. Revenue figures represent core business activities and differ to those

disclosed in the Financial Statements which include income which is presented as a cost reduction in management reporting.

	2021/22 Results	2022/23 Target	2022/23 Results
Environment & Energy	0	Category 1-4 Events: 0	0
Health & Safety	0 0	Significant Events: <3 Actions Missed: 0	0 0
Security	0 0	Significant Events: <2 Actions Missed: 0	0 0
Quality	0	Category 4 Issues: <3	1
Culture & Assurance	3	Actions outstanding: <9 (per period)	3
Revenue	£129.9m	£142.5m	£126.8m
Earnings to Reinvest	£11.4m	£1m	(£2.9m)
Cash			
Forecast Low	£26.5m	£28.9m	£20.9m
Year End	£42.1m	£35.1m	£29.8m
Efficiency: Utilisation	1,307hrs	Average hours: 1,280hrs	1,203hrs
Facilities Cost Base	£28.1m	Facilities Budget: £34.3m	£31.6m
Functional Cost Base	£23.1m	Functional Budget: £27.4m	£27.1m
Customer Satisfaction	Green	Green	Green
Quality: Technical papers	76	75	78

As the UK's National Laboratory, NNL operates to generate earnings to reinvest in the technical knowledge and capability which ensures that the country's civil nuclear fission energy programmes are delivered safely and cost-effectively. The level of earnings available to reinvest is therefore an important Alternative Performance Measure (APM). Earnings to Reinvest (ETR) is reconciled to profit from operations as follows:

	2023 £'000	2022 £'000
Earnings to Reinvest	(2,906)	11,434
Investment in science & technology and strategic investment included in administrative expenses	(5,927)	(5,803)
Items considered by the directors to be non-trading, included in administrative expenses	(7,171)	(2,915)
Difference between pension contributions paid, and IAS 19 P&L charge included in administrative expenses	211	287
Difference in accounting treatment between statutory accounts and management accounts	(72)	208
(Loss)/Profit from operations	(15,865)	3,211

1.6 Financial review

We achieved revenue this year of £126.8m, decreasing from the 2022 figure of £129.9m. Our profit/(loss) (earnings to reinvest) figure of (£2.9m) was lower than the previous year's result of £11.4m, largely due to our customer programmes being impacted by the AHF embargo.

Investment in key infrastructure continued during the year resulting in property plant and equipment balances of £110.8m (2022 - £95m) at the year-end.

Following extensions to the lease agreements for several of our laboratory facilities, associated asset and lease liabilities were reviewed in accordance with IFRS 16. This led to right of use assets being valued at £13.4m (2022 - £12.6m), and lease liabilities being valued at £13.3m (2022 - £12.4m).

At the statement of financial position date, NNL had total assets of £222m (2022 - £201.7m) and total liabilities of £139.4m (2022 - £115.5m). Further details are set out in the financial statements on pages 94 to 135. ○

Revenue	£126.8m ▼
Earnings to reinvest	-£2.9m ▼
Property plant and equipment balances	£110.8m ▲
Right of use assets valued at	£13.4m ▲
Lease liabilities valued at	£13.3m ▲
Total assets	£222m ▲
Total liabilities	£139.4m ▲

1.7 Future outlook

The uncertainty in the global political and economic climate is impacting supply chains and driving inflationary pressures which have been important factors in the development of our strategic and business plan for 2023/24. As with many organisations we recognise the increased level of uncertainty that is impacting the forward outlook for the business.

Our purpose, nuclear science to benefit society, drives our strategic planning. We have developed a set of strategic and enabling imperatives that will shape the work that we undertake in the future and which are aligned to delivering our sustainability ambitions (as discussed in Section 4 Sustainability). Our imperatives ensure that we support government policy, enhance our skills and capabilities, provide the stewardship of critical nuclear infrastructure, and develop an enabling organisation that maintains efficient and effective delivery to all stakeholders.

Our plan supports ongoing commitments to our stakeholders through customer delivery, science and technology, capital and strategic investment. Through the next financial year, the AHF is planned to progressively return to service as upgraded manipulator ports are installed allowing for increased throughput and customer work to

be delivered. We have a strong baseline in our customer portfolio utilising long terms contracts and relationships with Sellafield Limited, EDF, Rolls Royce and AWE. These relationships ensure we are able to support government policy and develop the science and technology that could be potentially used for future adjacent markets in the health and space sectors.

As custodians of over £1.5 billion worth of unique and critical nuclear research infrastructure, supporting national missions, we will strive to ensure that they continue to receive the investment they need to remain operational and efficient. Alongside our facilities, we will ensure that we invest in our people and our future capabilities. We will work to transfer knowledge from this generation to the next – ensuring we can turn today’s apprentices and graduates into the subject matter experts of tomorrow. ○

1.8 Risks and uncertainties

NNL’s directors remain confident about the future of the business. Nevertheless, risks and uncertainties do exist which could adversely impact future financial performance.

We have continued to strengthen and improve risk and opportunity management through 2022/23 and the approach to risk at board level has continued to mature. Specifically, the board reviewed its risk management framework, reviewed and updated the Risk Appetite Statements, and thoroughly refreshed its business risks. A full list of our business risks is set out in Section 7 Governance Statement.

As we enter the new financial year, we have reviewed our

business risks in light of both the changing economic environment and changes directly impacting NNL. The UK nuclear landscape has evolved significantly through 2022/23 and this trend is expected to continue in order to address the UK’s energy challenge. While this introduces uncertainty, the principal risks impacting NNL are in the areas of programme delivery, critical national infrastructure and cyber security. As outlined above, some of our programmes were impacted this year by the AHF embargo and whilst we anticipate a phased return to service during 2023/24 there is a risk that our programmes may be further impacted. Connected to this risk we recognise that, as custodian of a suite of ageing facilities, we need

to secure ongoing investment in our critical national infrastructure and asset management capability. As with all organisations we are seeing increasing threats in the area of cyber security. The board will continue to monitor, manage and mitigate these risks throughout the year.

The board is responsible for management of all matters of risk and opportunity across the business. Support is provided by the Audit, Risk and Assurance Committee, which advises the board on the suitability of the assurance, audit and risk processes. The Environment, Health, Safety and Security Committee provides in-depth reviews across the health and safety of our business activities. ○

1.9 Going concern

The company’s business activities, together with factors likely to affect its future development, performance and position have all been considered.

Based on the detailed cashflow forecasts prepared by management, which included any reasonably possible change in key assumptions on which the cashflow forecasts themselves were based the directors continue to believe that there is a reasonable expectation that the company has adequate resources to continue to adopt the going concern basis in preparing these financial statements.

Approval

This strategic report was approved by order of the board.



David Dukes
Secretary
27 July 2023

2.0

Environment, Health, Safety, Security and Quality (EHSS&Q)



At NNL we operate an extensive suite of critical national infrastructure across several sites (including our own and those run by others). We handle a wide variety of highly challenging materials, many of which are highly radioactive, as well as working with heavy engineering machinery in our rig halls.

The nature of the research we undertake often means we are undertaking unique processes for the first time; this means a focus on change management around both nuclear and conventional safety requirements. This year we have experienced a significant increase in output and a record number of new recruits thus enhancing our organisational capability. All of this creates an environment where our focus on remaining safe and secure, alongside managing our environmental impacts, must be paramount at all times. We therefore continue to ensure safety is incorporated into everything we do – and to sustain this ethos as a core value of our business and all our personnel.

We once again achieved a very good performance, with no notifiable events being externally reportable around either nuclear safety (related to the INES scale) nor to any aspect of our EHSS&Q activity. Continuous improvement is a key driver with notable improvement initiatives in leadership and management for safety, waste and energy management realised this year. Relationships and interfaces with our regulators continue to remain strong and positive, with the annual intervention

program completed without any significant concerns. We continue to maintain and develop our Nuclear Site Security Plans (NSSPs), working collaboratively with our regulators, particularly in the area of cyber security and information assurance.

Our focused Covid-19 exit planning and hybrid working strategy provided the foundations for a safe return back to our workplaces as well as providing a more efficient and effective working environment.

We continue to review and de-risk our facility operations as we enhance and improve their infrastructure and capability in line with future national challenges. A significant focus has been on our Windscale facility to improve shielding requirements and our safety cases to enhance our capability going forward.

We were proud to be awarded the RoSPA Health and Safety Sector Award for Research and Development during the year. However, ensuring we remain vigilant and continue to learn lessons from events and near-misses – both within NNL and across the industry – remains a priority. The health

2.0 Environment, Health, Safety, Security and Quality (EHSS&Q)

and wellbeing of all our personnel has been a focus of a variety of initiatives and campaigns during the year with excellent participation and interaction.

Combined with safety, security (including the increasingly important area of cyber security) remains a key area of focus, with security and resilience processes becoming much stronger and more robust as we continue to build and sustain our security culture. Our information security certification (ISO 27001) surveillance assessment was successful after a comprehensive LRQA audit. Compliance with Government Functional Standard (GOV007) for security was also consolidated.

Our quality oversight processes continue to be developed and improved after we identified a flaw in our supply of components parts confirmation process.

Whilst defining our sustainability framework for the future, we maintained a strong performance in the area of environmental management and control, with robust compliance with all environmental permits and authorisations across all our facilities. This was supported by improvements in our processes to track energy usage and Streamlined Energy Carbon Reporting (SECR).

There was a successful integrated recertification of our Occupational H&S

The health and wellbeing of all our personnel has been a focus of a variety of initiatives and campaigns during the year with *excellent participation and interaction.*

Certification (ISO 45001), Environmental Management Certification (ISO 14001) and Quality Management Certification (ISO 9001) completed. Our Energy Management Certification (ISO 50001) was successfully undertaken and resulted in zero non-conformances.

We continued to identify, and progress, suitable disposal routes for difficult waste streams, with some long-standing legacy wastes disposed of this year.

The 'Achieving EHSS&Q Excellence' vision and long-term strategic plan to sustain a strong nuclear safety, security, and conformance culture, underpinning operational delivery excellence, continued to progress with the cultural maturity model road map indicating we continue to move towards a 'proactive' culture. A strategy deployment process supports implementation through the business. ○



3.0 What we have delivered...

This year, we have:

- Delivered on our purpose – nuclear science to benefit society – through our focus areas, with our science and technology agenda, with our work for customers and our support to government
- Made progress towards becoming a sustainable business
- Listened to our people as we become a home for stimulating, rewarding careers
- Helped develop the UK nuclear supply chain through our procurement and partnerships
- Managed an unprecedented scale of capital investment to enhance our facilities while continually improving our operations and delivering excellence programmes

...through our customers and focus areas

Our customer portfolios are grouped into three categories: Legacy, Defence and Generation, and Government and New Build. We are also developing our business in our focus areas of Environmental Restoration, Clean Energy, Health and Nuclear Medicine and Safeguards and Nuclear Security. The Environmental Restoration focus area aims to develop our legacy portfolio; similarly, the Clean Energy focus area develops the government and new build portfolio.

Legacy portfolio and Environmental Restoration

Sellafield Limited accounts for around one third of our total turnover delivered under a long-term collaborative technical services agreement (TSA). The TSA allows us to engage and to deliver value at a strategic level. We are embedding the TSA ethos and approach across the portfolio of Sellafield Limited technical work. We see this as a potential model for our relationships with other customers, particularly those in the public sector where we are working collaboratively in support of national programmes.

3.0 What we have delivered...

Some highlights from the legacy business area include:

achieving more than £7bn joint savings with Sellafield Limited since 2008 and measuring benefits against the NDA's Value Framework

showcasing collaboration with Sellafield Limited in November 2022 and achieving reaccreditation to ISO44001 (collaborative working standard) in December 2022

establishing the Plutonium Programme with Sellafield Limited and informing the NDA on plutonium disposition options through the Hot Isostatic Pressing (HIP) and the MOx Fuel Line programmes

continuing to support the replacement analytical programme as we start to transition the national strategic analytical capability from Sellafield Limited to NNL

building capability to support Sellafield Limited's higher active waste thermal treatment (HAWTT) programme, which is funded via Nuclear Waste Services

commencing strategic supplier relationship management programme with the NDA which will lead to a longer-term strategic collaboration

winning the "best people" award at the NDA Supply Chain Event in July 2022 for Centre for Innovative Nuclear Decommissioning (CINDe)

saving millions of pounds in liabilities and recovering more than £15 million worth of uranium through continued residues processing at Preston Laboratory

achieving eligibility for UK Research and Innovation (UKRI) funding and continuing to lead UK support to a variety of EU research programmes

beginning a collaborative programme with the private sector, academia and overseas laboratories to develop the technical underpinning for the safe disposal of special nuclear materials

Some key activities during 2023/24 will include:

establishing a long-term collaboration agreement with the NDA that covers the entire NDA Estate, positioning NNL as the key strategic partner

supporting the government's aspiration to align civil and military nuclear programmes to drive value for money by

establishing and building relationships with the Ministry of Defence (MoD) to support the Submarine Disposal Programme

partnering with the Atomic Weapons Establishment (AWE) with a focus on decommissioning, waste processing, and remediation

investing in robotic skills areas, such as haptic systems for robot control, and providing training facilities for testing, developing and deploying systems at our Hot Robotics facility

Case Study

In November 2022, we celebrated the five-year anniversary of our strategic, long-term collaboration with Sellafield Limited by hosting a collaboration showcase.

Through this strategic partnership we have delivered significant value to Sellafield Limited by solving complex site challenges, reinvesting our earnings in customer focused science and technology themes. The partnership has also enabled collaborations in robotics and with small to medium enterprises, universities, and international programmes.

Our approach to strategic partnerships sits at the foundation of the environmental restoration focus area. This covers our relationships with academia and other national laboratories, international links, partners in the defence sector and across the NDA estate together with UK industry and the supply chain.

The strategic relationship between Sellafield Limited and NNL is praised as a model of government to government to working.



We are adopting a similar approach across the partnerships at the foundations of environmental restoration with the goal of multiplying the benefits that we have already secured with Sellafield Limited. The cost savings for taxpayers will be transformative, as will the outcomes for restoring the environment.

The relationship has been recertified to Collaborative Business Relationships ISO44001.

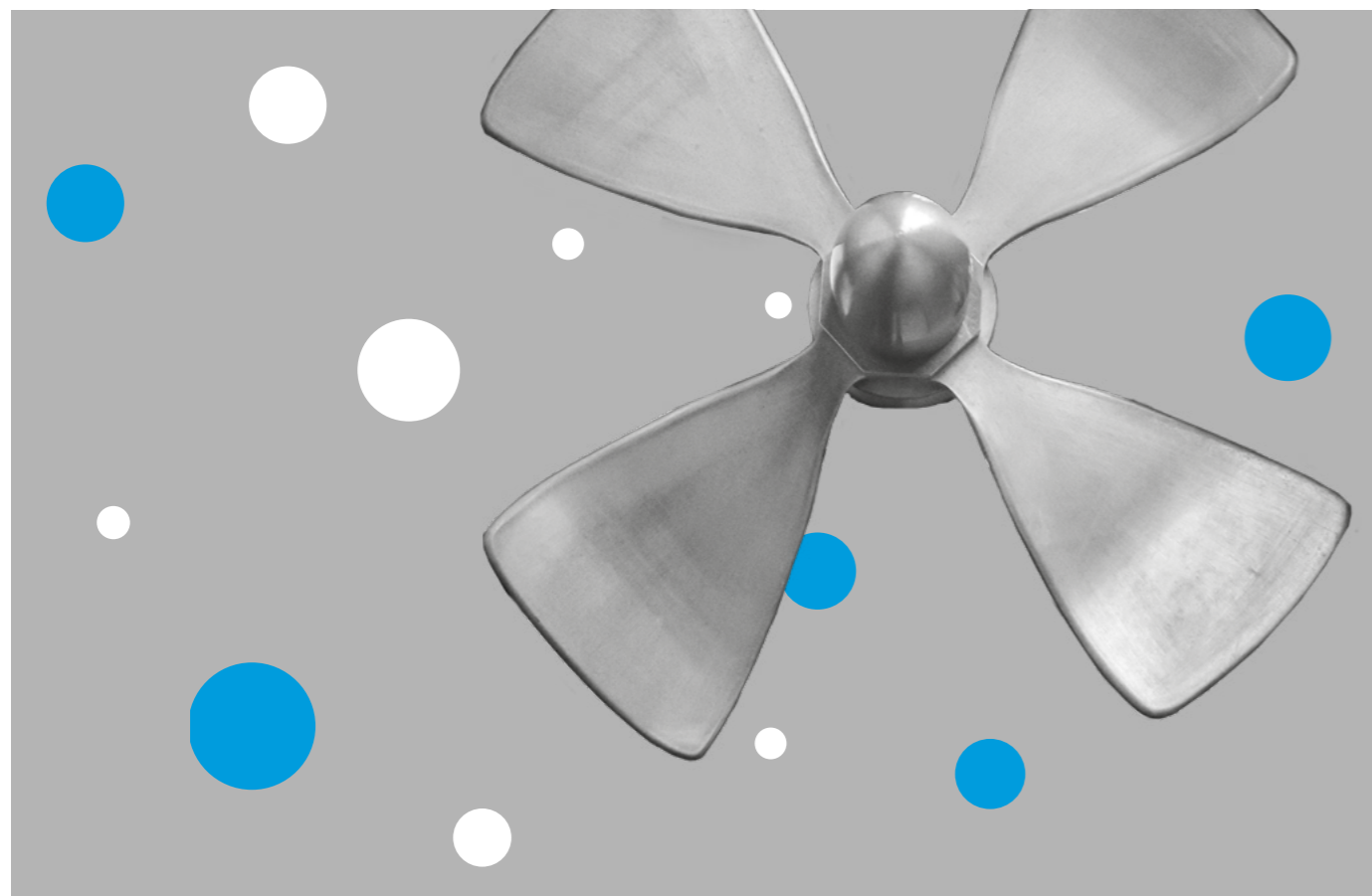
Read more about our approach to the investment for the preceding year in the report Public Interest Reinvestment Contributions to Environmental Restoration at Sellafield.



"This is a collaboration, and collaboration is about relationships, and relationships develop and require work. While we've achieved ISO44001 in the past, this international standard requires that we keep on improving as our organisations and people change and evolve. The review went really smoothly and this is because of the hard work of a lot of people and our common aspirations as nuclear professionals. Having LQRA recertify that we meet this international standard is really important and it's a badge we can wear with pride."

Robin Ibbotson
Sellafield Limited

3.0 What we have delivered...



Defence and generation portfolio

The defence and generation (D and G) portfolio covers major customer activity with the MoD/Rolls-Royce, EDF and AWE.

Ministry of Defence/Rolls-Royce – we are currently developing specific capabilities and preparing for post-irradiation examination (PIE) operations in NNL's Active Handling Facility (AHF) at Windscale Lab for Rolls Royce.

In order to maintain the continuous at sea deterrent, we need to provide timely empirical fuel performance data. To enable this, we have recruited and trained around 100 new colleagues to have more people on hand around the clock. We have also carried out flask and cask inactive trials to increase client confidence in our programme.

EDF – we have worked closely with EDF across graphite, endoscopy and post irradiation examination (PIE), enabling EDF to deliver against its business plan.

Our fuel programme delivered the first condition monitoring flask into an active handling facility to support EDF's PIE programme. Our graphite programme supported EDF's advanced gas-cooled reactor (AGR) safety case, launching the largest programme of coefficient of thermal expansion (CTE) in 20 years. This support is critical to EDF's lifetime extension strategy and the UK's energy.

AWE – we have recently signed a collaboration agreement with AWE to facilitate closer working relationships between NNL and AWE. We are supporting both the technical underpinning to AWE's new plant process and the processing legacy materials that were restricting site operations.

Using our unique capability across the fuel cycle we have unlocked new waste routes and provided the underpinning science needed to enable AWE to develop new processes.

Government and new build portfolio and clean energy focus area

This year has been an important year in government and new build space with several important policy announcements with supporting funds being made available to progress the development of new nuclear technologies. The British Energy Security Strategy, for example, aims to deliver 24 gigawatts of nuclear

generating capacity by 2050 through a range of measures including the deployment of both large and small reactor technologies. The Future Nuclear Enabling Fund, the AMR Research, Development and Demonstration fund, and the Nuclear Fuel Fund have all been set up to finance active programmes.

We are capitalising on this commitment by advancing the following programmes of work:

Reactor technology

In order to meet our energy security and net zero ambitions it is envisaged that the UK will need to deploy a range of nuclear reactor technologies including giga watt scale light water, small light water and Gen IV advanced systems. In this last category, high temperature gas reactors offer the potential to decarbonise industries such as hydrogen, steel, cement and aviation fuels through the provision of high-grade heat. We are working with our partner, JAEA, through the government AMR RD&D programme to progress a UK design based on proven Japanese technology to meet the requirements of having a demonstration reactor operational by the early 2030s. In addition, we are working closely with a number of vendors of molten salt reactor technology as well as supporting the Rolls-Royce SMR programme.

This is an exciting era for NNL as we use programmes such as this to develop and increase our in-house skills and capabilities in advanced reactor development.

NNL is also developing reactor expertise on behalf of the UK through involvement in Small Modular Reactors (SMRs). As a member of the consortium that delivered Phase 1 of the Rolls-Royce SMR programme, NNL is supporting Rolls Royce

in Phase 2 as the reactor is progressing through Generic Design Assessment. This remains a very exciting programme as the UK looks to deploy small reactor technology to provide flexible power generation in the future.

Fuel development

Fuel development is a key technical capability within NNL and we have continued to support operations at Springfields Limited on existing products whilst also looking to develop the advanced fuels of the future. One particular highlight is the work we have done on developing TRISO Coated Particle Fuel (CPF) through the government's Advanced Fuel Cycle Programme, where laboratory scale production of the uranium kernel was achieved for the first time this year in the dedicated CPF laboratory in our Preston facility. Building on this success, we also led a programme with Urenco and JAEA under the government AMR RD&D programme to assess the challenges in developing a commercial scale process and facility for manufacturing sufficient quantities of this fuel to power a fleet of high temperature reactors in the future. This included the production of a UK source of High Assay-Low Enriched Uranium (HA-LEU) required to drive efficiencies in the operations of high temperature reactors.

Applications for nuclear energy

New reactor technologies will be justified by the products they will deliver in the decarbonised world of the future. Therefore, an important workstream in the clean energy programme was to seek input from industry to gain a detailed understanding of the needs of end users. In particular, nuclear generated high-grade heat can be used directly by energy-intensive manufacturing processes, such as hydrogen production, to improve economics and provide a route through to large scale manufacture.

Large scale nuclear-enabled hydrogen can be used directly as a source of energy or contribute to the production of synthetic fuels to decarbonise industries such as long-haul aviation.

NNL has worked with partners including Energy Systems Catapult to demonstrate the case for nuclear to play its part in future UK hydrogen production.

We have also collaborated with DNV to explore the potential for nuclear enabled hydrogen to be distributed by the conversion of the UK gas networks. This will help us create an in-depth evidence base on the role of hydrogen as a key energy vector to support upcoming UK government policy decisions.

Health and nuclear medicine

Radionuclides, also known as radioisotopes, are used in the health sector for medical imaging, diagnosis and treatment.

The UK was a world-leader in development of technology, techniques and equipment, and until around the mid-1990s had “full cycle” capability – isotope production, refinement, logistics and use in hospitals. However, today the UK imports the majority of isotopes and is no longer active in refinement or exports.

An emerging medical treatment, known as Targeted Alpha Therapy (TAT), uses a targeting molecule linked to a radionuclide that emits alpha particles. Once the carrier has taken the alpha-emitting radionuclide to the area of concern, the alpha particles destroy cancer cells while minimising damage to healthy parts of the body, thereby limiting side effects experienced by patients.

A limited number of radionuclides are suitable for TAT such as Actinium-225, Radium-223, Astatine-211 and Lead-212. Research and development into TAT, and other improved diagnostics and treatments, in the UK is restricted by access to these radionuclides.

NNL’s objective is to: *Be the leading UK provider of radionuclides for medical research*

Investment in nuclear medicines offers significant societal benefits: improving outcomes for cancer patients, developing small and medium sized enterprises, preserving critical skills and enhancing the UK’s reputation for world leading life sciences.

Progress

We have made significant progress on a number of fronts.

Lead-212 is a very important medical radioisotope for treating cancer, yet a global shortage limits its use. There’s currently no production route in the UK. During the year, scientists at NNL have made a breakthrough and developed the UK’s first home-grown supply of Lead-212 at NNL’s Preston Laboratory. The production process requires complex chemical separation and purification of nuclear material and builds on NNL’s world-leading capability in this area.

NNL has also created a Radiopharmaceutical Development Laboratory at Preston. The facility will allow researchers to handle radionuclides without having to set up facilities at their own universities, avoiding the need for each university to make amendments to their permits or hold radioactive waste.

Some key activities during 2023/24 will include:

Scaling up the production of Lead-212 to remove the significant supply constraints currently faced by researchers and hospitals

Investigating the feasibility of extracting other radionuclides from legacy materials

Developing an outline business case for investment in new infrastructure

Developing NNL’s skills, knowledge and capabilities in health and nuclear medicine

Case Study

Development of Alpha Particle Radiotherapies using Lead-212

In order to explore how we might supply Lead-212 to researchers and clinicians in the UK and Europe, we have entered into a memorandum of understanding with Viewpoint Molecular Targeting®.

Viewpoint’s leading Lead-212-based alpha-particle radiotherapies are designed to deliver powerful alpha radiation specifically to cancer cells using specialised targeting peptides. Viewpoint is also developing complementary imaging diagnostics that incorporate the same targeting peptides.

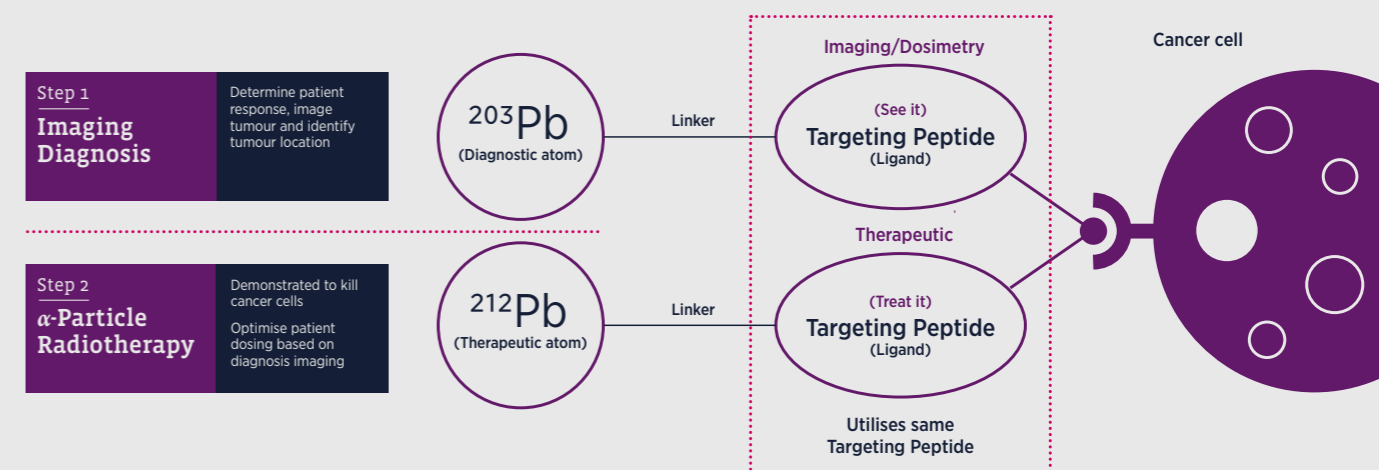
This “theranostic” approach enables the recognition and precise treatment of the specific tumour. It also has the potential to improve efficacy and minimise the toxicity associated with other types of cancer treatments.

The company’s melanoma (VMT01) and neuroendocrine tumour (VMT-α-NET) programmes are entering phase 1 imaging studies, which will be followed by phase 1/2a therapy trials for the treatment of metastatic melanoma and neuroendocrine tumours at two leading academic institutions.

“This new initiative is immensely exciting, offering a huge boost to the future of molecular radiotherapy treatment and personalised medicine in the UK. Barts Cancer Institute and Radionuclides for Health UK welcomes the leadership that NNL is showing on this issue. It is an important step in re-establishing UK supply of medical radioisotopes and securing the future of research in this important sphere of human health.”

Dr Jane Sosabowski

Reader In Molecular Imaging at Queen Mary’s Barts Cancer Institute and researcher at City of London Cancer Research UK-RadNET



Security and non-proliferation

The current and future adoption of a greater breadth of advanced nuclear technologies presents challenges that we must address. We established this focus area to facilitate the global deployment of vital nuclear technology and help maintain national security.

We have grouped our activities into four areas:

safeguards and non-proliferation – to ensure the UK government, IAEA, regulators, and industry have the tools and knowledge required to enable peaceful use of nuclear materials and technology in current and future fuel cycles

nuclear security – to keep the UK at the forefront of securing nuclear and radiological materials to effectively manage domestic and global risks

nuclear forensics – to establish a national operational nuclear forensics capability for identifying the nature and origin of nuclear and radiological materials

emergency preparedness – to provide the UK with a technically robust capability underpinning emergency procedures and arrangements in response to nuclear and radiological events

We have made huge strides and continue to expand our contribution to meeting nuclear security and non-proliferation priorities and overcoming key challenges, at home and overseas. Nuclear security and non-proliferation are global issues. Key threats rarely respect borders, and as such many challenges and their solutions are shared between nations. As such we support the world's nuclear watchdog, the International Atomic Energy Agency (IAEA) in its mission of ensuring the peaceful use of nuclear.

Our planned activities for 2023/24 will strengthen and develop resilience in core areas of capability. We will build relationships and partnerships across public, private and academic sectors to enable the deployment of vital nuclear technology.

In collaboration with industry partners and the UK government, we are creating the National Centre for Nuclear Security and Non-Proliferation to provide a single point of access to security and non-proliferation expertise. Using science and technology, the centre will create and implement an integrated, national research and development programme.

Case Study

Nuclear forensics

Nuclear forensics is the ability to establish where nuclear and radiological material came from. The UK has a nuclear forensics capability, used to identify the origins of the Polonium used in the poisoning of Alexander Litvinenko in 2006.

Nuclear forensics is an essential element of the UK counter-terrorism strategy (CONTEST).

NNL identifies civil sector materials while AWE is responsible for defence sector materials.

The government threat assessment in 2021 said: *“It is likely that a terrorist group will launch a successful CBRN attack by 2030.”* This has resulted in an increased focus on the chemical, biological, radiological and nuclear (CBRN) threat.

We have secured three years' funding for the UK Nuclear Forensic Laboratory to help develop the UK counter terrorism response capability to a potential radiological or nuclear incident.

We have secured three years' funding for the UK Nuclear Forensic Laboratory to help develop the UK counter terrorism response capability to a potential radiological or nuclear incident.

Through training, development, conferences, international outreach and taking an active part in exercising this capability, we are ready to deploy this capability immediately in response to an incident.

Nuclear Forensics



Space

Space is one of the UK's fastest growing and most valuable sectors in both the UK and global economy. Space power systems are a key focus area for NNL and we have been working on developing a Radioisotope Power Systems (RPSs) which uses the decay heat from Americium-241 to prevent spacecraft from freezing and it can be converted into electricity to power onboard systems. These systems continue working for decades without maintenance enabling multi-year spacecraft journeys.

NNL's objectives are to:

create a new national capability for Americium-241 production, securing the supply of this strategic resource for the UK to power the next wave of solar system exploration missions

accelerate the development and testing of UK space reactor technology

The Space Clusters Investment Fund (SCIF) awarded NNL £19.2 million to design, procure, install and commission the PuMA2 facility.

We will equip this new laboratory in Cumbria with next-generation equipment and technology, enabling us to deliver a sovereign supply of fuel for space batteries. This will support the UK and its partners in pursuing new space science and exploration missions.

Working at the forefront of space science and technology enables us to create new highly-skilled jobs in the North West of England, driving innovation in radiochemistry and separations science and opening a new market for the UK space sector and goes to the heart of our purpose of nuclear science to benefit society.

NNL has enjoyed a decade of close partnership with the University of Leicester and has taken office space at Space Park Leicester. This will facilitate deeper collaboration in the development of space nuclear power systems and in particular radioisotope power technologies.

Some key activities during 2023/24 will include:

design of the PuMA2 facility

understand where core NNL capability can best support the development of space reactors and sub-watt radioisotope power systems

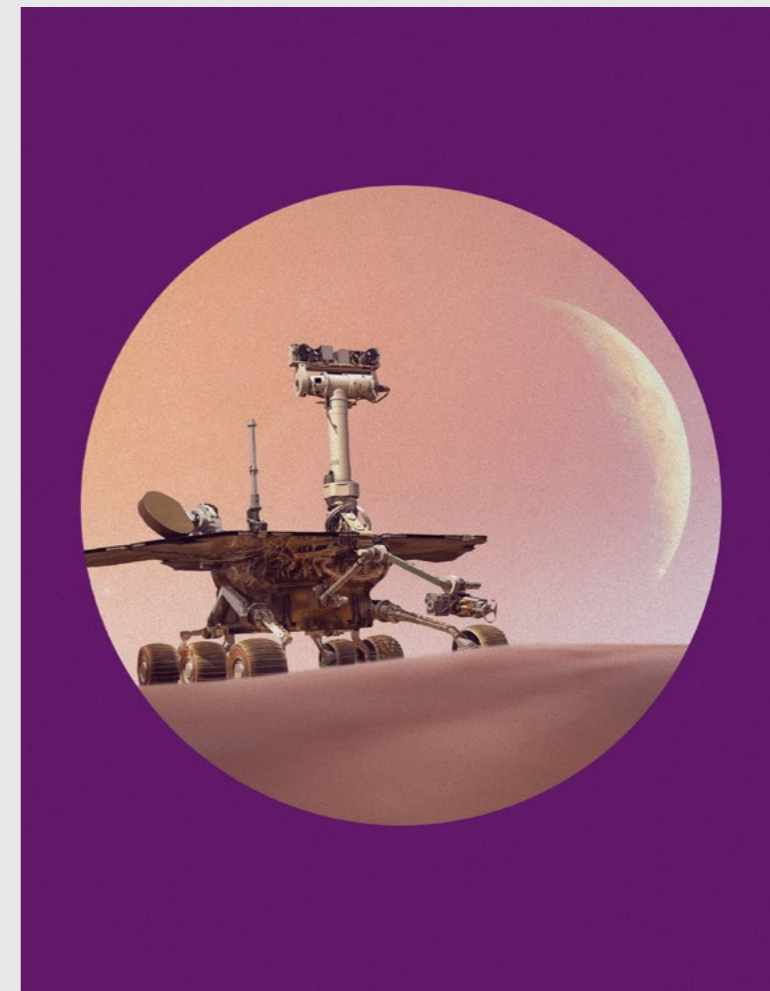
expand collaboration and explore new opportunities with the University of Leicester

Case Study

In order to explore how we might supply Lead-212 to researchers and clinicians in the UK and Europe, we have entered into a memorandum of understanding with Viewpoint Molecular Targeting®.

Space is the final frontier and space agencies around the world have committed to a new generation of space exploration. The Apollo missions in the late 1960s and early 1970s, which resulted in the first (and last) human footsteps on the surface of the moon, had one thing in common – an atomic battery. Every rover that has gone to Mars has relied on the same energy technology, powered by Plutonium-238, a radioisotope produced only in the US, where supply is limited, and in Russia. An alternative is urgently needed.

In 2009, NNL researchers identified that Americium-241 emits power for more 400 years and is a viable alternative to Plutonium-238. Americium-241 has the added benefit of being produced during the radioactive decay of used fuel from nuclear reactors. Not only does this provide a use for a problematic waste product, but the UK – the home of the world's first full scale nuclear



power plant – owns the largest available resource of Americium-241 in the world.

For more than a decade, we have worked under contract for the European Space Agency (ESA) to develop an Americium-241 extraction process at the Central Laboratory and partnered with the University of Leicester, which has led on the system design. We have demonstrated the scientific concept and are starting work to scale up the process.

“We are backing technology and capabilities to support ambitious space exploration missions and boost sector growth across the UK. This innovative method to create Americium to power space missions will allow us not only to sustain exploration of the Moon and Mars for longer periods of time, but to venture further into space than ever before.”

Supporting the National Nuclear Laboratory's expansion will make the UK the only country in the world capable of producing this viable alternative to Plutonium, reducing the global space community's reliance on limited supplies,

which are increasingly difficult and costly to obtain. The UK Space Agency is committed to keeping space activities sustainable, and this resourceful technology exploits otherwise unused waste Plutonium biproducts without generating additional waste.”



Dr Paul Bate
CEO, UK Space Agency

3.0 What we have delivered...

...through our support to government

As the UK government's centre of expertise for nuclear fission, we provide technical nuclear advice to policy teams. We do this through the Nuclear Innovation and Research Office (NIRO): a division of NNL operated on an independent, arm's-length basis and staffed by experts from across the nuclear industry.

NIRO gives government immediate access to strategic and technical advice and guidance.

Throughout the year, NIRO has supported government on a variety of areas including:

with the Nuclear Innovation Research Programme

Secretariat for the Nuclear Innovation and Research Advisory Board (NIRAB)

advanced nuclear technologies including small modular reactors and advanced modular reactors

international engagement, including advice on integrated approaches with NEA and IAEA and a number of bilateral R&D collaborations

delivery of "Large Nuclear" and support for activities enabling the development and delivery of new nuclear programmes

...through our facilities

Working at the cutting edge of nuclear science requires cutting edge facilities. Our clients in the UK and around the world need reliability and sustainability.

We have almost quadrupled capital spending on our estate, from an average of £6 - 8 million to £25 - 30 million. To enable us to deliver this scale of work, we have reorganised the department to create roles that focus on either delivering capital works or system improvements.

We secured multi-year grant funding from DESNZ to invest in critical national infrastructure in 2021 and are using the money to refurbish ageing buildings and invest in improving our assets and enabling software systems.

We identified a safety issue with our active handling facility, which needed to be fixed straight away before the plant could be fully used. We developed a three-stage process to bring the plant back into full use as quickly and safely as possible. We are due to complete the first stage - approving the plant modification plan - by July 2023, and the final stage completed within 12 months.

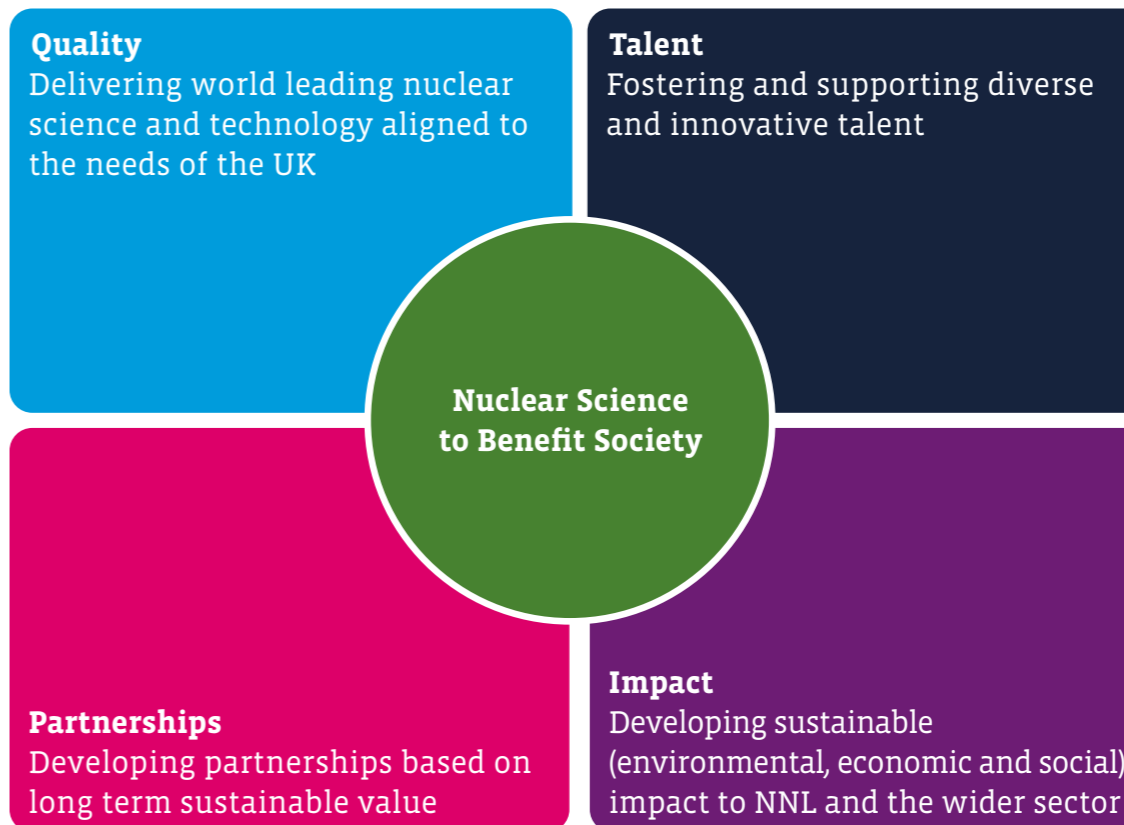
Case Study

UNL Finishing Line Preston

The Uranyl Nitrate Liquor (UNL) finishing line project will enable us to convert more natural or depleted UNL to oxide or diuranate.

This will allow our legacy and defence customers to prepare currently held residues for long

term storage. We're working on designing the line while our Preston team clears an area for construction by decommissioning the redundant effluent treatment rig. It will take 10 weeks to systematically dismantle it and reduce the size of the resulting waste.



...through our Science and Technology Agenda

The nuclear landscape is evolving at pace. Nuclear will play a key role in decarbonising the energy sector by 2050, creating sustainable carbon free energy, powering space missions and enabling production of medical isotopes for health. Our work is putting the UK at the forefront of nuclear science and technology.

In line with our purpose and strategy, we launched a new science and technology (S&T) agenda in 2021 to push the boundaries. Science and technology is the heartbeat of NNL and enables successful delivery of our purpose - Nuclear science to benefit society.

Our science and technology agenda guides our investment in future capability. It includes three key pillars: core science; innovation; and strategic research and is underpinned by collaboration.

In combination with our strategic plan our science and technology agenda powers meaningful and sustainable change. We are investing in science and technology to serve our partners and our nation, cementing the UK's position as a global thought leader in nuclear technology.

Core science (focused on themes that develop core skills, utilise critical national infrastructure and drive university collaborations)

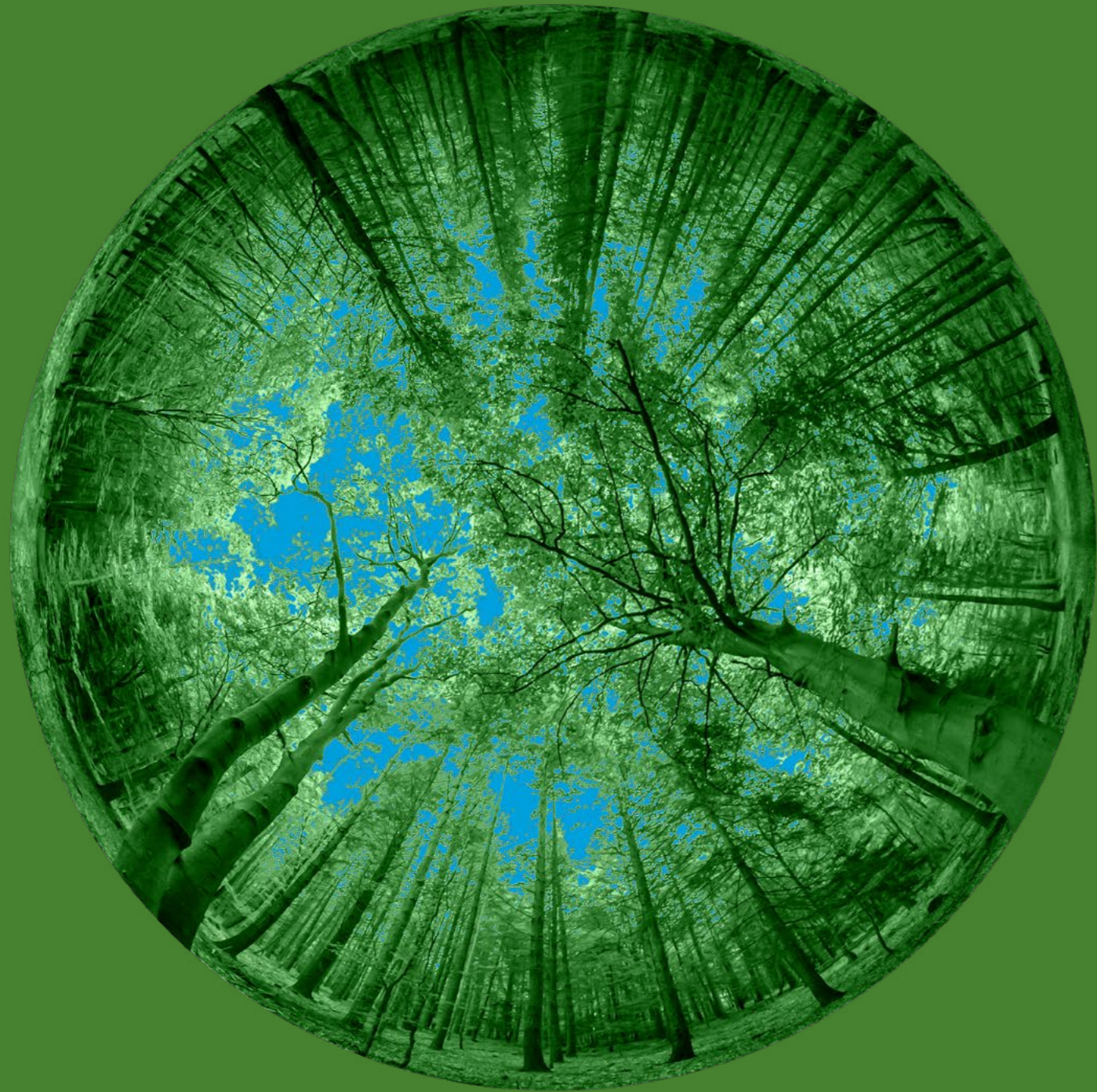
Innovation (disruptive innovation created from innovative ideas, customer led challenges and industry wide partnerships)

Strategic research (programmes underpinning the future national agenda that leverages R&D programme investment)

This year, we introduced our new science and technology Value Framework as a mechanism to both drive and communicate the value we generate.

Our science and technology value framework has four key value themes: quality, talent, partnerships and impact. Together, these enable us to demonstrate the significant value we deliver for our sector and the UK, driving towards being a scientific superpower. ○

4.0 Sustainability



Sustainability is a core area of focus for NNL as a purposeful business.

Our sustainability ambitions are:

- 1. Environment** – we will achieve net zero emissions by 2030, reduce our wider environmental impacts by half and double our positive contributions in respect of nature and resource use
- 2. Social** – we will maximise our social impact, benefiting our people and our communities
- 3. Economic** – we will optimise for long-term inclusive economic growth and financial stability, whilst balancing this with broader measures of value and performance

We have identified our objectives which will contribute to the achievement of our ambitions:

People – embedded and enabled pro-social and pro-environmental decision making in ways of working, our ambitions are communicated clearly and support an inclusive programme of staff engagement where well-being and meaningful work for all is prioritised

Society – the value we create for stakeholders and investments in our communities is maximised, supporting a sustainable, equitable and inclusive economy, for the long term and protecting the needs of future generations

Emissions – meeting our net zero 2030 target and moving to a net positive contribution

Resources – continual improvement in the efficiency of our resource use and reductions of all wastes

Procurement – environmental and social benefit is driven through our supply chain, supporting the growth of a circular economy

Beyond NNL – exercising our influence to support global sustainable development goals, support wider systems changes, and enable our own employee actions.

We are committed to creating the clean energy the world needs. Not just at the point of generation, but throughout the nuclear lifecycle. How we work matters as much as what we do. Some of the actions we have taken this year to advance our sustainability ambitions are set out below.

We are focusing our attention on achieving net zero by 2030.

This year we launched a project to create a roadmap to get to net zero using targets endorsed by the Science Based Targets Initiative (SBTi) with a key focus on reducing emissions at our sites. The roadmap will establish the long-term actions and discreet activities we can implement immediately to get us to net zero.

To support individual action, we launched a partnership with Giki Zero, a UK-based social enterprise and certified B-Corp, enabling our people to calculate their own carbon footprints, with a wide variety of actions that can help reduce it.

We have also introduced family-focussed policies to enable our people to balance career progression with family commitments.

4.0 Sustainability

At COP27 in Egypt in November, we sponsored Nuclear for Climate, a global grassroots initiative of more than 150 nuclear societies and associations.

Our sponsorship enabled members of Nuclear for Climate from across Africa to attend the summit, to educate policy makers about the necessity of including nuclear energy as a carbon-free solution to climate change. Because, whilst electrification is a key enabler to net zero, this is not a viable path for all industries and transport sectors. NNL's session discussed how nuclear and renewable energy sources can work in an integrated energy system to positively impact the climate agenda.

NNL also participated in a panel session in the UK Pavilion to discuss the investment that the UK government is making in its sovereign nuclear capability, and the importance of a supportive regulatory environment to ensure that innovation across the public and private sector continues.

In the coming year, we will continue to deliver on our net zero roadmap and will develop a new social policy with a renewed focus on investment in community, volunteering and STEM outreach.

Our equality, diversity and inclusion programmes will focus on ethnicity and neurodiversity, both corporately and through a wide group of champions within the business. NNL will pilot a sustainability training

programme and we look forward to participating in COP28, playing our role in a sustainable future for the UK.

As both a private limited company incorporated under the Companies Act 2006 and as a public corporation, NNL is required to report its environmental performance under both the Streamlined Energy Carbon Reporting Regime and the Greening Government Commitments. These reports are set out under Environmental Performance below.

In addition, to these reporting requirements NNL has voluntarily chosen to disclose against the TCFD Recommendations for the first time.



Task Force on Climate Related Financial Disclosures

The Financial Stability Board (FSB) created the Task Force on Climate Related Financial Disclosures to develop recommendations on the types of information that companies should disclose in relation to climate change. The recommendations provide a standardised approach to climate change reporting, so that risks and opportunities can be categorised consistently, and organisations across different sectors and jurisdictions can be compared.

NNL is at the start of its sustainability journey and whilst we have defined our sustainability ambitions we are still developing the framework around which those ambitions will be delivered. Nonetheless, NNL have chosen to

voluntarily disclose against the TCFD Recommendations in order to lay down the foundations for future sustainability reporting. NNL has taken the view that it is preferable to begin with a work in progress statement to be built on and improved, rather than to wait to have comprehensive disclosure.

The TCFD framework requires organisations to consider four interlinking themes: governance, strategy, risk management and metrics and targets. We used that framework to assess how well we are managing our internal climate change risks and how close we are to a TCFD-compliant disclosure.

GOVERNANCE: The organisation's governance around climate related risks and opportunities

Progress this year:	Board oversight of climate related risks and opportunities
<ol style="list-style-type: none"> 1. Board sustainability workshop Programme 2. Introduction of a sustainability impact assessment 3. Developed plans for board training aligned to Chapter Zero Toolkit 4. Identified sustainability as a business risk 5. Restated our sustainability ambitions and objectives and set priorities for 2023/24 6. Initiated development of a sustainability dashboard 7. Appointment of executive lead for sustainability 	<p>Throughout 2022/23 the board have been actively involved in developing our approach to sustainability. The board participated in a series of sustainability workshops to consider our approach to sustainability and to restate our sustainability ambitions and objectives.</p> <p>Following these workshops a plan was developed for sustainability training at board level and sustainability impact assessments have been introduced for all board papers.</p> <p>As part of the wider review of risk management the board identified sustainability as a key business risk.</p>
Future focus:	Management's role in assessing and managing climate related risks and opportunities
<ol style="list-style-type: none"> 8. Quarterly reporting to board and/or EHSSC 9. Sustainability dashboard to be developed and reported quarterly at executive meetings 10. Establishment of sustainability integration group 	<p>The Chief Strategy Officer has been appointed as the executive lead for sustainability. Over the course of the year the executive team have overseen the development of a sustainability implementation plan and the development of a template sustainability dashboard.</p> <p>The executive have carried out a risk deep dive on sustainability and identified that this risk needs to be understood further in the coming year.</p>

4.0 Sustainability

STRATEGY: How climate-related risks and opportunities impact the organisation's businesses, strategy and financial planning

Progress this year:	
1. Embedded sustainability within the 2023/24 Strategy	The NNL Strategy has been influenced by the changing environment and the opportunities presented by net zero for the nuclear industry. Our Clean Energy focus area was developed to take advantage of these opportunities.
2. Identification of sustainability as an enabling imperative to the NNL business	
3. Development of a climate change risk and opportunities assessment questionnaire	As part of our strategic planning process for 2023/24 we have embedded sustainability as an 'enabling imperative': to become a purposefully driven and sustainable led organisation. The embedding of sustainability as an enabling imperative has led to the cascade of sustainability objectives throughout the organisation.
Future focus:	
4. Work with the wider business to identify climate related risks and opportunities	Whilst our strategy recognises the risks and opportunities presented by climate change we have not carried out a formal climate change risk and opportunities assessment. We have now prepared a climate risk assessment tool which we shall roll out across the business during 2023/24 to identify climate risks and opportunities.
5. Carry out high level scenario planning against NNL strategy	

RISK: How the organisation identifies, assesses and manages climate-related risks

Progress this year:	
Process for identifying and assessing climate related risks	
1. Development of a sustainability business risk	As explained above, we have identified a sustainability business risk and prepared a risk bowtie to enable the board and executive to further consider climate change risk.
2. Development of a climate change risk assessment tool	
Future focus:	
3. Work with the risk management committee to integrate sustainability and climate risks into the risk management system	We have made limited progress in identifying individual climate related risks and opportunities. However, we have now developed a climate risk assessment tool which we shall roll out across the business during 2023/24 to identify climate risks and opportunities.
4. Work with the risk management committee monitor development of sustainability and climate risks and opportunities.	Once we have identified our risks and opportunities we will then work closely with our risk management committee to integrate sustainability and climate risk reporting into the risk management system.

METRICS AND TARGETS: The metrics and targets used to assess and manage climate-related risks and opportunities.

Progress this year:	
Process for identifying and assessing climate related risks	
1. Reporting against Greening Government Commitments	NNL reports its environmental performance under both the Greening Government Commitments and Streamlined Energy Carbon Reporting regime.
2. Reporting against SECR reporting	
3. Identified initial metrics to be included within a sustainability dashboard	In addition to reporting our energy usage and emissions, we are currently developing a suite of metrics to assess progress against our sustainability agenda (incl. climate change). We expect that these metrics will form part of the Long Term Value Framework which is being piloted during 2023/24.
Future focus:	
4. Development of value framework	Work on our net zero roadmap has demonstrated areas for improvement and has led us to consider how best engage with our stakeholders to achieve our ambitions..
5. Work with our stakeholders	

Environmental Performance

NNL is required to report on greenhouse gas (GHG) emissions, energy consumption and energy efficiency in accordance with the Streamlined Energy and Carbon Reporting (SECR)¹. As a public corporation NNL also carries out sustainability reporting in line with the Greening Government Commitments (GGC). GGC is a framework for government departments to improve their sustainability across a range of targets.

NNL calculates its carbon emissions using the Streamlined Carbon Intensity Ratio methodology. NNL's carbon reduction plan for 2021-22 forecast a 5% emissions reduction year on year. In 2022/23 the Intensity Ratio indicates NNL has reduced scope 1 & 2 emissions by 10% versus the previous year.

This reduction has been delivered through raising awareness, delivering education, application of best practice, sustainable procurement, and continuous improvement initiatives. The majority of NNL's Scope 2 emissions are associated with operations on two UK nuclear sites. On these sites NNL's energy is supplied by its landlord, via an on-site combined heat and power facility.

Across the business, we have introduced energy efficiency measures into our procurement processes and ensured that sustainability is a key consideration in investment decisions.

Over the year we have been revising our Travel Policy. Rail travel is actively promoted over UK domestic flights and car hire. Our data is indicating increased rail usage in 2023, versus the previous year. However, we are seeing a significant

increase in international air travel which is reflective of the expansion of international business activities.

As regards waste reduction, it is difficult to quantify waste reduction within NNL as successful application of our Waste Management Hierarchy is very much dependent on the waste stream materials received and generated by NNL. The promotion of a sustainable circular economy has strengthened our strategy to 'avoid' creation of waste and active collaboration with the supply chain avoids waste unnecessarily entering the NNL waste footprint.

The carbon emissions associated with NNL operations and services, is continuously reducing. In real time, the application of awareness through best practice and sustainable effort, thought and behaviours, is reflective in the Intensity Ratio reduction (-10%). However, Scope 3 requires further development. Early engagement and collaborative effort with our supply chain and workstream partners, with the embedding of circular economy, mitigating consumption of non-renewable and non-recyclable materials from the design stage of our customer work stream, where practicable, will actively reduce the waste stream across the organisation.

Embedding through education, and a proactive application of sustainable effort, will mitigate the avoidable waste stream entering the NNL footprint. Future sustainable training will facilitate reduced consumption. However this is difficult to quantify as the business activities are not linear and are reflective of customer work stream activities.

1. The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 (SI 2018/1155).

4.0 Sustainability

Streamlined energy and carbon reporting

Our Annual Energy Review included an intensity ratio calculation for the UK government's Streamlined Energy and Carbon Reporting (SECR). Our reviews indicated our facilities have a relatively consistent

energy usage, and we have shown a continually reducing energy intensity ratio.

Business travel continues to increase, however is still less than pre-pandemic data (Scope 3: 2019 – 20 kilometers =1,981,193.57)

NNL Streamlined Energy Carbon Report (SECR)	2022-2023	2021-2022	% Change
Data Energy consumption used to calculate emissions:/kWh Total each F/Y	Electricity = 9,684,376 kWh Gas = 956,197 kWh Steam = 6,363,659 kWh	Electricity = 9,406,851kWh Gas = 530,321 kWh Steam = 8,006,642 kWh	+3% +80% -21%
Scope 1 Fleet vehicles leased or owned by NNL	Small diesel car, up to 1.7l 11,858km Medium diesel car, 1.7 – 2.0 49,054km Large diesel car, >2.0l 1,343km	Small diesel car, up to 1.7l 11,202km Medium diesel car, 1.7 – 2.0 25,965km Large diesel car, >2.0l 1,883km	6% +89% -29%
UK Government: Conversion factor	Government conversion factors	Government conversion factors	
Scope 1 Emissions from activities for which the company own or control including combustion of fuel & operation of Facilities (Scope 1) /tCO2e	Gas = 172 NNL fleet emissions = 10.5	Gas = 108 NNL fleet emissions = 6.6	+59%
Scope 2 Emissions from purchase of electricity, heat, steam and cooling purchased for own use (Scope 2, location Based) / tCO2e	Electricity = 1,873 Steam (CHP) = 1,086	Electricity = 1,997 Steam (CHP) = 1,366	-6% -20%
Scope 3 Total emissions from business travel in rental cars or employee-owned vehicles/ tCO2e	Kilometres = 1,331,474 Transport = 224 tCO2e (Business travel)	Kilometres = 536,123 Transport = 88 tCO2e (Authorised travel)	+148%
Total gross Scope 1 & Scope 2 emissions / tCO2e =	Total gross Scope 1 & Scope 2 emissions = 183 + 2,959 =3,142 tCO2e	Total gross Scope 1 & Scope 2 emissions =114 + 3,363 = 3,477 tCO2e	-10%
Intensity ratio: tCO2e (gross Scope 1 + 2) / e.g. £1,000,000 revenue	tCO2e/£128M NNL Intensity Ratio (2022-23) = 24.5	tCO2e/£128M NNL Intensity Ratio (2021-22) = 27.2	-10%

Notes

- Total gross emissions are noted in 'tonnes of carbon dioxide equivalent' (tCO2e).
- Government conversion factors for company reporting of greenhouse gas emissions have been used to derive tonnes of carbon dioxide per annum from each energy source.

Methodology:

NNL boundaries are defined as three active facilities, one non-active facility and four offices- approximately 75,000 m2 in total. The company has established and actively uses an energy baseline; using a systematic, data driven and fact-based process, focused on continually improving energy performance. NNL monitors and measures all energy consumption, using meter readings for facilities and energy data supplied by landlords for offices in shared buildings. Estimates are used for one office extrapolated against historical data and checked against a metered office. NNL energy consumption is well understood – deviations from expected energy usage are understood and relatable to work patterns or outages.

Greening Government Commitments

The current GGC framework is for 2021–25. Targets are measured against a 2017-18 baseline, to be achieved by March 2025. DESNZ is the lead department for setting policies for UK to become net zero by 2050 and NNL is part of the DESNZ family for GGC. Performance of the DESNZ group towards government departments' GGCs can be found in the DESNZ Annual Report and Accounts using the link below.

[DESNZ annual report – Search – gov.uk](#)

NNL is accredited to ISO 50001:2018 Energy Management and ISO 14001 Environmental and is committed to protecting the environment and energy management in our daily operations and services. We deliver extensive training, to ensure the application of effective energy management, through controlled processes and effective risk management, with continual improvement activities.

NNL – Waste Target: Reduce the amount of waste going to landfill to less than 5% of overall waste	2022/23	2021/22	2017/18 Baseline
	tonnes	tonnes	tonnes
Waste recycled externally (excl. ICT waste)	48	371	180
Waste incinerated with energy recovery	16	3	0
Total waste recycled (% of total)	48 (-41%)	372 (85%)	181 (93%)
Total waste not to landfill (excl. waste reused)	64	375	183
Total waste sent to landfill	52	63	10
Total waste (excl. waste reused)	117	438	193
Total landfill waste deemed hazardous (incl. clinical waste)*	22	58	2

GGC Performance Criteria	Unit of measurement	DESNZ 2025 Targets	2022/23	2021/22	2017/18 baseline
Paper Use (Scope 3)	Equivalent to A4 reams	Reduce paper use by at least 50% (*3,313) from the 2017/ 2018 baseline	2,333	1,146	6,625
Water use (Scope 3)	m³	Reduce water consumption by at least 8% from the 2017/18 baseline	9,070m³	8,789m³	7925m³
Domestic Travel (UK) (Scope 3)	Rail Travel (km)	Reduce the distance travelled of domestic business flights by at least 20% from a 2017/18 baseline	796,781km 5tCO2e	148,553km 28 tCO2e	941km 44 tCO2e
	Domestic Flights (km)		27,407km 4 tCO2e	5,340km 0.7 tCO2e	51,595km 7 tCO2e
International Travel (Scope 3)	Number of flights Distance (km)	Report the distance travelled by international business flights	68 flights 1,144,307km 217 tCO2e	19 flights 161,195km 14 tCO2e	44 flights 242,356km 34 tCO2e

Notes

- Please refer to the SECR Reporting for details of Scope 1 and 2 and 3 emission (business travel)
- NNL Boundaries are defined as m3. for water usage are those as explained under SECR Reporting
- DESNZ targets do not stipulate criteria for the reduction of travel. DESNZ strongly encourages train travel over other methods. NNL international flights are USA, Australia and Japan.
- DESNZ targets are those set by the department for NNL as a business. Targets reflect NNL's contribution to the DESNZ family commitments year on year using baseline data from 2017/18.

Prompt payment in government contracting

NNL follows the Prompt Payers Code of Practice and commits to paying 95% of all supply chain invoices within 60 days. ○

	2022/23	2021/22
Average time taken to pay invoices (days)	7	7
Paid within 30 days (%)	100	99
Paid 31 to 60 days (%)	-	1
Paid 61 days or more (%)	-	-

5.0 Our People



We can lead the world in new nuclear technology if we create an environment where our people can thrive.

This year, we have met the challenge of hybrid working by listening to our people. We approached this with the aim of maximising the individual and business benefits of combining office and home working.

Every person who works for NNL is an individual, so we have developed a range of tools and support to enable our people to make the most of their careers here.

We want the best people. And once they're here, we want to keep them. We create positive experiences, so our people remain advocates for NNL and the wider nuclear sector, even beyond their employment with us.

We're building an incredible place to work, develop and thrive. We've increased our attention to people in the early part of their careers and introduced ambitious new family-focused policies.

With our clear purpose, our people know they are doing meaningful work. We are bonded by our determination to solve the challenges faced by the world's population.

When we talk about our major assets, we not just talking about our facilities and equipment, we're also talking about our greatest asset: our people.

In this section we consider our activities during the year under the **People Strategy** headings.

Define

New talent is central to our future success. This year we welcomed 35 new apprentices and graduates onto our early careers programmes. Through support and mentorship, we're making sure new starters get the best foundation for their nuclear careers.

A further 15 people joined our post-doctorate programme, which is the first of its kind in the nuclear sector.

These programmes have a combined membership of 115 people, representing almost nine per cent of our workforce. We will grow again this year as we take on new apprentices, graduates and post-doctorate candidates.

Through our membership of the Nuclear Skills Strategy Group, we continue to contribute to the future of the sector by providing specific input on the higher-level skills agenda. And we are continuing to support a number of social impact initiatives including

developing education content for schools, colleges and universities, offering virtual work experience programmes and participating in the Dream Placement Scheme.

With the right people and the right skills, we will maintain our world-leading position and make an impact on humanity's biggest challenges. We combine sector intelligence with a deep understanding of our employees to plan and adapt to future workload and customer requirements.



Attract

This year we have again attended virtual early career showcase events and run online selection.

We recruit all candidates to our early careers programmes on permanent contracts to give them job security keeping their focus on their studies. We also provide all the support they need to ensure success. Our early careers support team tailors wellbeing and pastoral care for our apprentices and graduates.

We have continued to run the highly successful 'Becoming Me' personal development course and a series of career podcasts to showcase career pathways within NNL. As our apprentices and graduates complete their courses, they receive support from our early careers coordinators to help them adapt to working within their chosen business function.

Across the wider business, we have continued to invest in our recruitment activities, branding and campaigns to attract the best talent to NNL. Our focussed equality, diversity and inclusion (ED&I) agenda helps us attract and retain talent. We are dedicated to making reasonable adjustments and accommodating flexible working requests.

Deploy

Succession planning is key to our ongoing success. We're committed to maintaining resilience in the skills and knowledge required for the safe, effective and efficient delivery of our 10-year plan.

Our established annual succession planning process covers all business functions; identifying critical roles and ensuring a pipeline of talent for these roles for the short, medium and longer term.

We collaborate with organisations across the UK nuclear sector to offer secondment opportunities, including inter-project exchanges, and support the NDA rotational graduate programme and appointments from academia.

We have celebrated some individual success of our amazing colleagues. Our Chief Science and Technology Officer, Dr Fiona Rayment OBE, was bestowed the Légion d'honneur in May. The prestigious award celebrates her invaluable work in the nuclear field promoting links between France and the UK.

Joe Mahmoud, Operations and Technical Support Assistant in the Separations Science and Special Nuclear Material Team, won the prestigious 2022 Materials Science Thesis Prize. Inaugurated in 2019, the prize is awarded annually for the best thesis on a materials science theme produced by an AWE sponsored postgraduate student and published in the 12 months preceding the judging.

We proudly received a gold accreditation from ideasUK,

recognising excellence in ideas management and innovation at NNL. We achieved this recognition alongside some of the most renowned global brands, working hard to spotlight the fantastic innovation projects delivered by NNL and in collaboration with academia and industry. Several colleagues hold visiting professorships at UK universities.

Acquire

During this year we have had record levels of recruitment and welcomed more than 350 new colleagues. Our interview framework continues to ensure we recruit people who share our values and behaviours and embody the culture and mindset we are creating. We're improving the first experiences people have of NNL, by improving our onboarding processes. Our online induction programmes receive very positive feedback from new colleagues.



Engage

As we continue to develop a 'purpose-led', sustainable NNL we are connected and aligned with colleagues' values, principles and needs, so we can understand and enhance 'what it means' and 'what it feels like' to work at NNL.

In 2022/23 we launched a new employee engagement tool. We use it to reach out to employees. The insights provided by advanced data gathering and analysis capabilities has already informed our approach and decision making on hybrid working and other people issues.

NNL has a fundamental commitment to open communications and two-way engagement. We continue to engage and involve employees in the design and development of solutions relating to our people projects and activities, and we regularly share business updates; transitioning many of these back to in person meetings during 2022/23 as we implement our shift to hybrid working.

Our monthly Trade Union Forum is established within our HR calendar. It allows us keep trade union colleagues closely involved in what is happening in the business. Together we are making NNL a great place to work.

5.0 Our People

Equality, diversity and inclusion

We have built on our commitment to Equality, Diversity and Inclusion (ED&I) delivering on our strategy and the recommendations from the National Equality Standard (NES) accreditation.

This National Inclusion Week, we created the broadest engagement of any of our initiatives to date. We asked leaders to hold “inclusion pauses” with their teams to discuss what inclusion meant for them and used the key messages and ideas for improvements they fed back to underpin our ED&I programme.

National Inclusion Week galvanised the enthusiasm of our ambassadors and resulted in a 50% increase in their numbers. We launched updates to our family focus policies, which are now industry leading and empowering for those combining careers and family following our removal of statutory qualification periods from these terms.

We continued to collect ED&I data to enable anonymised diversity analysis and help guide our interventions. We have more than doubled the numbers of colleagues who have voluntarily shared their data this year raising it from 25%

last year to an average of 60% across all demographics now.

Our 2022 Gender Pay Gap Report highlights the progress we have made and the challenges we still face. Our mean gender pay gap decreased slightly in the last 12 months to 10.1%, however the median has increased to 16%. The latter is a result of a few changes at a senior level but also the increasing numbers of women entering in the early stages of their careers. We recognise that this median is slightly worse than the national median pay gap of 14.9% but we believe our focus on a sustainable pipeline and talent support will lead to stable improvements over the longer term.

We are making progress. Our workforce is 30% women. In our non-STEM roles, this rises to 53% and in STEM roles is growing and is currently at 24%. We're doing better than the industry average, which has a workforce that's just 20% women in all roles.

Our analysis of career progression in NNL in STEM roles and the sector demographics themselves highlight that the lower percentage of women in STEM in NNL is predominantly a pipeline issue – the pool of women available is much smaller

We are making progress...

Our workforce is 30% women.*

Non STEM: 53%

STEM roles: 24% and growing

*Industry average is 20% across all roles

in STEM. To address this, a key focus in the upcoming year will be strategic outreach.

We continue to embrace our responsibility as a national laboratory to drive ED&I both internally and externally so this year we have continued our support of ED&I related nuclear advocacy groups, as well as sector and national industry working groups. We set up a nuclear Chief HR Officer roundtable, for example, to drive a cogent strategic approach across the sector to both skills and ED&I.



Health and Wellbeing

Since the start of the pandemic, feedback from colleagues has highlighted the need for us to be flexible in our approach and mindset. Many of us have realised how much we value the right balance of home and work, as well as the separation between the two. We're aiming to embed that into the way we all work.

This year we have moved to a post-pandemic hybrid working model, enabling those employees who can work from home to do so on a regular basis determined by how they can best meet businesses requirements.

To support our move to a post-pandemic hybrid working model, we have trained our line managers, giving them the skills they need to help both the organisation and their team. Our hybrid working survey, carried out after six months has indicated that a majority of colleagues feel these changes have positively impacted their work-life balance, their sense of being trusted and empowered, and their productivity.

Colleagues can access a range of mental health support, from e-learning modules to our 24/7 employee assistance programme and more individualised counselling. We will be deploying a new mindfulness course in the coming year following a successful pilot.

We have also:

continued to offer autumn flu jabs to all employees.

extended our retirement planning sessions to cover more of our people.

launched a new employee benefits programme and a cycle to work scheme, Cycle scheme, which allows employees to spread the cost of a bike and cycling accessories through salary sacrifice over 12 months.

piloted a carbon conscious virtual training course to support our sustainability agenda and to help our employees contribute to the protection of our environment.

5.0 Our People

Develop

We have incorporated our new leadership framework, and career pathways alongside our refreshed performance development review process.

Our new leadership framework sets out the standard for good leadership. We are creating a community of supported and inspiring leaders who generate a culture where everyone feels valued and can flourish.

Our values and behaviours, including leadership integrity, underpin the framework, which promotes consistency across all levels of leadership, while supporting employees in their roles as nuclear professionals.

The framework is a key enabler for our #NewClearLeaders programme. It represents a significant investment in our people leaders and colleagues who 'lead through influence' and supports them to be 'the best they can be'. Since its launch in April 2022, 78 supervisors, managers and leaders have completed the programme.

Our development centres at early careers, middle manager and senior leader levels continue to help employees understand their key strengths and areas for development.

Career pathways for our science and engineering communities have helped people understand how their own role fits into the wider organisation and provided insights and information that will help individuals develop their careers and work towards the roles that they aspire to. This can be through gaining greater depth in a specific professional discipline or adding breadth of knowledge and skill by moving into different careers in different areas of the business.

Finally, our new Careers Lab continues to offer employees a fantastic range of resources to support their career development planning; from identifying their next training courses through to planning longer term career steps.

We have restarted face-to-face classroom training for leadership and behavioural courses. This year we have delivered 9,153 e-learning courses to support induction, compliance, access to NNL's facilities/systems and health and wellbeing activities.

Separate

Our leavers' process continues to ensure a consistent leaving experience and provides us with an opportunity to thank leavers for their contribution to our organisation. The leavers' interview provides us with a rich source of information and feedback from which we have been able to identify key themes and consider changes that will improve the employee experience for others.

Our attrition rate for 2022/23 was 8.89%. This was up on the previous year's number (7.0%).

Measure

Enhancing our terms and conditions to attract and retain the best sector and national talent has been a key priority. We offer a purpose-led and inspiring place to work, and competitive and engaging rewards.

Following extensive collaboration with our trade union colleagues we proudly launched our new family-focused people policies and processes in June 2022.

The new policies and processes reflect the expectations of workers and offer benefits that go above and beyond statutory rights; supporting colleagues and their families through all aspects of family planning, parenthood and beyond. This flexibility enables diversity and inclusion in our workplace as people can stay in work and pursue rewarding careers. We are proud to lead our sector with these new policies and efforts. We continue to be bold in our thinking and progressive in our approach.

2021
UK Nuclear
Skills Awards

Winner
Nuclear Graduate of the Year
Sam Lyons
National Nuclear Laboratory

Award kindly supported by
Sellafield Ltd

CELEBRATING
TOMORROW'S
NUCLEAR
TALENT

Cogent skills NSAN
for science industries
The strategic skills alliance for the Nuclear Industry

Case Study

Sam Lyons joined NNL as a graduate in 2018 and in 2021 was crowned Nuclear Graduate of the Year at the UK Nuclear Skills Awards.

Sam studied Chemical Engineering at Newcastle University and, while at university, realised his interests really lay in sustainability; prompting him to complete a Master's degree in sustainable engineering.

Sam works as a process engineer on projects at our central and Preston laboratories. His role involves considering the manufacture of advanced nuclear fuels, ensuring that the UK has a clean future energy system that will help to achieve our nation's clean energy ambitions. As well as this, the work ensures spent fuels are recycled as responsibly and effectively as possible – an example being the collaboration with the UK space agency to develop Americium-241 space batteries.

"I wanted to go into a sector where my work could have a positive and meaningful impact

on society – not only by helping to supply clean energy to the grid but by supporting advances in other significant areas. Working in nuclear enables me to do this." On top of his day-to-day role, Sam has immersed himself in our ED&I work; NNL's achievement of the National Equality Standard (NES) accreditation in 2021 recognised our achievements in ED&I and identified where we can improve. Sam co-led National Inclusion Week at NNL during September 2022, working to widen our awareness of the work the ED&I team does and why it is so important.

Sam completed our leadership and management scheme as part of the graduate programme, and now helps each intake of apprentice and graduate engineers in their day-to-day work. Sam was a speaker at the NIA's first ever Nuclear Week in Parliament as part of the Nuclear Skills and Apprenticeships Fair and has done a lot of work in helping to promote the sciences to young people to help safeguard the future of the nuclear sector. ○

"NNL puts a lot of emphasis on the development of its graduates, both in terms of expanding our technical understanding and capabilities within our specific job roles but also more broadly, beyond our day-to-day work. It's one of the reasons why I wanted to work here."



Sam Lyons
Process Engineer, NNL

6.0 Our Board

Ian Funnell	Chair
Paul Howarth FREng	Chief Executive Officer
Clare Barlow	Chief HR Officer
David Beacham	Chief Customer Officer (resigned 3 May 2023)
Matthew Miller	Chief Financial Officer
Dr Fiona Rayment OBE, FREng	Chief Science and Technology Officer
Iain Clarkson	Non-Executive Director
Edward Emerson	Non-Executive Director
Claire Flint	Non-Executive Director (resigned 21 April 2023)
Stephen Garwood FREng	Non-Executive Director



Ian Funnell
Chair

Ian is Chair of the UK's National Nuclear Laboratory, Chair of the NG Bailey Group, Chair of the Energy Futures Laboratory at Imperial College London, and advisor to the Chair of Hitachi Europe. Ian is also an Ambassador of the Women's Leaders' Association.

He has previously held positions on the Covid Recovery Commission, the Made Smarter Commission and the UK government's Advisory Board of Innovate UK (Energy Revolution).

Ian is a graduate of Aberdeen University in Engineering Science. He is a chartered engineer, a Fellow of the Institution of Engineering & Technology, and a Fellow of the Institute of Directors.

Ian's career has been largely focused in the global energy sector. He started in the UK utility sector, joined ABB in 1999, in manufacturing, global utility and oil and gas sectors. He rejoined UK utilities in 2008 as the Director of Major Projects, and latterly as the Managing Director of Scottish Hydro Electric Transmission plc.

Ian rejoined ABB in 2012 in France as Group Vice President in the global utility sector and latterly as CEO and President of ABB SA (France). He was appointed CEO of ABB UK in January 2015 and Chief Executive Officer of Hitachi Energy Ltd in the UK and Ireland in January 2020 until July 2022, when he stepped down from his executive role.



Claire Flint
Non-Executive Director
Until 21 April 2023

Claire Flint was appointed to the NNL board in April 2017, having previously served as an associate non-executive director from 2014-16, under the government's "Women on Board" scheme.

In her executive career, Claire was most recently Group Human Resources and Brand Director for Oxford Instruments plc, a leading international, nanotechnology tools provider, serving on their management board for over 10 years.

Claire now pursues a plural career comprising non-executive directorships and leadership consulting. Claire has a BA in history from London University and a post graduate diploma in labour studies.



Edward Emerson
Non-Executive Director

Edward joined UK Government Investments in 2015, and has worked on both corporate finance and corporate governance projects.

Prior to joining UKGI, Edward worked as a lawyer. He trained with the Scottish government before moving into private practice first in Scotland and then the City, specializing in project and asset finance. Edward combined work and study to complete a Masters in global energy and climate policy, and further augmented his sectoral

experience with secondments to Network Rail, ING and UK Export Finance.

Edward has also completed a two year secondment with the Cabinet Office, where he first led on business, energy and environmental policy coordination in the Economic and Domestic Affairs Secretariat, working closely with HM Treasury and No.10. Edward then led a team preparing for the UK's exit from the EU, before being asked to help establish and lead a team within the Covid Taskforce.



Iain Clarkson
Non-Executive Director

Iain joined the NNL board in October 2019, having previously served as Chief Financial Officer of WYG plc, an international consulting, engineering and project management business. Prior to that role, Iain was Finance Director for Amec Foster Wheeler's Clean Energy business, and before that he held various finance director positions in Westinghouse Electric Company, a global nuclear technology provider, including two periods spent working in the United States.

Iain started his career with Coopers & Lybrand where he qualified as an ACA before moving into Corporate Finance to work on mergers and acquisitions. He moved across into industry in 1996 and now has over 20 years' financial leadership experience in international consulting and engineering businesses and has a particular specialism in the international energy sector. In addition to his non-executive director role, Iain chairs the NNL board's Audit, Risk and Assurance Committee.



Stephen Garwood, FEng
Non-Executive Director

Steve joined the NNL board in May 2020, having been Professor of Structural Integrity at Imperial College London and serving as a non executive director of the Transport Systems Catapult. Prior to those roles, Steve was Director, Research & Innovation – Nuclear, at Rolls-Royce plc, retiring in 2013. Over the previous 15 years, he held various engineering and technology director roles for Rolls-Royce plc, including Head of the Technical Authority for the Nuclear Submarine plant.

After a PhD in Applied Mechanics, Steve started his career with The Welding Institute in 1976, rising to Head of Engineering, before joining Rolls-Royce and Associates in 1996. He was elected a Fellow of the Royal Academy of Engineering in 2002.

In addition to his non-executive director role, Steve chairs NNL's Technical Advisory Board. He continues to serve as an independent on a number of nuclear advisory boards and is an honorary professor at Imperial College London.

6.0 Our Board



Paul Howarth
Chief Executive Officer

Paul has extensive experience in the nuclear industry covering operations, commercial and research portfolios in the UK and also overseas. He has worked with a broad range of stakeholders across government, industry and academia and more recently

has worked in the research, technology and innovation sector beyond nuclear.

Paul began his career working on the European Fusion Programme where he completed his PhD in nuclear physics after a first degree in physics and astrophysics at the University of Birmingham. He subsequently worked in Japan on technology transfer in the semiconductor industry and on the Japanese nuclear programme. Following this he worked for BNFL at numerous locations in the UK and in roles covering technology commercialisation, plant support and policy development, culminating in support to the UK government on the case for new nuclear build in 2007. Paul also co-founded the Dalton Nuclear Institute and worked for the US

organisation Battelle alongside US National Laboratories on M&O contract development. In 2009 he was part of the M&O team that was awarded the contract to run NNL; and he subsequently became CEO of NNL in 2011.

Paul also holds a professional position at the University of Manchester in nuclear technology and was elected to become a Fellow of the Royal Academy of Engineering in 2014. He is a fellow of the Institute of Physics and the Nuclear Institute, holds an MBA from Salford University and in 2019 became an alumnus of Harvard Business School having completed their prestigious Advanced Management Programme.



Clare Barlow
Chief HR Officer

Clare Barlow is the Chief People Officer and board member at the National Nuclear Laboratory. In this role as well as her board responsibilities, Clare is passionate about driving the people agenda across the business with an inclusive and sustainable approach.

Clare joined NNL in 2018 from BAE Systems, where she spent the previous ten years as HR Director for the UK and International Combat Air Division. Prior to BAE Systems, Clare was Head of HR at Royal Mail, British Airways

and a number of manufacturing organisations.

Clare has a wealth of experience spanning both HR and business roles, specialising in strategy development, organisational development, change management and employee relations.

In addition to her NNL role, Clare is a trustee of Age UK Lancashire and a qualified executive and team coach and lives in Lancashire with her husband Warren and daughter Hannah.

6.0 Our Board



David Beacham
Chief Customer Officer

Until 3 May 2023

David was appointed as NNL's first ever Chief Customer Officer (CCO) in November 2016, and as such he is responsible for full end-to-end delivery of NNL's operations whilst ensuring that delivering value to our customers is at the heart of the organisation.

David is both a chartered engineer and a Fellow of the Institution of Civil Engineers and has a proven track record of improving team performance and delivering challenging projects for customers. His nuclear

experience includes working on major projects at Hinkley Point C, Sizewell C, Wylfa, Sellafield, Drigg, Devonport and Barrow. He also has extensive international experience ranging from Cuba to India and Taiwan to Romania.



Dr Fiona Rayment
OBE, FREng.
Chief Science and Technology Officer

Fiona has dedicated 30 years to the nuclear sector with extensive strategic and operational experience. She is a chartered chemist and engineer with a PhD in chemistry from University of Strathclyde, Glasgow and a fellow of the Royal Academy of Engineering, the Royal Society of Chemistry and of the UK Nuclear Institute. She has an MBA from Manchester Business School.

Fiona has recently served as a member of Euratom's Science and Technology Committee, the Idaho National Laboratory's Nuclear Science and Technology Advisory Committee, the American Nuclear Society Board, the UK Nuclear Institute and is immediate past chair of the UK's Nuclear Skills Strategy Group. Her other roles across the sector include being a member of the Nuclear Industry Council and the Office of Nuclear Regulation Chief Nuclear Inspector's Independent

Advisory Panel. Fiona is chair of the Scientific Advisory Committee of the Energy Division at CEA – the French Alternative Energies and Atomic Energy Commission, a Non-Executive Member of the UK Space Agency Steering Board and Patron of Women in Nuclear UK.

In addition to representing the UK at a variety of international meetings, Fiona is a regular keynote and plenary speaker at international nuclear conferences and is a vice chair of the Nuclear Energy Agency's Steering Committee Bureau and Policy Director of the Generation IV International Forum.

Fiona has long advocated widening participation in science and engineering and champions our sector-leading approach to diversity and inclusion. She was awarded an OBE in 2017 and the French Légion d'Honneur in 2020.



Matthew Miller
Chief Financial Officer

Matt joined NNL in June 2018 and was appointed Chief Financial Officer in April 2019. He joined the business from BAE Systems where he had spent the previous 16 years in a wide variety of roles, most latterly as Finance Director for the Dreadnought Submarine Programme.

Matt worked across multiple businesses within BAE Systems where he developed a deep understanding of financial management, corporate

governance and information management and technology.

Matt is a Fellow of the Chartered Institute of Management Accountants and sits as a member of the CIMA Benevolent Fund. Outside work, he is a qualified Rugby League Coach with Chorley Panthers



David Dukes
Company secretary

David has worked in the nuclear industry for over 20 years and was appointed as NNL Company Secretary in March 2013.

David began his career in the defence sector before joining BNFL in 1996. He undertook a wide variety of roles throughout the group including technical, international business development and corporate strategy. He was heavily involved in the development of the NNL concept and the establishment of NNL as a standalone business.

Upon formation of NNL, David worked in Strategic Business Development and Corporate Strategy before being appointed as Head of Transformation, developing NNL's transformation programme and managing its successful delivery.

7.0 Governance Statement

For the Year Ended
31 March 2023

National Nuclear Laboratory Limited (NNL) is owned by the Secretary of State for Energy Security & Net Zero (DESNZ) (formerly Department of Business, Energy and Industrial Strategy (BEIS)) (Shareholder). Its shares are held by NNL Holdings Limited, the primary purpose of which is to act as NNL's parent company and finance strategic investments in the NNL business. DESNZ manages its ownership of NNL through UK Government Investments Limited (UKGI). UKGI provides strategic oversight of NNL's corporate governance and advises government on the management of its interest in NNL. A UKGI representative is appointed to both the NNL board and NNL Holdings board. A Framework Document governs the relationship between DESNZ, UKGI and NNL.

NNL is a private company limited by shares, and as a consequence of its ownership by DESNZ is classified by ONS as a Public Corporation. NNL is not required to comply with the provisions of either the Corporate Governance in Central Government Departments: Code of Good Practice or the UK Corporate Governance Code 2018 but aims to take appropriate account of the principles and provisions of both Codes, to the extent that they apply. Similarly, under the terms of the Framework Document NNL is required to comply with the principles of Managing Public Money to the extent that they apply.

The following Governance Statement provides an insight into the corporate governance framework of NNL during 2022/23.

Governance framework

The board has responsibility for establishing and taking forward the strategic aims and objectives of NNL whilst maintaining a sound system of internal control that safeguards NNL's assets. The board supports high standards of governance and, in so far as is practicable given the business's size and status, has, together with UKGI, continued to develop the governance of the

business in accordance with the Corporate Governance in Central Government Departments: Code of Good Practice, the UK Corporate Governance Code 2018 and Managing Public Money (MPM).

The NNL Framework Document was entered into in August 2019. Once the Transfer of Functions has been implemented it is proposed that DESNZ, UKGI and NNL will commence a review of the NNL Framework Document.

Board and its committees

During the financial year ended 2022/23, the board of directors has comprised a non-executive chair, four further non-executive directors and five executive directors (the Chief Executive Officer, Chief Financial Officer, Chief Customer Officer, Chief HR Officer and Chief Science and Technology Officer).

The board met eight times in 2022/23, including board workshops in September and December. Attendance by members at the board and committee meetings are set out in the table below.

Name	Position	Board+	ARAC++	Remuneration Committee	Nomination Committee	EHSSC	TAB
Ian Funnell	Chair	8	-	4	4	-	-
Paul Howarth	Chief Executive Officer	8	-	-	-	-	-
Clare Barlow	Chief HR Officer	8	-	4	4	-	-
David Beacham	Chief Customer Officer	8	-	-	-	-	-
Iain Clarkson	Non-Executive Director	8	4	4	4	4	-
Ed Emerson	Non-Executive Director	8	4	4	4	4	-
Claire Flint	Non-Executive Director	6	-	4	4	-	-
Steve Garwood	Non-Executive Director	8	4	4	4	4	4
Matthew Miller	Chief Financial Officer	8	4	-	-	-	-
Fiona Rayment	Chief Science and Technology Officer	8	-	-	-	-	4
Number of meetings		8	4	4	4	4	4

+ Including board workshops in September and December 2022.

++ Note that Matt Miller attends ARAC meetings for finance-related discussions

Board members regularly attend committees of which they are not members. For example, Ian Funnell, Claire Flint, Ed Emerson and Clare Barlow all attended at least one TAB this year.

Ian Funnell, Iain Clarkson, Claire Flint and Steve Garwood were all considered independent on their appointment to the board.

7.0 Governance Statement

The role of the board

The NNL board is responsible for setting the strategic direction of NNL. The board provides effective and proactive leadership of NNL within a framework of prudent and effective controls and risk management processes. The board sets NNL's values and behaviours and ensures that its obligations to its shareholders and others are understood and met.

NNL board's role is to support and constructively challenge the NNL executive and to apply scrutiny both in the development of NNL's business strategies, plans, business cases and targets and in the assessment of its performance delivering the approved strategic and business plans. The board leads in the assessment and management of risk.

The Framework Document details the responsibilities and accountabilities of both the Chair and the Chief Executive Officer.

Key focus areas for the board regarding governance this year have included:

Alignment of NNL's strategy with the policy objectives of its shareholder

Development of NNL's understanding and approach to becoming a 'Purposeful Business'

Development of a Value Framework to provide NNL with a long term and balanced view of value creation

Continuing to develop NNL's stakeholder management strategy

Continuing to strengthen NNL's risk management framework

The board delegates the day-to-day management of NNL to an Executive Leadership Team, comprising five board members: the Chief Executive Officer, Chief Financial Officer, Chief Customer Officer, Chief Human Resources Officer and Chief Science and Technology Officer and other senior executives.

All board and board committee meetings held during the year have been quorate. All decisions made by the board and its committees have been recorded appropriately. The board reviews the effectiveness and the terms of reference of each of its committees in line with best practice.

The unitary nature of the board means that non-executive members and executive members share the same responsibility to challenge board decisions and development of NNL's strategy and operations. The non-executive board members bring a wealth of experience and complement the executive representation on the board in the provision of challenge, scrutiny and support on operational and strategic matters.

All board members have full and timely access to relevant information to enable them to discharge their responsibilities. All directors have access to independent professional advice, at NNL's expense, if required.

The board met eight times this year. Due to the impact of severe weather and strikes causing travel disruption three of these meetings were held using secure, online systems and technology.

Board performance and effectiveness review

The board undertakes regular evaluations of its effectiveness which look at both the board and its committees. In line with best practice, an externally facilitated review takes place every three years and an internally facilitated review every year in between.

An externally facilitated review of the NNL board was undertaken early in 2021. However, given the changes to the NNL board since the date of the last review, including the appointment of a new Chair and NED, the Chair requested that an external review be carried out in this financial year.

Socia Limited were instructed to carry out a board effectiveness review towards the end of 2022.

The report was published on 20 March 2023 and concluded that the board governance arrangements at NNL continue to be correctly constituted and efficiently run. It noted that board membership has experienced significant recent change and that the board will continue to transition into the future. The review made a number of recommendations to help the board continue to develop its ways of working and its leadership of NNL through this period of change. These were focussed around three key themes: board purpose and delivering a sustainable future for the business; board capability and addressing the transition challenge; and board dynamics to drive added value. The board is currently preparing an action plan to be agreed for implementation through 2023/24.

Audit, Risk & Assurance Committee (ARAC)

The ARAC is responsible for supporting the NNL board in its assessment and management of risk and for the independent assessment of NNL's control environment. The role of the ARAC is to critically challenge and review the effectiveness of the controls to ensure they are adequate in meeting the requirements of compliance, operations, corporate governance and information management. The ARAC is also responsible for reviewing the financial audit of the business as undertaken by the auditors of NNL.

The ARAC comprises three non-executive directors and is chaired by an independent non-executive director, currently Iain Clarkson. The committee invites executive directors, the Head of Independent

Assurance, and senior representatives of the external auditors to attend meetings as and when appropriate.

The ARAC met four times in 2022/23. The activities of the ARAC included reviewing and endorsing the annual statutory accounts for board approval. The ARAC and auditors worked together to undertake an enhanced assessment of the Going Concern that concluded that the level of risk faced by NNL in the current environment was low, but that ongoing assessment should continue. A decision was made to compete the Audit Contract for financial year ending 31 March 2023. Following a competitive tender process Saffery Champness were appointed as auditors of NNL in October 2022 for a term of 3 years.

Progress of overall business controls were assessed by the

Board committees

The board has three committees; Audit, Risk & Assurance Committee (ARAC); Remuneration Committee (RemCo); and Nominations Committee (NomCo). The board also has two advisory committees: Environment, Health, Safety and Security Committee (EHSSC) and the Technology Advisory Board (TAB).

Each committee is chaired by a non-executive board member. Each committee reports directly to the board by way of an Annual Report and access to minutes. Urgent matters are escalated by the committee chair to the board as appropriate.

ARAC through the annual review of Independent Assurance (IA). Key themes have been identified by IA and the management team has responded to ensure that all have Return to Green activities. Planned activities and management sponsorship of the planned interventions for the following financial year were reviewed and endorsed by ARAC.

Over the course of the year a review of the risk management framework and approach has been undertaken by the Executive Team. The review has given rise to a refreshed set of business risks, risk bowties as well as risk appetite statements. The ARAC reviewed and endorsed for board approval the risk appetite statements. ARAC will continue to support NNL in the development of its risk and opportunity management processes.

7.0 Governance Statement

Remuneration Committee

The Remuneration Committee is responsible for NNL's remuneration policy and determines the pay and remuneration levels for the NNL executive team and workforce, as well as providing guidance and oversight on the overall culture of the organisation. The Remuneration Committee's work is undertaken with reference to the NNL Framework Document, Civil Service Pay Guidance and the Corporate Governance Code 2018, where they apply.

The Remuneration Committee monitors data and narrative insights from HR, employee surveys, forums and site visits to identify trends and ascertain that the culture of the company and wellbeing of the workforce are consistent with the Company's long-term strategy and purpose. The Remuneration Committee ensures decisions are made with wider consideration of the organisation culture, people development and performance and that they are underpinned by NNL's strategy and values. The Remuneration Committee has oversight of the people metrics in addition to any external benchmarking data.

The Remuneration Committee comprises five non-executive directors and is chaired by an experienced HR professional non-executive director. The Chief Human Resources Officer and the Chief Executive Officer attend the Remuneration Committee as representatives of the executive, other executive directors are invited to attend meetings as appropriate (other than when their own remuneration and/or terms and conditions of employment are under discussion).

The Remuneration Committee met four times in 2022/23 to consider performance and reward and provide oversight of wider remuneration matters. The Remuneration Committee undertook a comprehensive review of NNL pay benchmarking and approved a pay negotiation window. In reaching its decision to approve this negotiation window the Remuneration Committee took into account a range of factors including the wider economic climate of increasing inflation and increasing costs of living, the increased attrition and skills challenge against a backdrop of increased demand for nuclear skills and skills for nuclear, as well as the government public sector pay guidance and affordability. DESNZ and UKGI were kept fully informed throughout the pay negotiation period. A Trade Union Forum, chaired by a board director, formally represents the views of most employees and leads negotiation of wider pay policy. All three trade unions recommended acceptance of the pay deal. The Committee approved the final settlement in April 2023.

The Remuneration Committee determines the appropriate performance conditions for NNL personal leadership bonus scheme awards. These are based on a balanced scorecard of metrics, achievement of key results that deliver NNL's strategy, and the way in which these results were accomplished. The Remuneration Committee approved payment levels of the NNL personal leadership bonus scheme for financial year 2021/22 as well as the design of the bonus scheme for 2022/23. Whilst the 2022/23 scheme replicates the structure of the 2021/22 scheme after consideration of the wider economic climate the financial targets to trigger a bonus payment

were raised. The Remuneration Committee has recommended that alternative schemes be considered for 2023/2024 taking account of NNL's value proposition and sustainability ambitions

NNL staff are public servants and are subject to public sector pay and conditions as set out in the Framework Document. This stipulates that appointment of the CEO is subject to Ministerial approval and that NNL salaries will not exceed that of the CEO, thereby setting the strategic rationale for the NNL remuneration policy. The executive, including the CEO, received the same annual pay increases as the wider NNL workforce, and the related bonus proposals were assessed in line with the NNL personal leadership bonus scheme. The Remuneration Committee has directed that an external remuneration benchmarking exercise be undertaken for NNL board and executive roles during 2023/24.

The Remuneration Committee has continued to ensure that NNL takes appropriate account of public sector pay and guidance.

The Remuneration Committee also reviews industrial relations and employee engagement. Engagement with the trade unions throughout the year has reflected the ongoing strong relationships. The introduction of pulse surveys has allowed the leadership team to monitor the culture of the organisation and to respond with agility to any challenges identified. Current engagement strategies in place across NNL were reviewed and progress monitored through engagement surveys. Pension scheme membership, liabilities, and future provisions were reviewed; and key remuneration metrics considered.

Nominations Committee

The Nominations Committee is responsible for advising the NNL board on matters relating to NNL's leadership requirements and the board's succession planning requirements. The Nomination Committee is responsible for recruiting the best qualified candidates for the board and NNL executive, including any executive directors; recommendations are made to the board for its approval and onward recommendation to the shareholder. The shareholder is responsible for appointing the chair, non-executive directors and for approving appointment of the chief executive officer.

The Nominations Committee comprises five non-executive directors and is chaired by the chair of NNL. The Committee invites executive directors to attend meetings as and when appropriate.

The Nomination Committee met four times in 2022/23 and oversaw the selection of a new non-executive director who will be appointed early in the new financial year and the extension of the terms of three non-executive directors. The Nomination Committee also approved and initiated the addition of a new NED role to complement the existing non-executive directors' skills and capabilities. Recruitment for this new role will commence during 2023.

The executive search agency Gatenby Sanderson was procured by UKGI (who manage the shareholder function on behalf of DESNZ) to assist in the recruitment campaign for the new non-executive director of NNL.

The Nomination Committee continued to review the approach to executive succession planning, organisational culture and

succession priorities. In particular, the Committee undertook a comprehensive review of succession plans for NNL board and senior executive roles and noted the blend of internal and external solutions with a focus on diversity. The committee also noted the roll out of development centres and leadership development programmes as part of a wider review of NNL's succession and talent strategy.

The Nomination Committee initiated an external review of board effectiveness. An external review was not yet due for another year but it was felt that a review would help to shape and strengthen the board following the appointment of the new chair.

As explained, in Section 5 Our People of this Annual Report NNL has established a five-year ED&I Strategy to allow it to achieve and sustain a truly inclusive culture to underpin NNL's Strategy. The Nomination Committee have taken full account of the ED&I Strategy in the development of its approach to nomination and succession planning.

Technical Advisory Board

The Technical Advisory Board (TAB) is not a formal board subcommittee. Instead the TAB is a formal advisory committee to the NNL board and is chaired by a non executive director. The purpose of the TAB is to provide advice to the NNL board on NNL's technical strategy, effectiveness and impact of NNL's science and technology programmes to deliver the mission, and to offer strategic technical advice on other matters when called to do so. In particular, it provides advice and assurance on the NNL research and development reinvestment programme.

The TAB membership includes the NNL Chief Science and Technology Officer together with government representation through chief scientific advisors (DESNZ and MOD), representatives from key industry stakeholders, strategic partner universities, national labs and independents. The committee invites both non-executive directors and executive directors to attend meetings as and when appropriate.

A comprehensive review of the TAB was undertaken in 2021 and the TAB Stakeholder Feedback Report made several recommendations regarding the management, focus and governance of the TAB which were welcomed by the NNL board. The implementation of the recommendations has taken place throughout 2022/23 with eight of the eleven recommendations progressed to completion. All nine TAB recommendations for this year were endorsed by the board, noting specifically the recommendation on prioritisation of science and technology funding to ensure maximum impact for the nuclear sector. The board is working with the TAB to enhance the profile of the science and technology carried out, including receiving feedback from individual TAB members on the extent to which the topics discussed at the TAB are communicated and received within their own organisations.

The TAB met four times this year and key items of discussion included science and technology partnerships, core science and fundamental research with universities as well as the NNL science and technology agenda and links to wider NNL strategy (Clean Energy, Security & Non-Proliferation, Health & Nuclear Medicine and Environmental Restoration) and Innovation.

7.0 Governance Statement

Environment, Health, Safety & Security Committee

The Environment, Health, Safety & Security Committee (EHSSC) was established to provide assurance to the NNL board that NNL's EHSS (Environment, Health, Safety and Security), CS&IA (Cyber Security and Information Assurance) and General Data Protection Regulations (GDPR) policies are appropriately enacted and that associated risks are being managed appropriately within risk appetite.

The EHSSC comprises three non-executive directors and is chaired by a non-executive director. The committee invites executive directors to attend meetings as and when appropriate. The EHSSC met four times in 2022/23

The EHSSC has considered and approved the annual reviews of the EHSS&Q, CS&IA and DPO. In addition, the EHSSC has received the annual reports from NNLs Nuclear Safety Committee and Nuclear Security Committee.

Each meeting has received Independent Assurance (IA) input with the agenda item being common to both the EHSSC and ARAC. Engagement with IA from across the business has remained high. There has been progress with areas flagged for improvement, with further work requested to demonstrate improvement plan and metrics.

The committee completed a terms of reference review and agreed a calendar of business that will see an increase in safety and security items brought to the committee. The terms of reference review

and calendar of business will allow the committee to increase its forward looking perspective highlighting improvement areas and plans, providing the board with assurance that the business is taking the necessary measures to achieve environment, health, safety and security objectives.

Through the next 12 months the EHSSC will continue to run alongside each ARAC, with the two committees supporting each other, providing the board with the appropriate level of EHSS governance.

Executive Leadership Team

The Chief Executive Officer has primary responsibility for the day-to-day management of the business and discharges his responsibilities through an Executive Leadership Team (ELT), whose membership is made up of the executive directors leading the business. The ELT meets formally on a regular basis and not fewer than 12 times a year. The roles and responsibilities of the ELT include:

Monitoring the effectiveness of all environmental protection, health and safety, security (including cyber security) and quality aspects of NNL activities including the review and management of assessments of NNL management processes

Monitoring assurance activities undertaken to ensure compliance with statutory and regulatory requirements

Overseeing the key performance indicators (KPIs) that monitor overall progress against targets and ensuring corrective actions are taken.

Monitoring delivery of objectives required to implement the strategic / business plan

Ensuring that NNL operates in line with guidance from the NNL board

Sharing feedback from stakeholders.

Driving the strategic development of NNL through implementation of a strategic agenda.

Providing governance approval for matters within the delegated authority of the CEO and initial approval for matters that require approval by the NNL board

Preparing a risk register and subsequent reviews and mitigating actions

Risk management

NNL's directors are confident about the future of the business. Nevertheless, risks and uncertainties do exist which could adversely impact future financial performance. The ARAC oversees and advises the board on the current risk exposure, future risk strategy, the effectiveness of risk mitigation processes and the capability to address new risk types. Responsibility for management of these risks lies with the NNL board.

We have continued to strengthen and improve risk and opportunity management through 2022/23 and the approach to risk at board level has continued to mature. Specifically, the board reviewed its risk management framework, reviewed and updated the risk appetite statements, and thoroughly refreshed its business risks. In order to develop these business risks, NNL took account of the principles set out within the Orange Book as well as having regard to the top portfolio risks arising from NNL's operational

activities and risks common to nuclear sector organisations.

The board approved the revised set of business risks in January 2023. However, throughout the year the board used the risk register below in order to manage and mitigate risk:

Board Risk	Summary Description	Summary Mitigation
Programme Delivery and Customer/Supplier Relationships	As a result of increased demand on resources and capability combined with insufficient resource availability and ineffective business processes there is a risk of failure of customer programmes which would result in inability to deliver business plan, impact on costs, revenues and reputation.	<ul style="list-style-type: none"> proactive management of our end to end external relationships with our customers and suppliers internal activity balanced to availability and affordability constraints governance established re. capacity and prioritisation of facility resources development and implementation of supporting business systems and tools
DESNZ Relationship	As a result of poor stakeholder engagement or a governance/management failure there is a risk that NNL's role, corporate status and/or its relationship with government is jeopardised leading to changes in the direction of business, corporate structure and/or freedom to operate	<ul style="list-style-type: none"> proactive management of relationships and maintain a broad base of support deliver business targets and strategic objectives and fulfil role as national lab.
Health and Wellbeing of our People	As a result of an out of line situation there is a risk of a significant safety and/or security incident which would cause significant harm to individuals (incl. our employees) the environment and/or NNL business.	<ul style="list-style-type: none"> provide visible EHSS&Q leadership deliver EHSS&Q strategy, culture and performance share and learn from best practice (nuclear and non-nuclear community) manage succession, remuneration and industrial relations
Cyber Security	As a result of either malicious or accidental activity across the corporate or standalone estate there is a risk that there is an event which causes a loss of information to the public or criminals, a loss of reputation that we are able to handle sensitive information, significant disruption to our business activities and possibly financial impact through loss of business or fines	<ul style="list-style-type: none"> responsibly manage operation of large-scale, high hazard nuclear facilities establish visible leadership maintain highest standards in cyber and information security develop and implement an information security plan and information security strategy security by design planning security clearances, testing, health checks and audits
Strategic and Business Development	As a result of inadequate strategic planning and stakeholder engagement there is a risk that the strategy is not approved and/or implemented which results in failure to deliver the NNL business	<ul style="list-style-type: none"> share and learn from best practice effective relationships with customers and stakeholders at all levels. develop a robust strategic plan engage with stakeholders and adapt strategy accordingly agree implementation plans for component strategies, resource and monitor delivery, facilities and skills plans agree and implement continuous improvement
Critical National Infrastructure	As a result of ineffective asset management there is a risk that Mission Critical Infrastructure (plant and / or equipment) is not available when required which would result in inability to deliver the business.	<ul style="list-style-type: none"> establish culture, systems and processes required for effective business partnering appropriate investment in critical nuclear infrastructure capital replacement upgrade of key infrastructure proactive asset management regime technical basis of maintenance suitably qualified and experienced people

7.0 Governance Statement

The new business risks combine the previously separate board and executive risks into one set of risks that relate to the delivery of NNL's strategic objectives and business plan, an approach that aligns with best practice. Reporting is structured against these risks which are captured in a Business Risk Register, which is itself reviewed on a regular basis by both the board and executive.

The board and executive undertake a programme of deep dives into individual risks and actions are placed and the risks are updated accordingly. Risk mitigation is a key consideration in the strategic planning process and informs annual objective setting. Progress in the delivery of business objectives, which encompass risk mitigations, is routinely monitored by the board and executive.

The revised approach to business risk significantly enhances the level of granularity at which the board assesses the risk to the business and is intended to further improve the effectiveness of the board's approach to risk management.

Government Functional Standards

The government has published a series of Government Standards for use by functional teams across government. NNL has voluntarily agreed to adopt the standards and carried out a gap analysis against the mandatory requirements during 2022. NNL identified a series of improvement actions to be implemented during 2022/23 in order to ensure that NNL processes and procedures are aligned to the mandatory Government Functional Standards. Whilst the majority of these actions have now been completed a number of activities will continue throughout 2023/24.

such as the oversight provided by the relevant nuclear site licence companies, the Office of Nuclear Regulation (ONR) (external regulator in respect of nuclear security, safety and safeguards), the Environment Agency and Lloyd's Register Quality Assurance (LRQA).

Independent Assurance published 45 assurance reports throughout the year. 24% of these were graded as 'green', demonstrating a good level of assurance with only minor improvement opportunities noted; 36% were graded as 'yellow' or 'amber' where minor to moderate assurance weaknesses were noted as requiring improvement and 4% of the reports were graded as 'red' where shortfalls in assurance were noted and high-priority recommendations raised for management attention. The remaining 36% of reports were in response to specific board requests or were support work and did not receive a grading. Of the highest level internal findings raised in the last three years, Compelling Advice and Letters of Concern, five long-standing notices are extant and receiving executive leadership attention.

Where specific weaknesses have been identified, management has agreed appropriate corrective action and timescales for

improvement in the majority of cases. Planned corrective action is monitored closely by independent assurance and external regulators and reported to the ARAC. NNL's board also has direct oversight as appropriate.

NNL's risk management systems were reviewed by IA as part of the annual programme. A moderate level of assurance was obtained. Several improvements are underway to ensure a better linkage of functional to business level risks and provide effective escalation and appropriate focus at board level.

On balance these outcomes are consistent with providing a moderate level of assurance over the adequacy and effectiveness of NNL's systems of governance, risk management and internal control.

Internal Controls

Independent Assurance (IA) assessed the systems of governance, risk management and internal control through undertaking a programme agreed by NNL's Audit, Risk and Assurance Committee (ARAC). The results of this activity, including assurance opinions and progress with implementing recommendations arising from that work, were reviewed by the ARAC. The annual opinion is based on this as well as that of other external bodies

Quality assurance (QA) of analytical models

NNL recognise that ensuring quality is imperative to our ability to operate as a national laboratory. As such all technical modelling undertaken within NNL must follow a robust Technical Modelling procedure referenced in NNL's Integrated Management System. NNL has not formally aligned its QA processes to the MacPherson Review or the AQuA Book although our Technical Modelling Procedure reflects many of the principles contained within these documents. As NNL is increasingly undertaking work direct for HMG we have undertaken a review of our processes and procedures during FY 2022/23 which identified some minor recommendations which will be made to our processes and communications, no major issues were identified so we would therefore continue to rate NNL as 'Applicable and working to comply'.

All business planning financial models are owned by the Chief Financial Officer who is supported by a team of qualified accountants with a deep business knowledge. NNL has not formally aligned its business planning financial model QA processes to the MacPherson Review or the AQuA Book although standard practice reflects many of the principles contained within these documents.

Management information

The board is satisfied that the management information it receives is of high quality as a result of the:

Assurance mechanisms that are in place, including the internal compliance and assurance function, the ARAC and the EHSSC;

Accreditation, certification and regulatory environments within which NNL operates;

Findings from external audits;

Feedback from the TAB, which includes representatives of strategic partners from academia, government and industrial organisations

Modern Slavery Act 2015

The Modern Slavery Act 2015 (s54) requires organisations with a global turnover in excess of £36 million to publish an annual slavery and human trafficking statement. NNL is committed to preventing modern slavery and human trafficking. NNL will not tolerate the abuse of men, women or children and strives for total transparency right through its business and supply chains. Accountability is assigned to the NNL Chief Financial Officer with the Procurement Team undertaking day to day management. NNL's Modern Slavery Act Statement for the financial year ending 31 March 2023 (made pursuant to section 54(1) of the Modern Slavery Act 2015) has been approved by the NNL board and is published on the NNL website www.nnl.co.uk.

Gender Pay Gap Report

NNL reported its gender pay gap analysis in March 2023 pursuant to the Equality Act 2010 (Gender Pay Gap Information) Regulations 2017. The Gender Pay Gap Report can be viewed here [Gender Pay Gap Report 2022](#). We are now in our sixth consecutive year of gender pay gap reporting and whilst it is positive that the percentage of women within our business continues to increase, we still have a long way to go in terms of our Gender Pay Gap which remains at a similar level.

The Gender Pay Gap Report covers our first year of acting upon the National Equality Standard's recommendations which were to expand our Equality, Diversity and Inclusion (ED&I) focus beyond

gender, support leaders and managers to drive ED&I, improve data capture and analysis to inform initiatives, drive a more structured approach to career progression, attract and recruit diverse talent and consider ED&I in our supplier relations. We are making good progress against the recommendation areas whilst continuing to re-affirm our commitment to ED&I: ED&I continues to be embedded into our business' Objectives and Key Results (OKRs) and the ED&I team updates the NNL board twice a year on progress and direction of travel.

In addition, we have mandated ED&I data collection as part of our recruitment pipeline which enables us to understand our pipeline across a wide range of diversity demographics. Our analysis clearly shows that to reach gender parity, we need to improve our pipeline in terms of gender diversity from science, technology, engineering and mathematics (STEM) backgrounds entering into the nuclear sector and as such we are rethinking our outreach strategy. In keeping with our Strategic Plan 2021, we believe collaboration is the most effective way of driving positive change.

Information Governance

NNL has an appointed data protection officer and has implemented a virtual data protection team comprising of deputy data protection officers and data protection specialist advisors who assure personal data is managed appropriately within NNL. The Information Risk Management team is led by the Senior Information Risk Owner (SIRO) supported by information assurance leaders and comprising senior Information Asset Owners, who are responsible for managing information risk, meet regularly to provide governance of information risk and assurance.

8.0 Directors' Report

for the year ended
31 March 2023

The directors present their report together with the audited financial statements for the year ended 31 March 2023.

Directors

The directors of the company who were in office during the year and up to the date of signing the financial statements were:

Ian Funnell	Chair
Paul Howarth FEng	Chief Executive Officer
Clare Barlow	Chief HR Officer
David Beacham	Chief Customer Officer (resigned 3 May 2023)
Matthew Miller	Chief Financial Officer
Fiona Rayment OBE FEng	Chief Science and Technology Officer
Iain Clarkson	Non-Executive Director
Ed Emerson	Non-Executive Director
Claire Flint	Non-Executive Director - resigned 21 April 2023
Stephen Garwood FEng	Non-Executive Director
Ann Cormack MBE	Non-Executive Director (appointed 21 April 2023)

Directors' responsibilities statement

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare Financial Statements for each financial year. Under that law the directors have prepared the financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs

of the company and of the profit or loss of the company for that period. **In preparing the financial statements, the directors are required to:**

Select suitable accounting policies and then apply them consistently

State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements

Make judgements and accounting estimates that are reasonable and prudent

Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business

The directors are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006.

Results

The Statement of Comprehensive Income is set out on page 95 and shows the profit for the year. A detailed review is set out in the strategic report.

The directors do not recommend the payment of a dividend (2022 - £Nil)

Support for people with disabilities

Job applicants and NNL employees with disabilities will have the same consideration for job vacancies as any other candidates. NNL is committed to a policy of equal opportunities for all employees. Great care is exercised in our recruitment and

selection procedures to ensure that there is no discrimination, and that training is given to meet individual needs. Applications by people with disabilities are given full and fair consideration and wherever practical, provision is made for their special needs to help them realise their potential. The same criteria for training and promotion apply to people with disabilities as to any other employee. If an employee becomes disabled, every effort is made to ensure their continued employment. Reasonable adjustments to the workplace and to working methods will be made wherever it is reasonable and practicable to do so. People with disabilities will have the same scope to realise their potential and the same prospects as any other employees. Managers

are encouraged, and have the authority, to respond to the needs of people with disabilities including adjusting working hours or responsibilities

Statement on engagement with employees

It is NNL's policy to encourage employee involvement as the directors consider that this is essential for the successful running of the business. NNL keeps employees informed of performance, developments and progress by way of an intranet, e-communications, newsletters and briefing sessions. Employees are represented by trade unions. Additional information can be found in Section 5 - Our People and our Section 172 Statement.

8.0 Directors' Report

Statement on engagement with employees and suppliers, customers and others

Details of all of our stakeholders and how we engage with them is set out in Section 1.4.3 Our Stakeholders. Further information regarding engagement with our people, communities and wider society is included within Section 4 Sustainability and Section 5 Our People and our communities. In our Section 172 statement we explain how we take account of the interests of our stakeholders in our decision making.

Streamlined Energy Carbon Reporting

Our Streamlined Energy Carbon Reporting is set out within Section 4 Sustainability.

Charitable and political contributions

During the year, NNL spent £15,392 (2022-£Nil) on donations to support face to face community projects and for organisations promoting Science, Technology, Engineering and Mathematics (STEM) subjects (2022 - £Nil).

NNL has a policy on not making political donations and consequently there were no political donations during the year (2022 - £Nil).

Insurance

NNL's insurance requirements are provided through policies held in its own name.

Directors' insurance and indemnities

The directors have the benefit of the indemnity provisions contained in the company's Articles of Association and the company has maintained throughout the year directors' and officers' liability insurance for the benefit of the company, the directors and its officers.

Financial risk management

Details of the company's financial instrument risk exposures and management is discussed in note 17 to the financial statements.

Research and development

During the year the company carried out research and development activity on behalf of its customer base and invested £2.3m (2022 - £3.3m) on its self-funded programmes.

Future outlook

The future outlook is discussed in detail in section 1.7 of the strategic report

Directors' Confirmations

All of the current directors have taken all the steps that they ought to have taken as a director in order to make themselves aware of any relevant audit information and to establish that the company's auditors are aware of that information. As far as the directors are aware there is no relevant audit information of which the company's auditors are unaware.

Section 172 Statement

In their discussions and decisions during the year ended 31 March 2023, the directors of National Nuclear Laboratory Limited have acted in a way that they consider, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole having regard to the matters set out in sub-sections 172(1)(a) to (f) of the Companies Act 2006:

- (a) the likely consequences of any decision in the long term,
- (b) the interests of the company's employees,
- (c) the need to foster the company's business relationships with suppliers, customers and others
- (d) the impact of the company's operations on the community and the environment,
- (e) the desirability of the company maintaining a reputation for high standards of business conduct, and
- (f) the need to act fairly as between members of the company.

Our Strategic Report explains NNL is a purpose led organisation. Our purpose 'nuclear science to benefit society' reflects our commitment to serving the greater good. The board decision making takes account of the views and impact upon stakeholders as well as considering the expected outcomes and long-term impacts of a decision.

The following are some of the Principal Decisions made by the Board this year which demonstrate how the Board have taken account of the Section 172 factors in discussions and decision making:

Principal decisions - a definition

NNL defines a **Principal Decision** as those pertaining to matters that require a significant amount of board or subcommittee time and that affect the company in a significant way. **Principal Decisions** therefore typically include those relating to:

Matters of strategic importance (e.g. restructurings, changes to strategy, investment decisions)

Matters that are commercially material and of financial or operational importance

Matters that will substantially affect NNL's employees

Decisions on board level policies

NNL's processes have been developed to formally capture future Principal Decisions making and ensure stakeholder engagement requirements have been considered. Board paper templates incorporate sections identifying where a principal decision is being proposed and requiring completion of a Stakeholder Impact Assessment to support decision making.

8.0 Directors' Report

Matters of Strategic Importance

Decision	Response to DESNZ Model Review
Context	During 2021/22 DESNZ undertook a review of the strategic relationship between DESNZ and NNL. The review proposed a series of recommendations to improve and strengthen the relationship between Government and NNL. In responding to these recommendations the board have approved certain developments.
Stakeholder Considerations	<p>Government: NNL has worked in partnership with representatives from a variety of DESNZ directorates and also UKGI in order to develop an action plan to implement the recommendations in a manner that addresses stakeholder expectations.</p> <p>In particular, a Strategic Planning Steering Group has been established involving representatives from NNL, DESNZ and UKGI to jointly develop NNL's Strategic/Business Plan and to ensure its alignment with DESNZ Policy.</p> <p>Representatives from both DESNZ and UKGI were also invited to attend a series of workshops with the NNL board to actively participate in shaping and developing NNL strategic direction.</p>
Strategic actions supported by the board	<p>The board has endorsed a series of actions to respond to the recommendations:</p> <ul style="list-style-type: none"> • Strategic Alignment: Implementation of a revised strategic planning approach that ensures NNL strategy and objectives are fully aligned to DESNZ policy • Communications: Establishment of a Government Interface Function within the Strategy Directorate to manage government relations. Establishment of a CEO Office responsible for overseeing NNL's relationship with the government sponsor.
Expected outcomes	<p>The board expects that the strategic actions will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> • improved relations, alignment and efficiency

Matters of Strategic Importance

Decision	Value Framework
Context	<p>Following the publication in January 2020 of the Government Office for Science guidance framework to improve value creation and communication in PRSE's, NNL has initiated a refresh of its current balanced scorecard and is developing a performance management and reporting framework that has a long-term and balanced view of value creation.</p> <p>This framework will be used to create both a refreshed board level balanced scorecard and a hierarchy of measures to be used throughout the organisation to focus individual and team attention on strategy critical activity.</p>
Stakeholder considerations	<p>Employees: The Value Framework will provide an improved focus from management on employee expectations and desired outcomes arising from a more balanced view of the value that NNL can create. The Value Framework will strengthen the common sense of purpose.</p> <p>HR representation on both the Value Steering Committee and the Executive Leadership Team has ensured that employee views have been considered during initial stages of work. We have planned engagement with a representative group of NNL employees (e.g. TU forum) to understand desired outcomes from NNL for use as the primary driver of performance metrics.</p> <p>Government: Shareholder views have been considered as part of the ongoing engagement with key stakeholders to understand primary expectations from the outset. We will continue engagement through multiple channels including: CEO regular catch ups with stakeholder equivalents; NNL Board; NNL Technical Advisory Board; DESNZ CSA and Go Science.</p> <p>Customers: Provision of well-rounded customer experience by NNL understanding and delivering upon what is deemed valuable from a customer perspective. We have customer representation on both the Value Steer Co and ELT as well as initial engagement with additional customer facing NNL employees has provided considerations from customer perspective. Ongoing engagement with a cross-section of representation from across the NNL Customer landscape, e.g. DESNZ, MOD, EDF, NDA, Sellafield.</p>
Strategic actions supported by the board	The board endorsed the approach to determining the relevant long-term measures of value in the revised balanced scorecard and provide approval to proceed with work on the prioritised metrics presented and associated plans for implementation.
Expected outcomes	<p>The board expects that the strategic actions will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> • improved performance reporting and management regime • a clearer connection between strategy and individual action

8.0 Directors' Report

Decision	Approval of Health & Nuclear Medicine Strategic Outline Case
Context	<p>NNL has been carrying out exploratory work to determine the potential for creating an indigenous supply of radioisotopes for medical uses. The UK used to be a world leader in the production of medical radioisotopes but it lost this capability during the 1990s resulting in most medical radioisotopes being imported from abroad. The supply chain for these materials is limited and prone to failure and having an indigenous capability would be beneficial for the UK.</p> <p>As part of this work, NNL focused in on the market and applications for Targeted Alpha Therapy (TAT) and how best the UK might access desirable radionuclides from legacy materials and other sources such as future accelerators.</p>
Stakeholder considerations	<p>Government: NNL have worked closely with DESNZ to develop the rationale for investment in UK Nuclear Medicine. This work has resulted in the department launching the £6 million Medical Isotope Research Programme (MIRP) in December 2022.</p> <p>Customer: NNL have been working very closely with Queen Mary University of London and St Thomas's as possible end users of materials we may produce. This has allowed the hospitals to access research money and set up a number of user groups for these materials. The hospitals have helped NNL develop a concept for a Radiochemistry Development Laboratory base at Preston which will allow access for health care professionals and academics to carry out work on material that NNL may produce.</p> <p>Academia: The UK health sector is severely restrained by the availability of desired radionuclides to enable research, development, testing and treatment. NNL is able to assist with this through the development of desirable radionuclides from legacy materials. NNL has already sponsored some academic work in this area and it has created health and nuclear medicine as a core science theme within NNL. NNL has recently signed a strategic research agreement with Bangor University which has nuclear medicine as one of the themes.</p> <p>Supply chain: NNL have developed relationships with a number of companies that have been developing targeting vectors for use with alpha isotopes. These companies are interested in setting up in the UK if NNL can provide material.</p> <p>Communities and wider society: If this work is successful the benefits to society are enormous. The limited clinical trials on targeted alpha therapy have produced amazing results. With enough material available for research and treatment, NNL consider that this work could put the UK at the top table for cancer treatment and ultimately make targeted alpha therapy a primary treatment for cancer.</p>

Decision	Approval of Health & Nuclear Medicine Strategic Outline Case <i>continued</i>
Strategic actions supported by the board	<p>The board has endorsed a series of next steps for the development of the Health and Nuclear Medicine Focus Area:</p> <ul style="list-style-type: none"> • Benefits modelling and options appraisal – finalisation of benefits modelling with a view to developing a detailed appraisal of options • Policy advocacy – continued engagements with stakeholders to achieve alignment and buy in • Commercial support – continued consideration of commercial models and funding routes.
Expected outcomes	<p>The board expects that the strategic actions will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> • initial radioisotopes available for researchers • scale up of process for lead 212 separation • onsideration of the production of other isotopes such as Ra226 and Ra223 for use in targeted alpha therapy • a multi-agency business case submitted for consideration

8.0 Directors' Report

Matters that are commercially material and of financial or operational importance

Decision	Approval of PuMA2 Business Case
Context	<p>The European Space Agency (ESA) next planned mission to the Moon (ENDURE) requires Radioisotope Power Sources (RPS) (Space Battery) to power its Large Lunar Lander (EL3), to enable it to operate continuously in areas where sunlight is intermittent or non-existent.</p> <p>NNL has carried out research into production of Americium-241 (Am-241) as an alternative fuel to Pu-238. In order to facilitate the establishment of a new national capability for Americium-241 production, it is proposed that NNL shall design, procure, and commission a facility capable of meeting the demands of the ENDURE programme and subsequent space missions.</p>
Stakeholder Considerations	<p>Government: UK Space Agency (UKSA) is an executive agency of the UK government, reporting into DESNZ. In order to fund the development of the PuMA 2 facility it was proposed that NNL submit a business case to UKSA to secure £19.2m in grant funding. The approval of the business case will support UKSA in the delivery of its space strategy.</p> <p>Academia: We have worked closely with the University of Leicester on the research into production of Am-241 as an alternative fuel to Pu-238. We continue to strengthen our relationship with University of Leicester and have established an office at the UK Space Park.</p> <p>Employees: As part of the PuMA 2 programme NNL shall recruit, train, and qualify NNL's workforce to the required level to ensure readiness for the operation and maintenance of the PuMA-2 facility. The extraction of Am-241 will bolster resilience of existing jobs within NNL and collaborator organisations, with additional jobs created in NNL and in the supply chain.</p> <p>Communities: Establishing the PuMA-2 facility in the North-West, and the subsequent RPS supply chain, will help to build the reputation of the North-West as a hub for the development of nuclear power systems for space. UKSA's investment may unlock further ESA funding under ENDURE and subsequent programmes, attract private investment and directly support creation of further highly skilled jobs in the North-West.</p> <p>Nuclear industry and the supply chain: The PuMA 2 programme will lead to the creation of UK Intellectual property, securing and developing critical skills. In particular, skills in shortage areas such as Pu skills (Alpha Resilience Capability (ARC) project), supporting resilience of UK Alpha capability, as well as retaining regional talent and skills in the local area (Cumbria).</p>
Strategic actions supported by the Board	<p>The board supported the submission of PuMA-2 Full Business Case for approval of direct grant award from UKSA.</p> <p>The business case was approved by UKSA in December 2022 and a grant agreement entered into in January 2023.</p>

Decision	Approval of PuMA2 Business Case <i>continued</i>
Expected Outcomes	<p>The board expects that the strategic action will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> • establishment of a new national capability for Americium-241 production; • extraction of Am-241 will bolster resilience of existing jobs within NNL and collaborator organisations, with additional jobs created in NNL and in the supply chain • strengthening of NNL relationships in the Space Industry and opportunity to develop its role within the ENDURE Programme.

Decision	Approval of the entry into a Collaboration Agreement with Atomic Weapons Establishment (AWE)
Context	<p>AWE recently became a Non-Departmental Public Body wholly owned by the Ministry of Defence (MOD). The change in corporate structure provides an opportunity for greater collaboration between NNL and AWE.</p>
Stakeholder Considerations	<p>Government: The collaboration agreement is aligned to the wider objective for closer collaborative approach between civil and defence arenas. We have engaged our DESNZ Sponsor, Civ/Mil Lead, Tier 1 contracting organizations, suppliers and strategic advisors.</p> <p>Employees: We have engaged employees across the capability and business areas directly involved in the collaboration. It is intended that the collaboration will provide challenging and engaging work for our employees as well as developing and maintaining NNL capability and skills.</p> <p>However, NNL is also mindful of the concerns of employees regarding closer alignment of civil and military nuclear. Ongoing engagement with NNL's capability and communication teams is in place to manage such concerns.</p> <p>Customers and potential customers: The collaboration agreement represents a positive development for a number of our customers. The agreement enables AWE to focus on its core mission and develop sustainable approaches to the reduction of operational site risk through restoration and the development of critical national scientific and technical capabilities. It will also allow NNL to reach back into AWE's technical capabilities to support the civil nuclear programmes.</p> <p>Nuclear industry and the supply chain: It is expected that the collaboration agreement will engender additional industry resilience, supporting knowledge transfer and generate further work packages within the supply chain.</p>
Strategic actions supported by the board	<p>The strategic actions supported by the board are:</p> <ul style="list-style-type: none"> • approval of the Strategic Collaboration Agreement between NNL and AWE
Expected outcomes	<p>The board expects that the strategic actions will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> • strengthen the relationship between AWE and NNL, enabling the first steps in a long-term collaboration, which will evolve to address the challenges of each organisation. • flexible and adaptive approach to working with AWE, removing the requirement for bespoke contracts, improving communications and driving greater value for money. • agreement will provide for the sharing of knowledge and skills, providing increased industry resilience whilst maintaining and developing the UK's nuclear capability in both the civil and defence arenas.

8.0 Directors' Report

Decision	Extension of Nuclear Propulsion Lifetime Management (NPLM) Contract
Context	<p>NNL currently provides services to MOD under the NPLM Contract between Rolls-Royce Submarines plc and NNL. The contract was due to expire on 31st December 2022.</p> <p>The board had previously approved the entry into a replacement contract to support the Futures programme over a ten-year period commencing on 1st January 2023. However, due to the size of the overarching MoD/RR procurement not being finalised during 2022 a request was made to extend the existing RR-NNL sub contract.</p>
Stakeholder Considerations	<p>Government: The extension of the contract underpins Active Handling Facility (AHF) operation and maintenance of UK Post Irradiated Fuel Examination (PIE) capability.</p> <p>Customers and potential customers: The extension of the contract allows Rolls-Royce Submarines plc to continue to deliver its support to the wider submarine enterprise. The contract represents a critical programme to MOD for maintaining the UKs Continuous At Sea Deterrent (CASD).</p> <p>Community and wider society: Capability establishment and development of teams for shift operations will enable NNL to commit to a long-term programme of delivering PIE operations in Active Handling Facility (and not necessarily just for MOD). This will provide continuity of employment, development of sustainable skills, and maintenance of key UK skill base. It will further underpin the investment and improvement in the AHF.</p> <p>Employees: The extension of the contract secures the development and maintenance of capability as well as providing a career progression pathway, challenging and meaningful work alongside the inclusion of alternative working patterns. We have actively engaged our workforce in this programme through discussions at trade union and staff forums to gain support for the implementation of the required alternative working patterns.</p>
Strategic actions supported by the board	<p>The strategic actions supported by the board are:</p> <ul style="list-style-type: none"> To approve a twelve-month contract extension of the existing Fuel Cycle Management (FCM) contract with Rolls-Royce Submarines plc from 1st January 2023 to 31st December 2023
Expected outcomes	<p>The board expects that the strategic actions will produce the following outcomes to support our Purpose:</p> <ul style="list-style-type: none"> Further develop technical capability and NNL capacity to support the long-term MoD Futures programme. Strengthening the relationship between NNL, MOD and Rolls-Royce. Supporting the strategic requirements of CASD. Underpin the future of NNL's AHF and continue to develop and maintain key technical and facility capability for the UK. Underpin the sustainability of our current business model by maintaining AHF recoveries.

Matters that significantly affect our employees

Decision	Employee Value Proposition
Context	In an environment where we continue to see challenges in the demand for talent NNL has been developing its Employee Value Proposition (EVP) to ensure that NNL remains an attractive Employer of Choice.
Stakeholder Considerations	<p>Government: We continue to liaise with the Government (as our shareholder) to develop an EVP that attracts and retains a talented, innovative & diverse workforce. We engage through our quarterly meetings with the DESNZ reward manager and attendance at the ED&I cross government working group. The development of NNL's EVP will contribute to the development of skills and capability across the nuclear sector.</p> <p>Employees and TU Representatives: The Trade Unions are directly involved in the design of our EVP model and sit on all working groups accordingly. All changes to our working practices and people policies are agreed through the TU and our ED&I working group.</p> <p>Nuclear Industry and Supply Chain: We work closely with our colleagues across Government and the Nuclear Sector to respond to the challenge of increased attrition and skills shortages in an environment of increased demand for nuclear skills and skills for nuclear. NNL leads the industry HRD round table and have fed in directly to the Kingman and Great British Nuclear skills groups. NNL also sits on both the Nuclear Skills Strategy Group.</p>
Strategic actions supported by the board	<p>The strategic actions supported by the board and NNL Remuneration Committee are:</p> <ul style="list-style-type: none"> Pay and reward – we have made progress in reducing the pay and benefit anomalies across NNL and work with the Trade Unions in moving toward a new set of NNL terms and conditions and are 80% through a new set of terms and conditions Radical flexibility – we have introduced hybrid working and a new suite of family focussed policies Holistic health and wellbeing – implementation of our Health and Wellbeing Strategy progressing Personal growth – 75% through new career pathways for all our disciplines and launched new clear leadership programme
Expected outcomes	<p>The board expects that the strategic actions will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> Enable NNL to attract and retain a talented, innovative and diverse workforce Increase the availability of skills and resources within the UK nuclear industry

8.0 Directors' Report

Decision	NNL Pay Review
Context	The NNL board and Remuneration Committee undertake an annual review of NNL pay. The pay award for 2023/24 was particularly challenging given the wider economic climate of increasing inflation and the subsequent increase in the cost of living.
Stakeholder considerations	<p>The NNL board and Remuneration Committee considered a wide range of factors to ensure the Pay Award was fair and appropriate:</p> <p>Government: As a public corporation, NNL liaised with colleagues at DESNZ and UKGI as well as taking account of the Government public sector pay guidance in reaching its decision.</p> <p>Employees and trade unions: All three trade unions recommended acceptance of the proposed Pay Award.</p> <p>Nuclear industry and supply chain: NNL undertook a comprehensive benchmarking exercise within the nuclear sector noting that NNL are a medium payer at the lower grades and below medium at the higher grades. We also took account of the challenge of increased attrition and skills shortages against the backdrop of increased demand for nuclear skills and skills for nuclear.</p>
Strategic actions supported by the board	The strategic actions supported by the board and NNL Remuneration Committee are approval of a pay award of 5.75%.
Expected outcomes	<p>The board expects that the strategic actions will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> NNL employees continue to be motivated by a fair and appropriate pay award which takes account of wider economic factors.

Decision	Hybrid working
Context	<p>Since March 2020 NNL has changed how it works in response to the global pandemic – prior to Covid-19, very few of our people worked from home.</p> <p>NNL has formally introduced its Hybrid Working Model to provide greater flexibility and agility for all teams, supporting their needs and promoting health and wellbeing so that all employees feel valued, can flourish and deliver their best work.</p>
Stakeholder Considerations	<p>Employees and TU representatives: Hybrid working within NNL is a mix of remote and 'in office' working arrangements that is different depending on role, individual, team and business needs. NNL has a significant proportion of staff that work full time within nuclear facilities as part of their roles. Given this diverse work base we have not set out a one size fits all 'rules-based' approach to hybrid working. Rather we have provided a framework for leaders to manage their teams locally.</p> <p>Our leaders play a crucial role in defining our approach, working with individuals to develop solutions that work for NNL, our teams and team members. Leaders assess individual preferences and consider these alongside specific requirements of work and activities that a team needs to deliver; and then develops solutions that work best for NNL, the team and the individual. A detailed resource pack has been developed for all employees.</p> <p>Throughout the year we have maintained an open dialogue with all our employees to encourage the new ways of working. We have also carried out a pulse survey on hybrid working where we saw overwhelming support for Hybrid working with some areas of focus as we continue to embed – all survey results shared with TU and Employees.</p>
Strategic actions supported by the Board	The strategic action supported by the Board was the establishment of a Hybrid Working Model.
Expected Outcomes	<p>The board expects that the strategic action will produce the following outcomes to support our purpose:</p> <ul style="list-style-type: none"> Hybrid working model will provide greater flexibility and agility for our teams, support their needs and promote health and wellbeing so that everybody feels valued, can flourish and deliver their best work Hybrid working model is a crucial part of NNL's ambition to continue to grow a thriving and expert workforce

Approval

This Directors' report was approved by order of the board.



David Dukes
Secretary
27 July 2023

9.0 Independent auditors' report to the members

for the year ended 31 March 2023

Opinion

We have audited the financial statements of National Nuclear Laboratory Limited (the 'company') for the year ended 31 March 2023 which comprise the statement of comprehensive income, the statement of financial position, the statement of cash flows, the statement of changes in equity and notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and UK-adopted international accounting standards.

In our opinion the financial statements:

give a true and fair view of the state of the company's affairs as at 31 March 2023 and of its loss for the year then ended;

have been properly prepared in accordance with UK-adopted international accounting standards; and

have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified

any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial

statements, or our knowledge obtained in the course of the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and

the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report and the Directors' Report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or

the financial statements are not in agreement with the accounting records and returns; or

certain disclosures of directors' remuneration specified by law are not made; or

we have not received all the information and explanations we require for our audit.

Responsibilities of directors

As explained more fully in the Directors' Responsibilities Statement set out on page 77 of the Directors' Report, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an

auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The specific procedures for this engagement and the extent to which these are capable of detecting irregularities, including fraud are detailed below.

Identifying and assessing risks related to irregularities:

We assessed the susceptibility of the company's financial statements to material misstatement and how fraud might occur, including through discussions with the directors, discussions within our audit team

planning meeting, updating our record of internal controls and ensuring these controls operated as intended. We evaluated possible incentives and opportunities for fraudulent manipulation of the financial statements. We identified laws and regulations that are of significance in the context of the company by discussions with directors and updating our understanding of the sector in which the company operates.

Laws and regulations of direct significance in the context of the company include The Companies Act 2006 and UK Tax legislation.

Further, the company is subject to other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements; through a significant fine, litigation or restrictions on the company's operations. We identified the most significant laws to be The Health and Safety at Work etc. Act 1974 and The Environmental Protection Act 1990.

Audit response to risks identified:

We considered the extent of compliance with these laws and regulations as part of

our audit procedures on the related financial statement items including a review of financial statement disclosures. We reviewed the company's records of breaches of laws and regulations, minutes of meetings and correspondence with relevant authorities to identify potential material misstatements arising. We discussed the company's policies and procedures for compliance with laws and regulations with members of management responsible for compliance.

During the planning meeting with the audit team, the engagement partner drew attention to the key areas which might involve non-compliance with laws and regulations or fraud. We enquired of management whether they were aware of any instances of non-compliance with laws and regulations or knowledge of any actual, suspected or alleged fraud. We addressed the risk of fraud through management override of controls by testing the appropriateness of journal entries and identifying any significant transactions that were unusual or outside the normal course of business. We assessed whether judgements made in making accounting estimates gave rise to a possible

indication of management bias. At the completion stage of the audit, the engagement partner's review included ensuring that the team had approached their work with appropriate professional scepticism and thus the capacity to identify non-compliance with laws and regulations and fraud.

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

A further description of our responsibilities is available on the [Financial Reporting Council's website](#). This description forms part of our auditor's report.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Diane Petit-Laurent FCA (Senior Statutory Auditor)

for and on behalf of
Saffery Champness
Chartered Accountants
Statutory Auditors,
Trinity,
16 John Dalton Street,
Manchester M2 6HY
28 July 2023

10.0 Financial Statements

For the year ended
31 March 2023

Statement of Comprehensive Income

	Note	2023 £'000	2022 Restated £'000
Revenue	2	128,627	131,579
Cost of sales		(100,891)	(92,872)
Gross profit		27,736	38,707
Administrative expenses		(43,601)	(35,496)
(Loss)/profit from operations	3	(15,865)	3,211
Finance income	6	2,550	78
Finance expense	6	(120)	(73)
(Loss)/profit before tax		(13,435)	3,216
Taxation	7	9,964	5,490
(Loss)/profit for the year		(3,471)	8,706
Other comprehensive income/(expense)			
Items that will not subsequently be reclassified to profit or loss:			
Actuarial losses in defined benefit pension schemes, net of tax	20	(157)	(173)
Total other comprehensive expense, net of tax		(157)	(173)
Total comprehensive expense		(3,628)	8,533

The notes on pages 102 to 135 form part of these financial statements

10.0 Financial Statements

Statement of Financial Position

	Note	2023 £'000	2023 £'000	2022 Restated £'000	2022 Restated £'000
Assets					
Non-current assets					
Property, plant and equipment	9	110,766		95,035	
Right of use assets	10	13,361		12,569	
Intangible assets	11	11,561		5,762	
Trade and other receivables	12	401		431	
Total non-current assets			136,089		113,797
Current assets					
Trade and other receivables	12	56,088		45,804	
Cash and cash equivalents	13	29,785		42,144	
Total current assets			85,873		87,948
Total assets			221,962		201,745
Equity and liabilities					
Equity					
Share capital	18	25		25	
Retained earnings	19	82,520		86,148	
Total equity			82,545		86,173

	Note	2023 £'000	2023 £'000	2022 Restated £'000	2022 Restated £'000
Non-current liabilities					
Trade and other payables	14	66,896		43,880	
Lease liabilities	10	11,815		10,811	
Provisions	15	11,241		13,928	
Deferred tax	16	19		3,088	
Total non-current liabilities			89,971		71,707
Current liabilities					
Trade and other payables	14	46,491		41,321	
Lease liabilities	10	1,524		1,541	
Provisions	15	1,431		1,003	
Total current liabilities			49,446		43,865
Total liabilities			139,417		115,572
Total equity and liabilities			221,962		201,745

The notes on pages 102 to 135 form part of these financial statements

The financial statements on pages 94 to 135 were approved and authorised for issue by the board of directors on 27 July 2023 and signed on its behalf by:



Matt Miller
Chief Financial Officer

Company registration number 03857752

The notes on pages 102 to 135 form part of these financial statements.

10.0 Financial Statements

Statement of Cash Flows

	Note	2023 £'000	2023 £'000	2022 £'000	2022 £'000
Cash flows from operating activities					
(Loss)/profit before tax		(13,435)		3,216	
Adjustments for:					
Depreciation	3	8,225		7,392	
Amortisation	3	1,152		810	
Asset impairment		-		453	
Non-cash movements relating to share of defined benefit pension scheme obligations		(211)		(287)	
Non- cash movements in provisions		(1,402)		753	
Interest receivable	6	(162)		(4)	
Interest payable	6	120		(1)	
Cash flows from operating profit before changes in working capital and provisions			(5,713)		12,332
Increase in trade and other receivables		(10,334)		(4,688)	
Increase in trade and other payables		30,663		10,662	
Utilisation of provisions		(852)		(1,072)	
Total changes in working capital and provisions			19,477		4,902
Cash generated from operations			13,764		17,234
Tax received			7,028		6,937
Net cash flows generated from operations			20,792		24,171
Cash flows from Investing activities					
Purchases of property, plant and equipment		(26,805)		(19,645)	
Purchases of intangible assets		(4,867)		(812)	

	Note	2023 £'000	2023 £'000	2022 £'000	2022 £'000
Cash flows used in investing activities			(31,672)		(20,457)
Cash flows from Financing activities					
Interest received	6	153		4	
Interest paid	6	(120)		(70)	
Principal elements of lease payments		(1,512)		(1,736)	
Cash used in financing activities			(1,479)		(1,802)
Net (decrease)/increase in cash and cash equivalents			(12,359)		1,912
Cash and cash equivalents at beginning of the year	13		42,144		40,232
Cash and cash equivalents at end of the year	13		29,785		42,144

The notes on pages 102 to 135 form part of these financial statements.

10.0 Financial Statements

Statement of Changes in Equity

	Note	Share Capital £'000	Retained Earnings £'000	Total equity £'000
At 1 April 2021		25	77,615	77,640
Profit for the year		-	8,706	8,706
Original actuarial losses in defined benefit pension schemes	24	-	1,775	1,775
Restatement of actuarial losses in defined benefit pension schemes	24	-	(1,948)	(1,948)
Total comprehensive income as restated	-		8,533	8,533
At 31 March 2022 and 1 April 2022 Restated		25	86,148	86,173
Loss for the year		-	(3,471)	(3,471)
Actuarial losses in defined benefit pension schemes		-	(157)	(157)
Total comprehensive expense		-	(3,628)	(3,628)
At 31 March 2023		25	82,520	82,545

No amounts recognised as other comprehensive (expenses)/income will subsequently be reclassified through Profit & Loss

The notes on pages 102 to 135 form part of these financial statements

Notes to the Financial Statements

For the year ended
31 March 2023

1 Accounting Policies

1.1 Summary of principal accounting policies

The following principal accounting policies have been applied consistently in the preparation of these financial statements in accordance with the Companies Act 2006. The policies have been consistently applied to all the years presented, unless otherwise stated.

1.1.1 Basis of preparation

The directors believe that there is a reasonable expectation that the Company has adequate resources to continue to adopt the going concern basis in preparing these financial statements. Further detail on the steps taken to reach this conclusion can be found in section 1.9 of the Strategic report. These financial statements have been prepared on a going concern basis, and in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006.

The financial statements have been prepared on a historical cost basis, except, as stated in the accounting policies,

in accordance with IFRS. The preparation of financial statements in compliance with IFRS requires the use of certain critical accounting estimates. It also requires judgement to exercise judgement in the most appropriate application in applying NNL's accounting policies. The areas where significant judgements and estimates have been made in preparing the financial statements and their effect are disclosed below.

NNL has a non-trading subsidiary – Nexia Solutions Limited, company number 06729401. Nexia Solutions Limited is registered and domiciled in England and Wales and its registered address is Chadwick House, Warrington Road, Birchwood Park, Warrington WA3 6AE.

NNL is exempt from preparing consolidated financial statements on the grounds that it qualifies under S400 of the Companies Act 2006 as a wholly owned subsidiary of a company registered in England and Wales for which consolidated financial statements are prepared. These financial statements therefore present information about NNL as an individual undertaking

and not about its group.

The directors have considered the requirements of HM Treasury's Financial Reporting Manual (FRoM) and have reported beyond the requirements of the Companies Act 2006 as deemed appropriate for a Public Corporation.

All amounts are presented in Sterling and, unless otherwise stated, rounded to the nearest £1,000.

1.1.2 Revenue

Revenue represents income derived from contracts with customers for the provision of goods and services in exchange for consideration in the ordinary course of the Company's activities.

At the start of each contract the transaction price is estimated as the amount of consideration the Company expects to be entitled to in exchange for transferring the promised goods or services to the customer, excluding VAT. Variable consideration, such as price escalation, is included based on the expected value or most likely amount only to the extent that it is highly probable that there will not be a reversal of the cumulative

amount of revenue recognised. The transaction price does not include estimates of consideration resulting from contract variations, such as change orders, unless they have been approved by both parties to the contract. The total transaction price is allocated to the performance obligations identified in the contract in proportion to their stand-alone selling prices. Given the bespoke nature of many of the Company's products and services there are typically no observable selling prices, instead stand-alone selling prices are typically estimated based on expected costs plus contract margin.

For each performance obligation under a contract the Company determines whether it is satisfied over time or at a point in time. Performance obligations are satisfied over time if one of the following criteria is satisfied:

the customer simultaneously receives and consumes the benefits provided by the Company's performance as it performs;

the Company's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or

the Company's performance does not create an asset with an alternative use to the Company and it has an enforceable right to receive payment for performance satisfied to date.

The Company has determined that all of its contracts satisfy the over time criteria.

For each performance obligation to be recognised over time the Company recognises revenue based on an input method based on costs incurred in the year. Revenue and attributable margin

are calculated by reference to reliable estimates of transaction price and total expected costs, after making suitable allowance for technical and other risks. Revenue and associated margin are therefore recognised progressively as costs are incurred and risks have been mitigated or retired.

The company applies the practical expedient included in paragraph 121 of IFRS 15 and does not disclose information about its remaining performance obligations for contracts as the company recognises revenue in line with the value of the services received by the customer to date.

Where it is probable that total contract costs will exceed total contract revenue the expected loss is recognised immediately as an expense.

Interest income is accrued on a time basis, by reference to the principal outstanding at the effective interest rate applicable.

1.1.3 Foreign currency

Transactions entered into by NNL in a currency other than sterling are recorded at the spot rate when the transactions occur. Foreign currency monetary assets and liabilities are translated at the closing rates ruling at the reporting date. Exchange differences arising on the retranslation of unsettled monetary assets and liabilities are recognised immediately in the profit and loss for the year.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss shall be recognised in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised

in the profit or loss, any exchange component of that gain or loss shall be recognised in the profit or loss.

NNL's policy is to hedge against significant foreign exchange exposures, however, at the Statement of Financial Position date NNL did not hold nor had it issued any derivative instruments, intended to hedge the company's exposures.

1.1.4 Leased assets

NNL leases its trading locations from third parties. In all cases a significant proportion of the risks and rewards of ownership are not transferred to NNL.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following payments:

Fixed payments less and lease incentives receivable; and

Variable payments that are based on an index or rate, initially measured using the index or rate as at the commencement date.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot readily be determined, which is usually the case for the Company's leases, then a discount rate based on HM Treasury's Public Expenditure System (PES) rates is used as an approximation of the company's incremental cost of borrowing.

The Company is exposed to potential future increases in variable lease payments based on an index or rate which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take

10.0 Notes to the Financial Statements

effect the lease liability is reassessed and adjusted against the right of use asset.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit and loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right of Use Assets are measured at cost comprising the following:

The amount of the initial measurement of the lease liability.

Any lease payments made at or before the commencement date less any incentives received; and

Any initial direct costs.

Right of use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Payments associated with short-term leases of vehicles are recognised on a straight-line basis as an expense in the Statement of Comprehensive Income. Short-term leases are leases with a lease term of 12 months or less.

Information about the critical accounting estimates and judgements in the application of lease accounting is disclosed in note 1.2.3.

1.1.5 Exceptional items

Unusually large or uncommon items which are caused by events or transactions that fall within ordinary activities are disclosed as exceptional items.

1.1.6 Retirement benefits: Defined benefit schemes

A defined benefit scheme is a pension plan that defines an amount of pension benefit that an employee will receive on retirement.

In respect of a defined benefit scheme, the pension scheme surplus or deficit represents the difference between:

The fair value of scheme assets at the Statement of Financial Position date; less

Scheme liabilities calculated using the projected unit credit method discounted to its present value using yields available on high quality corporate bonds that have maturity dates approximating to the terms of the liabilities.

Plus, adjustments for unrecognised past service costs.

The Statement of Comprehensive Income charge is split between an operating service cost and a financing charge, which is the net of the interest cost on pension scheme liabilities and expected return on plan assets.

Actuarial gains and losses are recognised in full during the year, in the Statement of Comprehensive Income. If NNL cannot benefit from a scheme surplus in the form of refunds from the plan or reductions in future contributions, any asset resulting from the above policy is restricted accordingly.

Any difference between the expected return on assets and that actually achieved, and any changes in the liabilities over the year due to changes in assumptions or experience within the scheme, are recognised in other comprehensive income in the year in which they arise.

Past service costs are recognised directly in income, unless the changes to the pension plan are conditional on the employees remaining in service for a specified period of time. In this case, the past service costs are amortised on a straight-line basis over the vesting period.

Where improvements are made to benefits payable under a defined benefit scheme, the effect on the plan liability is recognised in the Statement of Comprehensive Income on a straight-line basis over the average period until the employees become entitled to the improved benefits. Where the benefits vest immediately, the effect of the change is recognised immediately.

The net defined benefit liability or asset represents the present value of the defined benefit obligation as reduced by the fair value of plan assets, and as adjusted for any limit on the net defined benefit asset. Any asset resulting from this calculation is limited to the lower of the surplus in the defined benefit scheme and the present value of available refunds, and any reductions in future contributions to the scheme, including the adverse effect of any minimum funding requirements in accordance with IFRIC 14. The asset is expected to be reduced in full and as such a surplus will not be recognised in the statement of financial position.

Where the present value of future scheme liabilities exceeds the fair value of pension scheme assets the excess is recognised in the statement of financial position as a liability in accordance with IAS19 and IFRIC 14.

1.1.7 Retirement benefits: Defined contribution schemes

A defined contribution scheme is a pension plan under which the Company pays fixed contributions to a separate entity. Contributions to defined contribution pension schemes are charged to the Statement of Comprehensive Income in the year to which they relate. The Group has two defined contribution pension schemes.

The CPS is a multi-employer scheme which provides defined benefits to its members. In common with other unfunded public sector schemes the CPS does not have the attributes of typical defined benefit schemes. Any surplus of contributions made in excess of benefits paid out in any year is surrendered to the Consolidated Fund and any liabilities are met from the Consolidated Fund via an annual Parliamentary vote. His Majesty's Government does not maintain a separate fund. In common with defined benefit pension schemes NNL does however bear the risk that it will have to increase its contributions in accordance with the Government Actuaries Department's assessment of the funding required to provide benefits under the scheme.

A further defined contribution scheme is operated for employees. The Company pays fixed contributions to Royal London and once contributions have been paid, the Company has no further payment obligations. The contributions are recognised in the Statement of Comprehensive Income in the year in which they become payable in accordance with the rules of the scheme. The assets of the plans are held separately from the Company in independently administered funds.

1.1.8 Property, Plant and Equipment

Property, Plant and Equipment (other than assets in the course of construction) are stated in the Statement of Financial Position at cost less accumulated depreciation. Assets in the course of construction are stated at cost and are not depreciated until commissioned. The cost of assets will include directly attributable staff costs associated with bringing the asset into the location and condition for it to be capable of operating in the manner intended by management. This includes the cost of testing whether the asset is functioning properly.

The carrying values of Property, Plant and Equipment are reviewed for impairment if events or changes in circumstances indicate that a provision for impairment is required. Accumulated depreciation includes any additional charges made where necessary to reflect impairments in value. IAS 36 also requires management, on an annual basis, to determine the recoverable amount of assets and the estimated useful life to determine if this is still reasonable.

Depreciation is calculated to write off historical costs less residual value of assets, by equal annual instalments over their estimated useful economic lives as follows:

Land and Buildings:
Over the lease term

Plant and machinery:
3 to 21 years

Fixtures and fittings:
3 to 20 years

1.1.9 Intangible Assets

Intangible assets are measured initially at cost and are amortised, as an administrative expense, on a straight-line basis over their estimated useful lives. The carrying amount is reduced by any provision for impairment where necessary.

Internal expenditure is capitalised as internally generated intangibles only if it meets the definition and recognition criteria of IAS 38 'Intangible Assets'.

Criteria of IAS 38 – the asset is separable, i.e., it is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset, or liability, regardless of whether the entity intends to do so, or arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

The cost of the intangible asset must be able to be measured reliably.

The service concession arrangement on Phase 2 works at the Company's Central Laboratory consists of future revenue, some of which is guaranteed. An intangible asset is recognised for the non-guaranteed future revenue where it is probable that the revenue will be generated.

Intangible assets are amortised on a straight-line basis over their estimated useful lives:

Computer software:
1 to 5 years

Service concessions:
6 to 20 years

10.0 Notes to the Financial Statements

1.1.10 Trade and other receivables

Trade and other receivables arise principally through the provision of goods and services to customers (trade debtors), but also incorporate other types of contractual monetary asset.

NNL applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets. Trade and other receivables are stated net of expected credit losses.

Expected credit losses are recognised when there is objective evidence (such as significant financial difficulties on the part of the counterparty or default or significant delay in payment) that NNL will be unable to collect all the amounts due. The expected credit loss being the difference between the net carrying amount and the future expected cash flows associated with the receivable.

For trade receivables, which are carried at cost less any expected credit loss; such losses are recorded in a separate allowance account with the loss being recognised within administrative expenses in the Statement of Comprehensive Income. On confirmation that the trade receivable will not be collectable, the gross carrying value of the asset is written off against the expected loss.

1.1.11 Deferred Taxation

Deferred tax assets and liabilities are recognised where the carrying amount of an asset or liability in the Statement of Financial Position differs to its tax base,

except for differences arising on the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting nor taxable profit.

Recognition of deferred tax assets and unused tax losses is restricted to those instances where it is probable that taxable profit will be available against which the difference can be utilised.

The amount of the asset or liability is determined using tax rates that have been enacted or substantially enacted by the Statement of Financial Position date and are expected to apply when the deferred tax liabilities are settled. Deferred tax balances are not discounted.

1.1.12 Cash and cash equivalents

These include cash in hand and deposits held at call with banks.

1.1.13 Trade and other payables

Trade payables and other short-term monetary liabilities are recognised at fair value and subsequently held at amortised cost.

1.1.14 Government grants

Grants relating to expenditure on property, plant and equipment are recognised in the Statement of Comprehensive Income at the same rate as the depreciation on the assets to which the grant relates. The deferred element of grants is included in liabilities as other payables. Grants relating to revenue expenditure are recognised in the Statement of

Comprehensive Income in the same year in which the revenue expenditure arises.

1.1.15 Provisions

Provisions are recognised, at current price levels, for liabilities of uncertain timing or amount that have arisen because of past transactions and are discounted at a pre-tax rate reflecting current market assessments of the time value of money and the risks specific to the liability

1.1.16 Pension assumptions

The Group's share of costs, assets and liabilities of the defined benefit scheme are determined using methods relying on actuarial estimates and assumptions. Details of the key assumptions are set out in note 20.

The Group takes advice from independent actuaries relating to the appropriateness of the assumptions. Changes in the assumptions used may have a significant effect on the Statement of Comprehensive Income and the Statement of Financial Position. Sensitivity to key assumptions is disclosed in note 20.

1.1.17 Revalorisation

Revalorisation arises because provisions are stated in the Statement of Financial Position at current price levels and discounted from the eventual payment dates. The revalorisation charge is the adjustment that results from restating these liabilities to consider the effect of inflation in the year and to remove the effect of one year's discount as the eventual dates of payment become one year closer. The inflation rate used is specific

to the expected cost increase in the underlying liability. Each year the finance charges in the Statement Comprehensive Income include revalorisation required to discharge one year's inflation and discount from the liability.

1.1.18 Changes in accounting policies

There have been no changes to accounting policies during the year under review.

1.1.19 Prior year adjustment

During the year under review the directors identified an error in the comparative figures for 2021/22 due to the incorrect application of IFRIC14 in relation to pensions and the recognition of the scheme surplus for the defined benefits schemes.

The error was due to the company not having an unconditional right to the pension surplus and as such, the right to the surplus should be restricted. The amount of the adjustment for each financial statement line item affected for 2021/22 comparatives is outlined in note 24. The change in comparatives for 2021/22 was applied through the derecognition of the actuarial gain/(loss) in year in relation to the surplus, adjusted for the impact of deferred tax at 25%.

Restated comparatives for 2021/22 correct the error prospectively from the earliest date practicable.

1.2 Critical accounting estimates and judgements

NNL makes estimates and assumptions regarding the future. Estimates and judgements are continually evaluated based on historical experience and other factors, including expectations

of future events that are believed to be reasonable under the circumstances. In the future, actual experience may differ from these estimates and assumptions. The areas where the estimates and assumptions used could have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below

1.2.1 Provisions

The provisions recorded in the financial statements represent the directors' best estimates of the costs expected to be incurred as at the Statement of Financial Position date.

Further details of the types of provisions, together with details of relevant estimates and, where appropriate sensitivities, are included in note 15.

1.2.2 Revenue recognition

Revenue is recognised to the extent that work has been completed and an agreed purchase order from a customer covering the work is held. As a result, at 31 March 2023 £14.6m (2022 – £18.6m) of accrued income was recognised as NNL had completed work before the balance sheet date and held agreed purchase orders. Key to the recognition of revenue is the directors' estimate of the stage of completion of each contract. The estimate is based on the ratio of actual costs incurred to date to estimated total costs

NNL carries out work for a number of customers under discrete purchase orders which are placed under larger framework agreements. The directors believe that the separate purchase orders constitute separate performance obligations and have treated them as such in determining

the amount of revenue to be recognised.

1.2.3 Leases

The lease liability disclosed in the statement of financial position represents the directors' best estimate of the present value of future leasing cash outflows. In arriving at this estimate the directors have assessed the incremental cost of borrowing to be used in the calculation. The rates used and sensitivities of both the lease liability and the right of use asset values to the rate are shown in note 10. Any lease modifications are first assessed to establish whether or not they cause a separate lease. Where a separate lease is caused then the modification is accounted for as a new lease, where no new lease is caused then the lease liability is remeasured to reflect the modified terms.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

Right of use assets are evaluated for indicators of impairments on an annual basis

1.2.4 Pensions

During the year under review, the directors have reconsidered the impact of IAS 19 and IFRIC 14, and in particular, whether the Company has an unconditional right to a surplus of the defined benefit schemes.

10.0 Notes to the Financial Statements

IFRIC 14 considers the general requirements concerning the limit on a defined benefit asset, and states that if the right to a refund of a surplus depends on the occurrence or non-occurrence of one or more uncertain future events not wholly within an entity's control, the entity does not have an unconditional right and should not recognise an asset.

Based on the terms of the trust deeds, director's judgement is that the Company does not have an unconditional right to a surplus. As a result, and as disclosed in note 24 the Company's main statements at 31 March 2022 have been restated to derecognise the pension fund surplus and the associated impact on taxation.

1.3 New Standards and Interpretations

The accounting policies adopted are consistent with those of the previous year.

New standards, amendments, and interpretations to published standards effective 2022/23.

IAS 16 – Amendment effective for annual periods beginning on or after January 2022.

The amendments prohibit a company from deducting from the cost of property, plant and equipment amounts received from selling items produced while the company is preparing the asset for its intended use. Instead, a company will recognize such sales

proceeds and related cost in profit or loss.

The amendments prohibit a company from deducting from the cost of property, plant and equipment amounts received from selling items produced while the company is preparing the asset for its intended use. Instead, a company will recognize such sales proceeds and related cost in profit or loss.

IAS 37 – Amendment effective for annual periods beginning on or after January 2022.

Standard amended to clarify that for the purpose of assessing whether a contract is onerous, the cost of fulfilling the contract includes both the incremental costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling contracts.

These amendments have been considered alongside existing accounting policies and do not have a material impact on the entity in the current period nor are they expected to have a material impact on future reporting periods and on foreseeable future transactions.

New standards not yet effective 2022/23

Certain new accounting standards and interpretations have been published which are not mandatory for 2022/23 and which have not been adopted early by the company. These standards are

not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

2 Revenue

NNL's principal activity is the provision of technology services across the nuclear fuel cycle.

The directors are of the opinion that NNL's activities fall within one operating segment – being the provision of technology services across the nuclear fuel cycle. Accordingly, all revenue recognised from contracts with customers has the same economic factors affecting the nature, amount, timing and uncertainty of revenues and cash flows. There are three key areas of this cycle: waste management and decommissioning, fuel cycle solutions and reactor operations support.

Revenue arises entirely from the sale of services principally in the UK. Sales to overseas customers make up a small proportion of total revenue at £2,361,895 (2022 – £1,694,618).

As far as practicable customer contracts are constructed to match revenue recognition profiles with payment application. As NNL also operates standard 30-day payment terms there are no significant delays between revenue recognition and subsequent cash receipt.

3 Profit from operations

	2023 £'000	2022 £'000
This has been arrived at after charging/(crediting)		
Staff costs (see note 4)	93,347	80,108
Depreciation (see note 9)	6,627	5,826
Research and development expenses	2,315	3,280
Revalorisation on provisions	(2,388)	(74)
Depreciation charge on right of use assets – buildings (see note 10)	1,598	1,566
Amortisation (see note 11)	1,152	810
Asset Impairment (see note 9)	-	453
Interest expense on leases (see note 6)	108	52
Auditors' remuneration: • audit services	110	116
Foreign exchange (gain)/loss (see note 6)	(9)	4
Lease expenses	102	7
Expenditure on consultancy	1,069	1,500
Training and education (notional via apprentice levy)	373	349

Research and development (R&D) expenses reflect all the Company's self-funded R&D programme expenditure excluding staff costs.

Revalorisation is the adjustment that results from restating provisions to consider the effect of inflation in the year. This includes removing the effect of one year's discount as the eventual dates of payment become one year closer. Due to the nature of the calculation this may be recognised as finance income or expense in the year.

Expenditure on consultancy represents bought in services in relation to the business-as-usual activities and objectives of the national laboratory.

10.0 Notes to the Financial Statements

4 Staff costs

	2023	2022
	£'000	£'000
Staff costs (including executive and non-executive directors) comprise:		
Wages and salaries	71,919	62,622
Apprentice levy	347	295
Social security costs	8,591	7,158
Other Pension costs	12,490	10,033
	93,347	80,108

The average monthly number of employees during the year was as follows:

	2023	2022
	Number	Number
Scientific, technical, engineering and facilities	862	848
Administrative	476	316
	1,338	1,164

5 Directors' remuneration

	2023	2022
	£'000	£'000
Directors' remuneration for both executive and non-executive directors consists of:		
Aggregate emoluments	1,185	1,188
Company contributions to money purchase schemes	47	44
Compensation for loss of office	-	-
	1,232	1,232

There were three directors in NNL's defined benefit scheme over the course of the year.

There are two directors to whom retirements benefits are accruing under a money purchase pension scheme in respect of qualifying service.

	2023	2022
	£'000	£'000
The remuneration amounts above include the following in respect of the highest paid director:		
Emoluments (excluding pension contributions)	264	266
Pension Contributions	38	31
	302	297

At the end of the year the highest paid director has accrued an entitlement to a pension of £24k (2022 £21k) and lump sum of £73k (2022 £64k) which is excluded from the figures above. The amounts above include emoluments accrued, not yet paid at the end of the year of £48k (2022 £60k).

10.0 Notes to the Financial Statements

6 Finance income and expense

	2023 £'000	2022 £'000
Finance income:		
Bank interest receivable	153	4
Revalorisation on provisions	2,388	74
Foreign exchange gain	9	-
	2,550	78
Finance expense:		
Bank charges	12	17
Foreign exchange loss	-	4
Interest on leases	108	52
	120	73

7 Taxation

	2023 £'000	2022 £'000
United Kingdom corporation tax credit		
Current year	-	(1,521)
Adjustments in respect of prior years	(103)	(27)
Tax reclaimed on research and development	7,051	8,653
Total current tax credit	6,948	7,105
Deferred tax		
Origination and reversal of temporary differences	3,016	(1,615)
Total deferred tax charge	3,016	(1,615)
Total tax credit on profit before tax on ordinary activities	9,964	5,490

7 Taxation (continued)

	2023 £'000	2022 £'000
Profit/(Loss) before tax	(13,435)	3,216
Expected tax charge based on the standard rate of corporation tax in the UK of 19% (2022 - 19%)	3,134	(611)
Items not deductible for tax purposes and other items	(446)	53
Other timing differences	779	(1,961)
Movement in deferred tax not recognised	1,203	1,056
Tax credits on research and development	(1,653)	(1,673)
Tax reclaimed on research and development	7,051	8,653
Adjustments in respect of prior years	(104)	(27)
Total taxation credit for the year	9,964	5,490

NNL's tax reclaim for 2022/2023 is £7,051k (2022 - £8,653k). This is due to tax credits received from HMRC for research and development activities.

Future tax liabilities arising from operations are expected to be offset by tax credits on research and development. In the Spring Budget 2021 the Government announced that the corporation tax rate would remain at 19% until 31 March 2023 and that effective from 1 April 2023 the rate would, increase to 25%. The deferred tax liability as at both 31 March 2023 and 31 March 2022 has been calculated using a Corporation Tax rate of 25% (2022 - 25%)

8 Dividends

No dividends have been declared or paid during the current or previous year.

10.0 Notes to the Financial Statements

9 Property, plant and equipment

	Land and Buildings £'000	Plant and Machinery £'000	Fixtures and fittings £'000	Assets in the course of construction £'000	Total £'000
Cost					
At 1 April 2022	538	22,985	55,386	48,348	127,257
Additions	-	-	-	24,442	24,442
Reclassification	-	-	-	(2,084)	(2,084)
Transfers from assets in course of construction	506	3,682	2,242	(6,430)	-
Disposals	-	(144)	-	-	(144)
At 31 March 2023	1,044	26,523	57,628	64,276	149,471
Accumulated depreciation and impairment					
At 1 April 2022	225	12,701	19,296	-	32,222
Depreciation charge for the year	81	2,399	4,147	-	6,627
Reclassification	31	(31)	-	-	-
Disposals	-	(144)	-	-	(144)
At 31 March 2023	337	14,925	23,443	-	38,705

	Land and Buildings £'000	Plant and Machinery £'000	Fixtures and fittings £'000	Assets in the course of construction £'000	Total £'000
Cost					
At 1 April 2021	538	19,121	56,837	33,251	109,747
Additions	-	-	-	19,523	19,523
Transfers from assets in course of construction	-	4,383	43	(4,426)	-
Disposals	-	(519)	(1,494)	-	(2,013)
At 31 March 2022	538	22,985	55,386	48,348	127,257

9 Property, plant and equipment (continued)

	Land and Buildings £'000	Plant and Machinery £'000	Fixtures and fittings £'000	Assets in the course of construction £'000	Total £'000
Accumulated depreciation and impairment					
At 1 April 2021	225	10,830	16,901	-	27,956
Depreciation charge for the year	-	1,937	3,889	-	5,826
Impairment	-	453	-	-	453
Disposal	-	(519)	(1,494)	-	(2,013)
At 31 March 2022	225	12,701	19,296	-	32,222
Net book value					
At 31 March 2022	313	10,284	36,090	48,348	95,035
At 31 March 2023	707	11,598	34,185	64,276	110,766

Assets in the course of construction refers to a number of ongoing major projects to enhance our critical infrastructure. Additions include £2,468k of accrued costs not yet invoiced (2022 – £638k). At the end of the reporting period there is capital expenditure contracted for but not recognised as a liability of £28.8m (2022 – £7.8m).

The directors believe that the characteristics of certain items previously classified as tangible assets more closely resemble intangible assets. As a result, there have been reclassifications during the year of £2,084k (2022 – £Nil).

10 Leases

Right of use Assets, categorised as Land and Buildings	2023 £'000	2022 £'000
Opening balance	12,569	9,944
Additions	363	7
Remeasurement	2,027	4,184
Depreciation charged in the year	(1,598)	(1,566)
Closing balance	13,361	12,569

All right of use assets relate to property leases

10.0 Notes to the Financial Statements

10 Leases (continued)

Lease Liability	2023 £'000	2022 £'000
Opening balance	12,352	9,896
Additions	363	7
Remeasurement	2,027	4,184
Interest charged in the year	108	52
Cash payments	(1,511)	(1,787)
Closing balance	13,339	12,352

The ageing of lease liabilities are as follows:	2023 £'000	2022 £'000
Less than 1 year	1,524	1,541
1-2 years	1,524	1,541
2 - 5 years	4,298	3,328
Over 5 years	5,993	5,942
	13,339	12,352

The increase in both the right of use asset and lease liability values relates to the remeasurement of several lease liabilities associated with the Company's laboratories. Right of use asset and lease liability values are calculated using a discount rate which is based on HM Treasury Public Expenditure System (PES) rates published December 2022. If the discount rates used in the calculation of the individual asset and liability values were 0.5% higher the right of use asset values at the balance sheet date would be £0.2m lower than stated, the lease liability values would be £0.15m lower than stated and the profit for the year would be £0.01m lower than stated.

11 Intangible assets

	Computer software £'000	Service concession £'000	Assets in the course of construction £'000	Total £'000
Cost				
At 1 April 2022	5,140	3,782	867	9,789
Additions	-	-	4,867	4,867
Reclassification	-	-	2,084	2,084
Transfers from assets in course of construction	2,214	-	(2,214)	-
Disposal	(517)	-	-	(517)
At 31 March 2023	6,837	3,782	5,604	16,223

11 Intangible assets (continued)

	Computer software £'000	Service concession £'000	Assets in the course of construction £'000	Total £'000
Accumulated amortisation				
At 1 April 2022	3,069	958	-	4,027
Amortisation charge for the year	939	213	-	1,152
Reclassification	(107)	107	-	-
Disposal	(517)	-	-	(517)
At 31 March 2023	3,384	1,278	-	4,662

	Computer software £'000	Service concession £'000	Assets in the course of construction £'000	Total £'000
Cost				
At 1 April 2021	5,851	3,782	166	9,799
Additions	-	-	812	812
Transfers from assets in course of construction	111	-	(111)	-
Disposals	(822)	-	-	(822)
At 31 March 2022	5,140	3,782	867	9,789

Accumulated amortisation

At 1 April 2021	3,294	745	-	4,039
Amortisation charge for the year	597	213	-	810
Disposal	(822)	-	-	(822)
At 31 March 2022	3,069	958	-	4,027

Net book value

At 31 March 2022	2,071	2,824	867	5,762
At 31 March 2023	3,453	2,504	5,604	11,561

Assets in the course of construction refer to IT software and the software implementation costs additions in the year include no accrued costs (2022 - £Nil). At the end of the reporting period there is capital expenditure contracted for but not recognised as a liability of £0.8m (2022 - £1.0m).

The directors believe that the characteristics of certain items previously classified as tangible assets more closely resemble intangible assets. As a result, there have been reclassifications during the year of £2,084k (2022 - £Nil).

Amortisation of £1,152k (2022 - £810k) is included in administrative expenses in the Statement of Comprehensive Income.

10.0 Notes to the Financial Statements

12 Trade and other receivables

	2023 £'000	2022 £'000
Trade receivables	14,005	9,526
Amounts due from group undertakings	205	174
Prepayments and accrued income	19,656	21,300
Corporation tax	7,051	7,155
Grants receivable	14,691	7,144
Other receivables	881	936
Total trade and other receivables	56,489	46,235
Less: non-current trade and other receivables	(401)	(431)
Current trade and other receivables	56,088	45,804

NNL operates standard payment terms of 30 days.

Prepayments and accrued income include £14,627,209 of accrued income (2022 £19,118,568). Invoicing schedules for a number of contracts are based on milestones rather than on value of work done or time elapsed – variability in the value of accrued income at the year-end is therefore to be expected. All accrued income is receivable within less than one year.

Grants receivable relates to government grants for specific (ring fenced) purposes. Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and NNL will comply with all attached conditions. NNL does not have uncommitted grant funds in hand.

The ageing of non-current trade and other receivables are as follows:

	2023 Other £'000	2023 Total £'000	2022 Other £'000	2022 Total £'000
Less than 1 year	229	229	86	86
1–2 years	125	125		
2–5 years	47	47	345	345
	401	401	431	431

The fair value of trade and other receivables approximates to their carrying value as at 31 March 2023 and 31 March 2022.

12 Trade and other receivables (continued)

The carrying value of NNL's trade and other receivables, and amounts due from group undertakings are denominated in the following currencies:

	2023 £'000	2022 £'000
Pound sterling	56,488	36,859
US Dollar	1	5,208
Euro	-	3,958
Other	-	210
	56,489	46,235

At 31 March 2023 no trade receivables were impaired (2022 – £Nil). At 31 March 2023 trade receivables of £3,321,000 (2022 – £5,720) were past due but had no expected credit loss provision. None of the overdue debt from the year end remains unpaid at the date of approval of the financial statements (2022 – £Nil).

The ageing of trade receivables are as follows:

	2023 Related parties £'000	2023 Third parties £'000	2023 Total £'000	2022 Related parties £'000	2022 Third parties £'000	2022 Total £'000
Not yet due	4,121	6,563	10,684	2,602	6,918	9,520
1–30 days	3,219	99	3,318	-	6	6
31–60 days	3	-	3	-	-	-
Over 91 days	-	-	-	-	-	-
	7,343	6,662	14,005	2,602	6,924	9,526

NNL has applied the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables.

NNL considers that all its customers have shared risk characteristics and has therefore considered the expected loss allowance for all its customers as one group. The expected loss rates are based on the payment profile of sales over a period of 24 months before 31 March 2023 and 31 March 2022 respectively and the corresponding historical credit losses experienced within this period.

NNL has considered the forward looking macro-economic factors and does not believe any adjustment is required to historical loss rates to ensure they reflect relevant future economic conditions.

On this basis the loss rate is 0% and the loss allowance as at 31 March 2023 is £Nil (2022 – £Nil).

10.0 Notes to the Financial Statements

13 Cash and cash equivalents

The cash and cash equivalent balances are broken down as follows:

	2023 £'000	2022 £'000
Cash available on demand	29,785	42,144

Book values equal fair values as at 31 March 2023 and 31 March 2022. All day-to-day banking matters are dealt with by the NatWest Bank, part of the RBS group.

14 Trade and other payables

	2023 £'000	2022 £'000
Payments received on account	9,532	9,400
Trade payables	6,834	6,081
Taxation and social security	4,621	3,302
Accruals	92,400	66,418
	113,387	85,201
Less: non-current trade and other payables	(66,896)	(43,880)
Current trade and other payables	46,491	41,321

Non-current other payables which represent capital grants are aged as follows:

	2023 £'000	2022 £'000
1-2 years	2,304	1,837
2-5 years	5,362	4,785
Over 5 years	59,230	37,258
	66,896	43,880

The carrying value of the Company's trade and other payables are denominated in the following currencies:

	2023 £'000	2022 £'000
Pound sterling	113,342	85,159
Euro	26	42
US Dollar	7	-
Other	12	-
	113,387	85,201

Book values equal fair values at 31 March 2023 and 31 March 2022.

14 Trade and other payables (continued)

The ageing of the trade payables are as follows:

	2023 Related parties £'000	2023 Third Parties £'000	2023 Total £'000	2022 Related parties £'000	2022 Third Parties £'000	2022 Total £'000
Not yet due	938	2,551	3,489	163	5,830	5,993
1-30 days	-	3,345	3,345	-	88	88
Over 91 days	-	-	-	-	-	-
	938	5,896	6,834	163	5,918	6,081

15 Provisions

	Severance £'000	Loss making contracts £'000	Other £'000	Total £'000
At 1 April 2022	4,770	929	9,232	14,931
Reclassification	-	218	(218)	-
Charged to profit or loss	382	441	1,140	1,963
Utilised in year	(415)	(29)	(407)	(851)
Revalorisation/(devalorisation)	(776)	19	(1,631)	(2,388)
Released in the year	(8)	(499)	(476)	(983)
At 31 March 2023	3,953	1,079	7,640	12,672

	Severance £'000	Loss making contracts £'000	Other £'000	Total £'000
At 31 March 2022				
Due within one year	361	426	216	1,003
Due after more than one year	4,409	503	9,016	13,928
	4,770	929	9,232	14,931

	Severance £'000	Loss making contracts £'000	Other £'000	Total £'000
At 31 March 2023				
Due within one year	391	441	599	1,431
Due after more than one year	3,562	638	7,041	11,241
	3,953	1,079	7,640	12,672

10.0 Notes to the Financial Statements

15 Provisions (continued)

Details of each category of provision are shown below.

Severance

The severance provision relates to severance obligations payable as pensions to employees who left NNL through redundancy. The amounts provided are based on best estimates of the pension payments and will be utilised over the next 31 years. The provision value uses a discount rate of 4.6% and a life expectancy of 88 years. A decrease of 0.25% in the discount rate would increase the provision value by £0.2m and separately an increase of 1 year in life expectancy would increase the provision by £0.1m

Loss making contracts

These are onerous contract provisions and have been calculated based on the latest technical evaluation of the

processes and methods likely to be used and reflect current knowledge. The provision relates to fixed-price, loss-making contracts. The loss has been calculated based on current costs and performance in line with the agreed schedule of work for the remaining duration of the contracts.

POCO

These provisions are based on such commercial agreements that are currently in place and reflect the directors' understanding of the current Company policy and regulatory framework. NNL is responsible for Post Operational Clean Out (POCO) costs or removing and disposing of the plant, equipment and consumables which have become radiologically contaminated during operations within the facilities.

Of the total other provision £7.04m relates to POCO (2022 –

£8.9m). The provision has been estimated based on the weight, packing density and levels of contamination of the plant, equipment and consumables contaminated, multiplied by the agreed cost of disposal with the appropriate supplier. The provision represents the best estimate of the future cashflows required to meet these obligations. Due to the nature of the provision the future utilisation of the provision is uncertain.

The POCO provision value above is based on disposal in 9 years' time, inflation of 7.4% year 1, 0.6% year 2, 2% into perpetuity and a discount rate of 3.27% based on HM Treasury Public Expenditure System (PES) rates. A delay of 1 year in the disposal date would decrease the provision value by £0.1m, an increase of 0.25% in the inflation rate would increase the provision value by £0.2m and separately an increase of 0.25% in the discount rate would decrease the provision by £0.2m.

16 Deferred tax

At 31 March 2023 a deferred tax liability is recognised as disclosed below.

	2023 £'000	2022 £'000
Provision at start of year	3,088	1,535
Deferred tax (credited)/charged to Profit and Loss in the year	(3,016)	1,615
Deferred tax credited to Other Comprehensive Income in the year	(53)	(62)
Provision at end of year	19	3,088

16 Deferred tax (continued)

At 31 March 2023 the deferred tax provision consists of:

	2023 £'000	2022 £'000
Depreciation in excess of capital allowances	5,261	5,654
Other timing differences – provisions	(1,121)	(1,317)
Tax credit and loss carry forward	(4,121)	(1,248)
Provision at end of year	19	3,088

The provision balance is not expected to be utilised in the next year.

17 Financial instruments – Risk Management

Principal financial instruments

The principal financial instruments used by NNL, from which financial instrument risk arises, are as follows:

Trade receivables

Cash at bank

Trade and other payables

NNL is exposed to risks that arise from its use of financial instruments. This note describes NNL's policies and processes for managing those risks and the methods used to measure them including quantitative information in respect of these risks.

NNL is exposed through its operations to the following financial risks:

Foreign exchange risk - transactional risk from receipts/purchases in a foreign currency

Credit risk - suppliers not able to fulfil contractual obligation due to financial difficulty and customer inability to pay

Liquidity risk - managing the cash flows of NNL effectively

There have been no substantive changes in NNL's exposure to financial instrument risks or its objectives, policies, and processes for managing those risks from the previous year.

Financial risk management objectives

NNL's treasury policy is structured to ensure that adequate financial resources are available for the development of its business whilst managing its currency, interest rate and counterparty credit risks. NNL's treasury policy is approved by the board of directors.

The overall objective of the board is to set policies that seek to reduce risk as far as possible without unduly affecting NNL's competitiveness and flexibility. Further details regarding these policies are set out below:

10.0 Notes to the Financial Statements

17 Financial instruments – Risk Management (continued)

Foreign exchange risk management

Foreign currency exposures are limited as NNL's functional currency is Sterling, although a minor proportion of revenue and expenditure is denominated in Euros and U.S Dollars.

The carrying value of NNL's cash and cash equivalents are denominated in the following currencies:

	2023 £'000	2022 £'000
Pound Sterling	29,522	41,916
US Dollar	7	26
Euro	256	202
	29,785	42,144

Foreign exchange risk is not considered to be material in either the current or the preceding year.

Credit risk management

At the statement of financial position date NNL's maximum exposure to credit risk at the end of the reporting period is the carrying amount of each class of financial assets mentioned below.

Financial assets	2023 Carrying value £'000	2023 Maximum Exposure £'000	2022 Carrying value £'000	2022 Maximum Exposure £'000
Cash and cash equivalents	29,785	29,785	42,144	42,144
Trade and other receivables*	44,058	44,058	36,475	36,475
Total financial assets	73,843	73,843	78,619	78,619

*Excluding non-financial assets

Financial liabilities

The table below analyses NNL's financial liabilities into relevant maturity groups based on contractual maturities:

At 31 March 2023	Trade payables* £'000	Accruals £'000	Lease Liabilities £'000	Total £'000
Less than 1 year	6,834	25,504	1,524	33,862
1-2 years	-	2,304	-	2,304
2-5 years	-	5,362	5,822	11,184
Over 5 years	-	59,230	5,993	65,223
	6,834	92,400	13,339	112,573

At 31 March 2022	Trade payables* £'000	Accruals £'000	Lease Liabilities £'000	Total £'000
Less than 1 year	6,081	22,538	1,541	30,160
2-5 years	-	6,622	4,869	11,491
Over 5 years	-	37,258	5,942	43,200
	6,081	66,418	12,352	84,851

*Excluding non-financial liabilities

Financial Liabilities (continued)

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. NNL is exposed to credit risk from its trade receivables due from customers and cash deposits with financial institutions.

Trade receivables balances are not covered by credit insurance, but customers are deemed to be of sufficient credit worthiness in order that NNL will continue to conduct trade with them. **The following internal procedures are undertaken to assess whether NNL will grant a credit facility to them:**

Obtaining status reports and reference reports for new companies; and

Reviewing their trading history and payments records.

Additional safeguards include the following:

Internal credit limits being set on all accounts which are only increased by credit controllers.

Stop-lists produced on overdue accounts; and

Vigorous collection strategy in place.

Credit risk also arises from cash and cash equivalents and deposits with banks and financial institutions. NNL maximises the use of publicly procured banking services and shall only hold money outside Government Banking Service accounts with consent from HM Treasury. Only commercial banks which

are members of relevant UK clearing bodies may be considered for this purpose.

At the end of the current year and preceding year there were no significant concentrations of credit risk.

Liquidity risk management

NNL's policy is to ensure that it will always have sufficient resources to allow it to meet its liabilities as they become due.

Budgets are set and agreed by the board of directors in advance, to enable NNL's cash requirements to be anticipated.

Capital management

NNL manages its capital to ensure that it will be able to continue as a going concern. There have been no changes to NNL's objectives, policies, and processes for managing capital from the previous year.

NNL's capital consists of cash and cash equivalents (note 13) and equity attributable to equity holders of the parent. Such equity comprises share capital (note 18) and retained earnings (note 19). There have been no changes in what NNL manages as capital from the previous year.

The board of directors reviews NNL's capital requirements on a regular basis. Based on this review, NNL will balance its overall capital requirements through new share issues and requests for capital contributions from the parent Company when considered necessary. Capital is monitored alongside liquidity risk management.

18 Share capital

Authorised, issued and fully paid	2023 Number	2021 Number	2023 £'000	2022 £'000
Ordinary shares of £1 each	25,000	25,000	25	25

No dividends were paid or payable during the year (2022 – £Nil)

10.0 Notes to the Financial Statements

19 Retained earnings

	2023 £'000	2022 Restated £'000
Reserves at beginning of the year	86,148	77,615
(Loss)/profit for the year	(3,471)	8,706
Other comprehensive expense	(157)	(173)
Total comprehensive (expense)/income	(3,628)	8,533
Reserves at end of the year	82,520	86,148

Details of the restatement on individual line items for 2022 comparatives are given in note 24.

20 Retirement benefit obligations

Schemes accounted for as defined contribution

Combined Pension Scheme (CPS)

The CPS is a multi-employer scheme which provides defined benefits to its members. In common with other unfunded public sector schemes the CPS does not have the attributes of typical defined benefit pension schemes. Any surplus of contributions made in excess of benefits paid out in any year is surrendered to the Consolidated Fund and any liabilities are met from the Consolidated Fund via the annual Parliamentary vote. His

Majesty's Government does not maintain a separate fund.

The CPS is accounted for as a defined contribution scheme. The pension charge for the year represents contributions payable by NNL to the scheme and amounts to £7,290,504 (2022 – £6,359,569).

Schemes accounted for as defined benefit

Combined Nuclear Pension Plan (CNPP)

The CNPP is a funded scheme (previously named GPS). The Company's contribution rate is 49.5%. The CNPP is accounted for as a defined benefit scheme. A full

actuarial valuation was carried out for the Trustees at 31 March 2019. This has been updated to 31 March 2023 by a qualified independent actuary. The actuarial assumption for salary increases was 3.1%.

Electricity Supply Pension Scheme (ESPS)

The ESPS is a funded scheme. The Company's contribution rate is 50.4%. The ESPS is accounted for as a defined benefit scheme. A full actuarial valuation was carried out for the Trustees at 31 March 2019. This has been updated to 31 March 2023 by a qualified independent actuary. The actuarial assumption for salary increases was 3.1%

Details of NNL's defined benefit schemes are as follows:

	2023 CNPP £'000	2023 ESPS £'000	2023 Total £'000	2022 CNPP £'000	2022 ESPS £'000	2022 Total £'000
Fair value of scheme assets	5,003	9,295	14,298	6,349	13,275	19,624
Present value of scheme liabilities	(4,263)	(7,817)	(12,080)	(5,834)	(11,192)	(17,026)
Surplus in the scheme	740	1,478	2,218	515	2,083	2,598

Principal actuarial assumptions

Assumptions regarding future mortality experience are set based on advice in accordance with published statistics and experience.

The average life expectancy in years of a pensioner retiring at 65 on the Statement of Financial Position date is as follows:

	2023 CNPP years	2022 CNPP years	2023 ESPS years	2022 ESPS years
Male	22	21	24	24
Female	24	24	25	25

The average life expectancy in years of a pensioner retiring at 65, twenty years after the Statement of Financial Position date is as follows:

	2023 CNPP years	2022 CNPP years	2023 ESPS years	2022 ESPS years
Male	23	23	25	25
Female	26	26	27	27

Expected increases in pensions in payment, discount rates, and inflation are as follows:

	2023 CNPP	2022 CNPP	2023 ESPS	2022 ESPS
Expected increase in pensions-in-payment	3.1%	3.4%	3.1%	3.4%
Discount rate pensioner liabilities	4.6%	2.6%	4.6%	2.6%
Discount rate deferred and active liabilities	4.6%	2.6%	4.6%	2.6%
Inflation rate	3.1%	3.4%	3.1%	3.4%

Expected discount rates are based on market yields on AA rated corporate bonds. Different discount rates have been applied to each group of members to recognise the cash flow timings attributable to each group.

Reconciliation of scheme assets

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2021	5,934	12,386	18,320
Expected return on plan assets	122	250	372
Employer contributions	181	336	517
Benefits paid	(80)	(222)	(302)
Contributions by scheme participants	8	17	25
Actual return less expected return on pension scheme assets	184	508	692
At 31 March 2022	6,349	13,275	19,624

10.0 Notes to the Financial Statements

20 Retirement benefit obligations (continued)

Reconciliation of scheme assets (continued)

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2021	5,934	12,386	18,320
Expected return on plan assets	122	250	372
Employer contributions	181	336	517
Benefits paid	(80)	(222)	(302)
Contributions by scheme participants	8	17	25
Actual return less expected return on pension scheme assets	184	508	692
At 31 March 2022	6,349	13,275	19,624

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2022	6,349	13,275	19,624
Expected return on plan assets	165	346	511
Employer contributions	84	292	376
Benefits paid	(61)	(274)	(335)
Contributions by scheme participants	9	18	27
Actual return less expected return on pension scheme assets	(1,543)	(4,362)	(5,905)
At 31 March 2023	5,003	9,295	14,298

The expected return on scheme assets is equal to the weighted average return appropriate to each class of asset within the schemes. The return attributed to each class has been reached following discussions with the external actuaries.

The fair value of the scheme assets at 31 March 2023 and at 31 March 2022 were as follows:

CNPP	2023 Fair value £'000	2022 Fair value £'000
Growth Assets	2,659	3,054
Index-linked gilts	1,667	2,472
Corporate bonds	592	660
Cash	85	163
	5,003	6,349

At both 31 March 2023 and 31 March 2022 all the growth assets, index linked bonds and corporate bonds were held in unquoted pooled investment vehicles.

20 Retirement benefit obligations (continued)

ESPS	2023 Fair value Quoted £'000	2023 Fair value Unquoted £'000	2023 Fair value Total £'000	2022 Fair value Quoted £'000	2022 Fair value Unquoted £'000	2022 Fair value Total £'000
Target Return / Diversified Growth Fund	1,711	1,611	3,322	4,340	3,801	8,141
Index linked gilts	-	3,683	3,683	-	4,810	4,810
Cash	-	2,290	2,290	-	324	324
Defined benefit pension cost	1,711	7,584	9,295	4,340	8,935	13,275

Reconciliation of plan liabilities

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2021	6,259	12,112	18,371
Interest cost	129	244	373
Current service cost	86	143	229
Benefits paid	(80)	(222)	(302)
Changes in financial assumptions	(568)	(1,102)	(1,670)
Contributions by scheme participants	8	17	25
At 31 March 2022	5,834	11,192	17,026

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2022	5,834	11,192	17,026
Interest cost	152	290	442
Current service cost	80	154	234
Benefits paid	(61)	(274)	(335)
Changes in financial assumptions	(1,751)	(3,563)	(5,314)
Contributions by scheme participants	9	18	27
At 31 March 2022	4,263	7,817	12,080

10.0 Notes to the Financial Statements

20 Retirement benefit obligations (continued)

Defined benefit obligation trends of scheme as a whole as at 31 March 2022

	CNPP £'000	ESPS £'000	Total £'000
Scheme assets	6,349	13,275	19,624
Scheme liabilities	(5,834)	(11,192)	(17,026)
Scheme (deficit)/surplus	515	2,083	2,598

	£'000	£'000	£'000
Experience adjustments on assets	184	508	692
As a % of scheme assets	2.9%	3.8%	3.5%

Defined benefit obligation reconciliation of scheme as a whole as at 31 March 2022

	CNPP £'000	ESPS £'000	Total £'000
Scheme assets	5,003	9,295	14,298
Scheme liabilities	(4,263)	(7,817)	(12,080)
Scheme surplus	740	1,478	2,218

	£'000	£'000	£'000
Experience adjustments on assets	(1,543)	(4,362)	(5,905)
As a % of scheme assets	-30.8%	-46.9%	-41.3%

Movement in overall scheme asset from 1 April 2021 to 31 March 2022

	CNPP £'000	ESPS £'000	Total £'000
(Deficit)/surplus as at 1 April 2021	(325)	274	(51)
Operating costs	(86)	(143)	(229)
Expected return on pension scheme assets	122	250	372
Interest on pension scheme liabilities	(129)	(244)	(373)
Actuarial losses	752	1,610	2,362
Contributions paid	181	336	517
Surplus as at 31 March 2022	515	2,083	2,598

20 Retirement benefit obligations (continued)

Movement in overall scheme asset from 1 April 2022 to 31 March 2023

	CNPP £'000	ESPS £'000	Total £'000
Surplus as at 1 April 2022	515	2,083	2,598
Operating costs	(80)	(154)	(234)
Expected return on pension scheme assets	165	346	511
Interest on pension scheme liabilities	(152)	(290)	(442)
Actuarial gains	208	(799)	(591)
Contributions paid	84	292	376
Surplus as at 31 March 2023	740	1,478	2,218

Amounts recognised in the financial statements

Analysis of amounts recognised in the statement of financial position

CNPP	2023 £'000	2022 Restated £'000	2021 £'000	2020 £'000
Fair value of scheme assets	5,003	6,349	5,934	5,127
Present value of scheme liabilities	(4,263)	(5,834)	(6,259)	(5,117)
Net pension asset/(liability)	515	(325)	10	(400)
Net pension surplus/(deficit)	740	515	(325)	10
Reduced to the extent the right to surplus is contingent	(740)	(515)	-	-
Surplus/(deficit) recognised in the statement of financial position	-	-	(325)	10

ESPS	2023 £'000	2022 Restated £'000	2021 £'000	2020 £'000
Fair value of scheme assets	9,295	13,275	12,386	10,688
Present value of scheme liabilities	(7,817)	(11,192)	(12,112)	(9,822)
Net pension surplus / (deficit)	1,478	2,083	274	866
Reduced to the extent the right to surplus is contingent	(1,478)	(2,083)	-	-
Surplus/(deficit) recognised in the statement of financial position	-	-	274	866

10.0 Notes to the Financial Statements

20 Retirement benefit obligations (continued)

Total	2023	2022	2021	2020
	£'000	Restated £'000	£'000	£'000
Fair value of scheme assets	14,298	19,624	18,320	15,815
Present value of scheme liabilities	(12,080)	(17,026)	(18,371)	(14,939)
Net pension surplus / (deficit)	2,218	2,598	(51)	876
Reduced to the extent the right to surplus is contingent	(2,218)	(2,598)	-	-
Surplus/(deficit) recognised in the statement of financial position	-	-	(51)	876

Included in administrative expenses

	2023 CNPP £'000	2023 ESPS £'000	2023 Total £'000	2022 CNPP £'000	2022 ESPS £'000	2022 Total £'000
Current service cost	80	154	234	86	143	229
Expected return on plan	(165)	(346)	(511)	(122)	(250)	(372)
Interest cost	152	290	442	129	244	373
Defined benefit pension cost	67	98	165	93	137	230

The sensitivity of the defined benefit obligations to the principal actuarial assumptions is as follows:

	2023 CNPP £'000	2023 ESPS £'000	2023 Total £'000	2022 CNPP £'000	2022 ESPS £'000	2022 Total £'000
0.25% reduction in discount rate	175	325	500	325	600	925
0.25% increase in rate of inflation	175	325	500	325	600	925
Life expectancy increased by 1 year	125	200	325	175	400	575

The table above shows the increase in liabilities in each scheme which would result from the stated change in assumption.

The above sensitivity analyses are based on a change in assumption while holding all other assumptions constant. In practice this is unlikely to occur and changes in some of the assumptions might be correlated. When calculating the sensitivity of the defined benefit obligation to the principal actuarial assumptions the same method (that is the projected Unit Credit method) has been applied as when calculating the defined benefit liability recognised in the balance sheet.

Contributions to defined benefit plans in the year to March 2023 are:

	2023 CNPP £'000	2023 ESPS £'000	2023 Total £'000	2022 CNPP £'000	2022 ESPS £'000	2022 Total £'000
Employer contributions	84	292	376	181	336	517
Employee contributions	9	18	27	8	17	25
Total	93	310	403	189	353	542

21 Related party transactions

	2023	2022	2023	2022	2023	2022	2023	2022
	Sales of goods/services		Amounts owed by related parties		Purchases of goods/services		Amounts owed to related parties	
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
DESNZ	10,421	20,843	4,948	1,626	57	-	-	-
MOD	1,329	652	274	-	-	-	-	-
NDA	8,280	9,396	164	693	784	1,237	-	154
SL	44,222	44,127	1,284	38	4,229	4,078	319	9
RWM	629	379	40	-	-	16	-	-
Dounreay	117	335	-	245	-	-	-	-
Innovate	-	61	-	-	-	-	-	-
Magnox	114	67	-	-	44	44	-	-
UKAEA	59	65	-	-	-	182	-	-
HSE	10	-	-	-	-	24	-	-
EE	53	-	-	-	81	29	-	-
UKRI	13	-	-	-	-	-	-	-
Home Office	150	-	-	-	-	-	-	-
AWE Plc	637	172	245	-	344	401	31	-
Springfield	2,268	2,423	269	-	3,149	-	524	-
ONR	-	-	31	-	763	555	64	-
NPSA	-	-	82	-	-	-	-	-
LLW Repository Ltd	4	-	-	-	-	-	-	-
Calder Ind. Materials	-	-	-	-	19	20	-	-
SEPA	7	-	-	-	-	-	-	-
DS&T Laboratory	23	-	6	-	-	-	-	-
Total	68,336	78,520	7,343	2,602	9,470	6,586	938	163

Undertakings under common control of the Government are the Department for Energy Security and Net Zero (DESNZ), Ministry of Defence (MOD), Nuclear Decommissioning Authority (NDA), Sellafield Limited (SL), Radioactive Waste Management Limited (RWM), Dounreay Site Restoration Limited (Dounreay), Innovate UK, Magnox Limited, UK Atomic Energy Authority (UKAEA), Health & Safety Executive (HSE), Environment Agency (EE), UK Research & Innovation (UKRI), The Home Office, Springfield Fuels Limited, Office for Nuclear Regulation (ONR), National Protective Security Agency (NPSA), Defence Science & Technology Laboratory and the Scottish Environment Protection Agency (SEPA)

Since the financial year ended 31 March 2023 all of the amounts owed by related parties have been settled by cash and a balance of £Nil remains (2022 - £Nil).

10.0 Notes to the Financial Statements

22 Controlling party

All of the share capital of NNL is owned by its parent, NNL Holdings Limited. NNL Holdings Limited's country of incorporation is the United Kingdom, and its registered address is Chadwick House, Warrington Road, Birchwood Park, Birchwood, Warrington WA3 6AE. The results of NNL are consolidated in the group financial statements of NNL Holdings Limited which are publicly available.

The entire issued share capital of NNL Holdings Limited is owned by the Secretary of State for Energy Security and Net Zero. In the directors' opinion, NNL's ultimate controlling party is His Majesty's Government.

24 Prior period adjustment

During the year under review, the directors reconsidered the impact of IAS 19 and IFRIC 14, and whether the Company has an unconditional right to a surplus of the defined benefit schemes. As a result, a prior period adjustment has been recognised to correct the 2022 comparatives in these financial statements. The adjustment affected the following line items in the 2022 comparatives:

	2022 Original £'000	2022 Adjustment £'000	2022 Restated £'000
Changes to statement of comprehensive income			
Actuarial gains/(losses) in defined benefit pension schemes, net of tax	1,775	1,948	(173)
Total other comprehensive income/(expense), net of tax	1,775	1,948	(173)
Total comprehensive income/(expense)	10,481	(1,948)	8,533

23 Subsidiary Company

NNL owns all of the share capital of Nexia Solutions Limited, a non-trading company with issued share capital of £1.

24 Prior period adjustment (continued)

	2022 Original £'000	2022 Adjustment £'000	2022 Restated £'000
Changes to the statement of financial position			
Retirement benefit obligations	2,598	(2,598)	-
Total non-current assets	116,395	(2,598)	113,797
Total assets	204,343	(2,598)	201,745
Retained earnings	88,096	(1,948)	86,148
Deferred tax	3,738	(650)	3,088
Total non-current liabilities	72,357	(650)	71,707
Total liabilities	116,222	(650)	115,572
Total equity and liabilities	204,343	(2,598)	201,745

	2022 Original £'000	2022 Adjustment £'000	2022 Restated £'000
Changes to the statement of changes in equity			
Actuarial gains/(losses) in defined benefit pension schemes	1,775	1,948	(173)
Total comprehensive income at 31 March 2023	10,481	(1,948)	8,533

National Nuclear Laboratory
5th Floor, Chadwick House
Warrington Road, Birchwood Park
Warrington WA3 6AE
T. +44 (0) 1925 933 744
E. customers@uknnl.com
W. nnl.co.uk

National Nuclear Laboratory Limited
Company registration number 03857752