

# Science and Technology Strategy



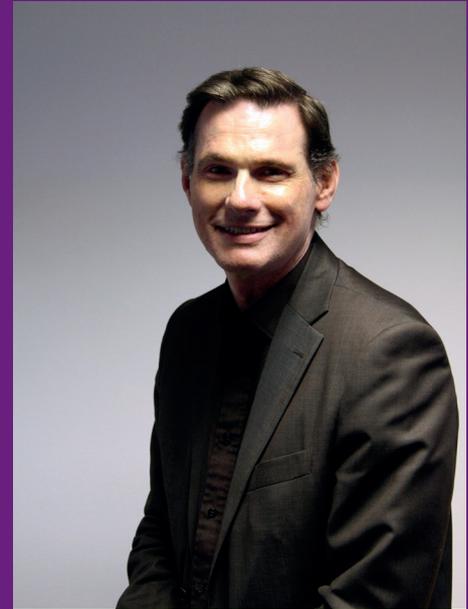
# Introduction

The next decade will see tremendous changes to the nuclear sector worldwide with an expansion in nuclear new build, a growth in decommissioning and waste management and the prospect of Small Modular Reactors (SMRs) and accident tolerant fuel. We are at an exciting time in our industry.

For the UK's National Nuclear Laboratory this presents an opportunity to make an impact. Positioned at the frontier of nuclear science and technology ensures NNL offers the best strategic technical advice, provides the best integrated solutions and delivers innovative products and services to industry for the wider benefit of society.

Our vision is to provide the best nuclear science and technology solutions in the world. This strategy sets out the core elements of how we will achieve this.

Our focus will be on promoting excellence in our programmes, people and facilities. Our links with a living network of universities and industry in the UK and overseas will ensure the quality and relevance of the solutions we provide.



## 2020 Vision

- To be the UK's premier nuclear fission science and technology organisation
- To be in the top 10% of similar organisations worldwide
- To lead the international community in at least five fields of nuclear science and technology



Innovative Programmes



Outstanding People



Leading edge facilities

# Science and Technology

## Innovative Programmes



NNL will deliver innovative science, technology and engineering ... that drives impact in national and international programmes.

Technical Quality 

Commercial Focus 

Targeted Innovation 

## Outstanding People



NNL will attract and develop outstanding people ... who deliver quality, grow reputation and exert influence.

Targeted Recruitment 

Technical Development 

Career Progression 

## Leading Edge Facilities



NNL will ensure the UK is supported by outstanding facilities ... that enable national and international R&D collaboration and delivery.

Strategic Investment 

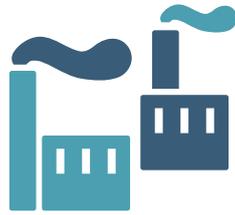
Facilitate Access 

Maximise Utilisation 

**Programmes**



Quality



Focus



Innovate

**People**



Recruit

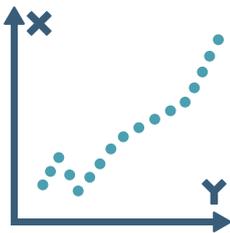


Develop



Progress

**Facilities**



Invest



Access



Utilise

**Enablers**



Knowledge



Partner



Engage

## Innovative Programmes



### Technical Quality

We will enhance technical quality and grow reputation through training and mentoring, increasing journal publication and international engagement.



### Commercial Focus

We will grow commercial R&D revenue in areas that align with NNL's capability, drive innovation into national programmes and maintain the UK's strategic nuclear capability.



### Targeted Innovation

We will establish a growing track record of innovation by bridging relevant academic research with the technical challenges of the nuclear industry. This will include doing so via SMEs.

## Outstanding People



### Targeted Recruitment

We will attract high quality people to join and remain in our science and technology community by recruitment, secondment and technical career progression.



### Technical Development

We will develop the capability, technical leadership and reputation of NNL staff through training, R&D programmes, and secondments to and from academia and industry.



### Career Progression

We will enhance the influence of staff through our Laboratory Fellowship, working with the professional institutions and contributing to expert panels of national and international significance.

## Leading Edge Facilities



### Strategic Investment

We will align capital investment in nuclear facilities and equipment with national programme needs, building an integrated capability of national facilities with wide access.



### Facilitate Access

We will develop a User Facility model to grow the access for staff, academia and industry experts to our facilities to strengthen national and international collaboration.



### Maximise Utilisation

We will enhance R&D programmes by engaging with our living network of universities and industry, to maximise the utilisation of our facilities and the return on investment for the UK.

## Enablers



### Knowledge Management

We will deliver knowledge management tools to capture, store and provide access to historic and current nuclear knowledge for our workforce, through our internal archive and the scientific literature.



### Strategic Partnerships

We will establish strategic partnerships with industry and universities and academic research networks to accelerate the flow of new knowledge and new skills into the sector, and to enhance the impact of innovation.



### International Engagement

We will enhance international engagement to grow NNL's reputation and influence by engaging with international R&D programmes, national laboratories, expert panels and strategic advisory groups.

# Outcomes

A successful outcome of this strategy will mean that we are:

An influential organisation that delivers the highest quality, impartial advice to government, nuclear stakeholder organisations and the international community.

An internationally-recognised national laboratory with the facilities and people that deliver integrated programmes, provide new technology, and offer the best strategic technical advice.

A UK hub for world-class nuclear R&D that connects the new knowledge and skills in universities through accelerated development to deployment in national programmes.



**Delivering the best nuclear  
science and technology  
solutions in the world**

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