



# THE CONNECTION IMPERATIVE

How a culture shift can make  
the UK nuclear industry pivotal  
to net zero and beyond

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### Acknowledgments

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# FOREWORD

The UK Government's Energy White Paper, *Powering Our Net Zero Future*, sets out an ambitious pathway to how the UK will clean up its energy system and reach net zero emissions by 2050. The paper makes it clear that nuclear energy generation and decommissioning *can* play a significant role in decarbonisation of the UK's energy system – *and* it is in the hands of the sector to deliver and prove it can be trusted to do more.

The Nuclear Sector Deal refresh, published in July 2021, sets out the sector's ambitions for the role nuclear should play in delivering the path to net zero. With the United Nations Climate Change Conference COP26 on the horizon in November 2021, there has never been a more important time for leaders to coalesce around a compelling purpose and be clear on the role nuclear will play in a net zero world. This can only be done if the sector can agree on its purpose and drive a culture of connectedness.

To date, the debate around the prevailing nuclear culture to deliver on its ambitions has been limited. This report – conducted in association with the Nuclear Industry Association (NIA) – and its findings leans directly into this discussion. It is based on discussions with industry leaders and the next generation of leaders from across the UK nuclear sector – including the largest ongoing nuclear projects in the UK. Our report provides an insight into culture through the lens of leaders and the ambitions, opportunities, challenges and frustrations they share at both a sector and organisational level.

Based on these insights, we believe there is an opportunity to reimagine the future of nuclear and redefine some of the cultural norms holding the sector back from realising its ambition.

**Nuclear energy generation and decommissioning can play a significant role in decarbonisation of the UK's energy system – and it is in the hands of the sector to deliver and prove it can be trusted to do more.**

At PA, we believe in the power of ingenuity to build a positive human future in a technology driven world. In this report, we've set out five recommendations that we believe will be a catalyst for the role nuclear *will* play:



## 1. Reframing and reinforcing nuclear's purpose

To create intrinsic motivation to perform and deliver, innovate and experiment, and take personal responsibility to continually learn and improve.



## 2. Activating inclusion

Where nuclear moves from a culture where 'knowledge is power' to one where diverse thought is far more powerful.



## 3. Creating urgency for performance

Where contentment with compliance is replaced by purpose-driven pursuit of improved outcomes.



## 4. Collaborating to innovate

Shifting from inward-looking reflection and protection to value being maximised by a united ecosystem.



## 5. Embedding new mindsets

Moving from safety as an inhibitor of innovation to one that also values collaboration, delivery and commercial outcomes.

Throughout the report we have consciously described a sense of urgency. The opportunity for nuclear to play a leading role in the path to net zero is now and is timebound.

We are urging you, as a key player in the sector, to get behind a renewed purpose for nuclear that can connect us all.



**JULIANNE ANTROBUS AND CHRIS SHERYN,**  
PA nuclear and operational excellence experts,  
and members of PA's management group



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## AN OPPORTUNITY TO BECOME MORE PROMINENT AND PROGRESSIVE

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It's an exciting time for the nuclear sector. It has the chance to play a significant role in contributing to national and international climate change targets, and in doing so becoming a thriving sector at the heart of the economy.



## Nuclear needs to prove it is fast-moving, ambitious and able to meet the Government's bold ambitions.

This is particularly true in the UK, home to the world's most ambitious climate change targets. The country aims to reduce carbon emissions by 78 per cent by 2035 compared to 1990 levels, and to bring all greenhouse gases to net zero by 2050. In its Energy Whitepaper, the Government set out the role nuclear could play in a net zero future. This includes delivering at least one large-scale nuclear project to the point of Final Investment Decision by the end of this parliament. And Government has indicated it's open to further investment "if the nuclear industry demonstrates that it is able to reduce costs and deliver to time and budget".

This last point is telling. More than 60 years ago, the UK was home to the world's first full-scale civil nuclear power industry. The sector now employs 60,000 people in the UK, and it contributes around £7 billion gross value added to the economy each year. It also supports jobs and investment in some of the most remote areas of the UK. But the sector is being challenged to prove its ability to contribute to net zero; to demonstrate it can decommission at speed, collaborate more effectively, and be more innovative. Nuclear needs to prove it's fast-moving, ambitious and able to meet the Government's bold ambitions.

So far, the industry has communicated its ability to technically contribute to net zero through the production of green hydrogen. But there are question marks over the industry's drive to achieve that contribution. The sector is often perceived as compliance-minded, conservative and inward-looking.

This focus on safety is understandable – and has delivered results. You're five times more likely to be struck by lightning than be caught up in a nuclear accident in the UK. But for too long, safety has come at the expense of progress. Major innovation is lacking. For instance, the UK is yet to advance beyond preliminary scoping into the delivery of either small modular reactors (SMRs) or advanced modular reactors (AMRs).

The nuclear industry is hampered by safety being seen as a performance factor rather than a hygiene factor. Other safety-driven industry cultures – for example, oil and gas, and aviation – have managed to deliver safety and improved performance. Aircraft manufacturers don't market their planes on the basis they'll stay in the air. It's a given. Now it's time for the nuclear sector to recognise high performance and high compliance aren't competitive forces. They're complementary.

### Nuclear's contribution to the UK



# 60,000

People employed by the sector



# £7 BILLION

Yearly gross value added contribution to the economy

## HOW TO MOVE ON

To further explore these issues, we spoke to 20 leaders from across the nuclear industry, including CEO-level respondents, to discuss the cultural realities of nuclear securing a vital role in a net zero future and beyond. Speaking to leaders from across the nuclear fuel cycle, we set out to determine how nuclear can become a reliable, sustainable, large-volume provider of clean energy – a sector that is more prominent and progressive.

Achieving this will take dynamism, decisiveness and determination. But it can be done – with a significant cultural shift. Organisations – and sectors – thrive when people feel strongly connected to their work, their organisations, their sector and their role in society.<sup>1</sup> We believe nuclear leaders need to create a culture of purpose-driven connection across both their organisations and the sector as whole; a culture where safety becomes a given, complemented by high performance, delivery and pace. They should do this by:

- 1. Reframing and reinforcing nuclear's purpose**
- 2. Activating inclusion**
- 3. Creating urgency for performance**
- 4. Collaborating to innovate**
- 5. Embedding new mindsets**

We've drawn on the combined expertise of those working in the industry, along with our organisational and behavioural experts, to explain why and how the industry must change.

If nuclear makes these changes, major opportunities await: a more prominent seat at the net zero table; a stronger, more progressive sector; and one that retains safety while delivering against society's needs.

**Nuclear leaders need to create a culture of purpose-driven connection across both their organisations and the sector as whole.**



## WHY NUCLEAR HAS TO CHANGE

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The UK nuclear industry can make an essential and material contribution to providing clean, sustainable, low cost energy for future generations. In doing so, it would enable the UK to become a net zero economy by 2050.





Nuclear is an industry that can provide not just highly skilled jobs, but long-term careers in capabilities in which the UK already leads the world. The location of many UK nuclear sites can also bring much-needed economic growth to regions, enabling the UK to 'build back better' in a post-COVID-19 and post-Brexit world – and for generations to come. Brexit creates more opportunities for the UK government to partner with countries from outside the EU – many of which see the UK nuclear industry as an appealing investment option. And the quality of the nuclear industry in the UK gives it both a global supply chain and global appeal.

Both the industry and organisations within it have an opportunity to make more impact, deliver more for customers and create more motivated workforces.

For this to happen, nuclear needs to up its game. It needs to look beyond the delivery of tasks to *how* it gets things done. This means going beyond delivering to the contract, and looking at behaviours, relationships and interactions that augment the entire experience. In short, being able to deliver safety plus high performance.

New people from other industries are frustrated by the risk aversion and bureaucracy

## THE INDUSTRY’S VIEW

We invited UK nuclear leaders and experts to share their perspectives on the current state of the industry and its culture. In our interviews, we asked about the most pressing opportunities facing individual organisations and the sector as a whole.

When leaders and experts shared their perspectives on industry opportunities, the dominating themes were the contribution nuclear can make to climate change, economic development and employment. They are energised and motivated by those opportunities and the contribution the industry can make. They also recognise that wind and solar are expected to make a greater contribution to net zero; that the narrative around nuclear is often conflicted; and that there are real and perceived barriers to entry – both economic barriers for investors, and inclusion challenges for potential employees.

They argue the culture of the UK’s nuclear industry is strong in many ways. It’s focused on something positive, meaningful, and purposeful for people – namely safety: both nuclear and conventional. And this culture is well embedded; not just in policies, systems, and procedures. It’s embedded in daily working practices and the dialogue and stories that do the rounds, shaping the way people think and behave.

But right now, this culture is what’s stopping the industry from realising its ambitions. When we asked leaders about the extent to which the culture of the industry is aligned to realising opportunities, feelings were not positive. Leaders suggested that while the current culture upholds impressive levels of safety, it also inhibits the industry’s ability to achieve available opportunities. A participant in our survey observed: “New people from other industries are frustrated by the risk aversion and bureaucracy.”

The unintended and long-term consequences of this risk-averse, compliance-minded and conservative culture are:

- a ‘nuclear premium’ of time and cost is accepted, even where it is avoidable
- the pace of delivery is slow
- complex decision-making is inhibited because people feel a need for definitive, predictable outcomes
- the industry can be inward-looking and conservative
- it’s a struggle to attract and retain diverse talent.

In our view, there are three types of connection essential to the dynamic, innovative culture the industry needs now: logical, emotional and brand.

### How nuclear leaders characterise the culture of the industry

A summary of leaders’ perspectives on the culture of the industry and how aligned it is to realising opportunities.



## WHY CONNECTION MATTERS

Employees are always connected to something, and the extent of, and object of that connection, drives their performance. This ranges from the passive "I only turn up to do what they ask me to do and take the pay" to the apocryphal, motivated NASA janitor who told John F Kennedy: "Mr President, I'm helping to put a man on the moon."<sup>2</sup>

By 'connected' we mean the level of understanding, engagement and emotional connection people have to the organisation's objectives and priorities – and to their colleagues. This connection needs to be at both the industry and organisational level. Most organisations have a relatively well-defined business strategy, and a programme of activity designed to deliver this. Many organisations, however, fall down in the doing. They fail to engage and motivate their employees, which reduces the discretionary effort people apply.

In considering the level of 'connection' employees have with their organisations, we're better able to determine the extent to which they're engaged with, and aligned to, organisational ambition. There are three primary types of connection:

### Logical – what I'm here to do.

This is about connecting people to the tangible aspects of performance – such as goals, targets, policies and processes, and quantitative performance measures. Logical connection provides essential direction and control.

An over-emphasis on logical connection, without a balance of the why and the how, creates a compliance-based culture, where people do what's required but discretionary effort is lacking.

### Emotional – why I do what I do.

This relates to the intangible levers of what motivates us to perform, such as a sense of purpose, values, attitudes of those around us, and non-financial recognition.

Connecting people to the purpose of their organisation, and to a sense of 'all being in it together' with their colleagues, is a powerful way of unlocking intrinsic motivation and step changing performance, especially in safety-critical environments.

### Brand – how I do what I do.

A well-developed brand gives organisations and industries both a logical and emotional construct for performance, and an essential lever on behaviours, by establishing a strong expectation of what makes us different.

A brand represents an expression of strategy (who we are, what we stand for, what we put priority on, and our point of uniqueness). However, because personal experience drives perceptions (internal and external) of any brand, it's also a highly emotional construct.

### The Business Connection Framework

Diagnoses the level of understanding and engagement people have to the organisation's priorities. Identifies organisational strengths to build upon, and where strategic themes need to be aimed.

	Logical connection	Emotional connection	Brand connection
What are we aiming for?	Goals	Meaningful purpose	Promise
How will we do it?	Strategies	Shared values	Experience
What's my role?	Tasks	Attitudes	Behaviour guiderails
How are we doing it?	Measurements	Encouragement	Stories
Are we serious?	Actions	Walk the talk	Conversations

The UK nuclear industry lacks strong emotional and brand connections. In our conversations, the concept of ‘brand’ isn’t well embedded. It’s seen to be more at home in the warm offices of advertising agencies than the challenging environments of engineering and construction.

Creating these connections is imperative if nuclear is to achieve its ambitions and ensure its continued prominence in a sustainable UK energy future. For leaders in nuclear, one of the greatest challenges over the next three years is to create a deep and meaningful connection to a reframed purpose. A shared, ambitious purpose can create a culture of connection where safety is a given and where high performance, delivery and pace are enabled.

**Nuclear leaders need to create a culture of connection across their organisations and industry where, fuelled by a shared and ambitious purpose, safety is a given and pace and delivery dominate.**

## NEXT STEPS

We believe the industry has an opportunity to more strongly connect people to achieve much greater levels of performance. Leaders need to balance a strong, rational, compliance-minded connection – a focus on what people do – with a focus on why they do what they do and how they need to do it.

To make sure the UK nuclear industry plays its critical role in the drive to net zero, there are five steps for leaders to consider both in their individual organisations (pages 16-31) and across industry (pages 32-34). It’s important to recognise the two-way street. As one sector expert told us: “Culture is thought of through the lens of the company rather than the industry.”

The culture of the industry is an aggregation of the organisations’ cultures – and the organisations’ cultures themselves reflect the industry. So there’s work to be done in parallel at both levels. Those steps will ensure the industry and organisations sustain the logical connections people already have and develop the emotional and brand connections they lack now.

## A WIDER VIEW

The tendency to see nuclear as unlike any other sector is also hindering progress. Plenty of other sectors – such as energy and utilities, aviation and rail – have similar characteristics: safety critical, security critical, unionised, and project based.

We think leaders need to lift their eyes and see what they can learn about culture from elsewhere. That's why we've included in this report examples of successful culture change in a range of sectors.



## RECOMMENDATIONS FOR LEADERS OF ORGANISATIONS IN THE NUCLEAR INDUSTRY

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We're starting with the recommendations for organisations to reflect a bottom-up approach. In our experience, change that has its origins within is most likely to stick.





## 1. REFRAME AND REINFORCE NUCLEAR'S PURPOSE

Regardless of sector, the highest-performing organisations are those where people are emotionally connected to a clear, consistent and compelling purpose. A deep and meaningful connection to purpose creates intrinsic motivation to perform and deliver, innovate and experiment, and take personal responsibility to continually learn, improve and develop.

Leadership has a powerful role to play here. By moving from 'command and control' to 'sense and respond', leaders can liberate their teams and help them connect to purpose. One respondent told us that their teams were willing to put in exceptional effort in challenging conditions because "we knew the bosses trusted us to make the right decision, so we did what we had to do to get it done rather than pass the buck".

Leaders should be looking to drive nothing less than social change. In practice, this means driving in-depth changes in how people interact, forming better working relationships that transform the organisation culturally and socially. This requires employees who are both inspired by and connected to the purpose. The end result: employees who advocate for the organisational and industry purpose in the same way they would for causes they're passionate about outside the workplace.

## ORGANISATIONS NOW

Our conversations with industry leaders and experts explored two questions about the role of leadership in creating a connected culture. We asked about the extent to which influential leaders model the target culture. And we asked about the impact of their organisation's purpose on behaviour.

In these conversations, just over half of our interviewees said leaders didn't model the behaviours needed to create a culture of delivery, pace and collaboration. Very few leaders said people in their organisation were well-connected to its purpose. Half said their managers overwhelmingly had an engineering and technical focus, rather than a leadership mindset. The 'purpose gap' has been filled by a strong safety imperative. One interviewee commented, "Leaders are more custodial than transformational. Those who come from other sectors are broader in their outlook."

There was strong alignment from those we interviewed that current leadership capabilities aren't up to the job. Our interviewees recognised the bias of leaders towards:

- managing performance of processes and tasks – as opposed to leading and coaching people to take the initiative and personal responsibility to perform
- seeking certainty – as opposed to working with complexity and ambiguity
- performing to a clear standard – as opposed to understanding and delivering customer value.

What's needed is a complex balancing of levers of performance, which will require new leadership capabilities. An example is balancing how some individuals work most productively on projects on their own, remotely, with the need at other times in the project to maintain and grow networks and relationships to enable collaboration.

Leaders are more custodial than transformational. Those who come from other sectors are broader in their outlook

Those capabilities include making complex decisions, dealing with trade-offs between the performance levers, and leading people into a less monolithic, less binary world of work. The complexity comes from a number of sources. Remote working, driven by COVID-19, has exposed the reality that managers cannot control people's day-to-day actions, so need to find new ways to lead. It also comes from potential post-Brexit global trading relationships and the pace of work required by the drive to net zero.

When it comes to defining nuclear's purpose, leaders discussed the 2050 clean energy focus and the opportunity to further develop nuclear's perception and branding. Some of the leaders spoke about the need to reposition the industry internally and externally. A strong purpose can achieve this and make nuclear more attractive to employees, investors and the wider public. As one leader said: "There's an important link for us between our purpose, social impact and our strategy."

**A strong purpose can reposition the industry internally and externally, and make nuclear more attractive to employees, investors and the wider public.**

## HOW TO REFRAME AND REINFORCE YOUR PURPOSE

- Is your organisation's stated purpose aligned with the drive to net zero? If not, work with a team across the organisation to update it. When your stated purpose lines up with today's opportunities and responsibilities, put it front and centre in your branding, and in your internal and external communications.
- Diagnose the extent to which employees and critical supply chain partners are connected to your organisation's purpose and investigate any areas of disconnection. This is where it's important to consult, listen and act on the opinions of your employees and critical supply chain partners. As our experience with a global media company shows (see opposite, page 19), you can't shift culture without input from those who really understand the business and how it operates.
- Develop people considered influential at all levels of the organisation to encourage dialogue that creates an emotional connection between your purpose and how people perform their day-to-day tasks.
- Recognise and reward individuals and teams who achieve significant outcomes in line with your purpose. In doing so, specifically emphasise the behaviours that led to the outcomes, not just the effort.

## Global media business

### Heading for growth by connecting people to purpose

A global media organisation with an ambitious growth strategy needed to bring out the very best from their highly-skilled creative teams. They wanted our help in developing the specific cultures that would help each of their six major regional hubs to flourish – both in terms of people being productive and happy in their jobs.

Our People and Talent experts launched a comprehensive programme, including staff surveys, workshops, one-to-one interviews and focus groups, taking in more than 500 team members and over 40 of the company's leaders. This gave us solid evidence for understanding the existing culture. In one hub we found people were duplicating efforts, which was leading to frustration. In another, the leadership team were struggling to communicate. As well as uncovering problems, the programme allowed leaders and team members to articulate how they wanted the culture to be, and how to get there.

We helped each hub develop its own culture change plan. These featured practical, innovative ideas, quick wins for the first six months and goals for each of the following six-month periods to keep up momentum. In each case we tailored the recommendations to the specific regional culture.

Ideas included running 'myth-busting' sessions where leaders explained the truth behind rumours that people wanted to know about. Another was to help leaders feel comfortable developing more informal relationships with their teams. The highly practical plans set the organisation on a clear course to develop the cultures they need to prosper and grow.



## 2. ACTIVATE INCLUSION

Inclusion in the workplace goes beyond breaking down cliques and having a more demographically diverse workforce, although clearly those things are important.

A truly inclusive workforce has and welcomes a spectrum of thoughts and opinions – all of which are equally valued and listened to. With diverse thought that's fully included in the DNA of an organisation, there comes the potential for true innovation and real growth.<sup>3</sup>

**Engineering thinking and nuclear-specific knowledge has long been the yardstick by which the importance of individuals' contribution is judged.**

## ORGANISATIONS NOW

Our conversations highlighted that engineering thinking and nuclear-specific knowledge has long been the yardstick by which the importance of individuals' contribution is judged. Leaders spoke of a mindset of 'knowledge is power' – rather than insight, applied in the right way, being powerful.

While deep domain knowledge clearly plays an essential role in the success of nuclear organisations, it becomes a limiting factor if it exists to the exclusion of diverse thought and the challenge that this brings. This 'intellectual snobbery' can (and often does) preclude collaboration; stifling creative thought, innovation and the pace of delivery.

Our interviewees acknowledged the problems 'outsiders' face. One observed: "The industry does bring in good people from other industries, but the environment dampens down their ideas and enthusiasm: industry structures, procedures and thought processes slow things down." There's also limited diversity, as indicated by the figures opposite (page 21).

## HOW TO ACTIVATE INCLUSION

- Consider and insist on inclusion at all levels of an organisation – from the leadership team to employees and supply chain partners. Build inclusion into processes for attracting, recruiting, onboarding and integrating into the organisation, and for assessing how to remain attractive and retain employees and supply chain partners.
- Use AI to interrogate your policies and people processes and identify where there's bias in language and application. Work with inclusion and HR specialists to de-bias, involving your stakeholders, which may include trade unions.
- Support sabbaticals/secondments of staff into and out of organisations to share learning and continuously create an environment of divergent thinking.
- Build diverse teams, pulling together people with different backgrounds and perspectives to create dissonance – a creative environment where no one's afraid to bring a new viewpoint or challenge ideas.
- When reimagining the future of your workplace and a hybrid working from home and site operating model, involve a substantial and diverse cross-section of employees and supply chain partners. Aim to encourage your whole workforce to contribute their perspectives and ideas.

Diversity within the nuclear workforce<sup>4</sup>

NUCLEAR WORKFORCE IN UK



**20%**

female



**40%**

experienced  
hires from  
outside sector



**20%**

of workforce  
over 54

## UK Space Agency

### Activating inclusion to achieve global space race ambitions

The UK Space Agency (UKSA) has grown rapidly in the past few years, with the aim of occupying a strategic player position in the recent global space race. UKSA is committed to becoming more diverse and developing an inclusive culture, recognising its value in innovation. But maintaining a close, inclusive community has been challenged by both the agency's growth trajectory and the rapid adoption of remote working due to the COVID-19 pandemic.

UKSA was looking for an assessment of its current level of inclusion and diversity (I&D) maturity to understand the actions it needs to take to create a more inclusive culture, and ensure it can attract, develop and retain critical talent.

We adapted a diversity and inclusion maturity model to enhance the PA Inclusive Culture Shaping Model to give a comprehensive and holistic overview of I&D. Our experts undertook an in-depth review of HR data and documentation; conducted interviews with the Executive Board, diversity networks and other key stakeholders; ran employee focus groups and a survey to understand the status of I&D in the agency; and assessed the gap between the status quo and desired outcomes. This data enabled the development of an action plan with recommended areas of improvement which covered: I&D Vision & Strategy; Governance & Accountability; I&D Data; I&D Behavioural Change; Inclusive Leadership Development; Line Manager Development; and I&D Employee Lifecycle.

A clear roadmap was delivered to outline the activities that would support the agency's journey to move up the maturity model and achieve behaviour change. Since this work was completed, the agency has built I&D into its People Strategy and engaged its diversity networks and People Group before launching it across the organisation. UKSA now has clear roles and responsibilities for I&D across the organisation. The action plan enabled UKSA to integrate I&D into its everyday business activity and provide a clear pathway to help improve strategic planning and achieve 'true' inclusion in the agency.

If people in an organisation don't feel a sense of urgency, they're likely to default to the status quo.



### 3. CREATE URGENCY FOR PERFORMANCE

There's nothing like an approaching deadline to focus the mind. If people in an organisation don't feel a sense of urgency, they're likely to default to the status quo. If the primary mindset is compliance, then any sense of urgency will dissipate when compliance is achieved.

In other innovative, purpose-driven sectors, urgency is directed towards the pursuit of purpose – an infinite pursuit that constantly and consistently demands ingenuity of individuals, teams and enterprises. Participants in such sectors recognise their connection to the purpose and accept that they have two enduring roles: to do the work and to improve the work. Our work with a safety-critical infrastructure operator (see page 25) shows how you can kickstart a transformation.

### ORGANISATIONS NOW

One major challenge for the UK nuclear industry is that the 2050 net zero deadline, while clear and compelling, is too far away to affect the work people do today. As an interviewee observed: "Timelines are so long, which arguably creates an inability for an individual to understand their role: milestones are usually 10 years apart." In fact, the industry doesn't yet have an agreed roadmap of stretching and ambitious targets to get to 2050.

When we asked senior leaders about culture, just under half said the industry lacked urgency and pace. While safety and compliance are critical, there's a growing consensus that it's the achievement of this 'gold standard' that's slowing things down. As one leader told us: "The strive for perfection inhibits moving at pace and sometimes safety is used as an excuse for not doing things."

Timelines are so long, which arguably creates an inability for an individual to understand their role

## HOW TO CREATE URGENCY FOR PERFORMANCE

- Recognise the difference between outputs and outcomes. Outputs are necessary to evidence physical achievement; outcomes evidence the value of those activities in pursuit of the organisation's purpose. Judge the success of projects by their contribution to your organisation's purpose. Set them up with a clear link to the purpose.
- Create short interval milestones overtly connected to goals and purpose – as a continuous process rather than a one-off KPI cascade. For example, try tasking all your teams to agree, set and review quarterly 'team goals' that include three outcomes (what they will do) and three behaviours (how they will do it). Get teams to review and reset their team goals every quarter, report on both the achievement of the outcomes, and evidence how they've achieved it (the behaviours).
- Use the quarterly reviews as an opportunity to learn from experience and continually improve – including sharing insights and successful ideas with other teams, so they too can deliver with greater urgency and efficiency in the next team goals cycle.
- Align recognition, reward and development to reinforce the importance of behaviours or activities that build a sense of urgency for performance. Recognise and celebrate what people do to produce meaningful and urgent progress – because these are largely behavioural they align more with intent and endeavour than output.

## Safety-critical infrastructure operator

### Transforming people's attitude to performance to accelerate efficient mission delivery

With a critical mission and a need for financial prudence, a critical infrastructure operator needed its whole workforce to make their best contribution. It needed people to come to work wanting not just to deliver their work, but also improve how they work.

Many employees viewed the organisation's existing performance management process as an annual corporate ritual and opted out of the process. We worked with the organisation to design a programme that would help people understand no-one is ever the finished article when it comes to improving performance.

We worked with the client to introduce high performance behaviours into existing routines. That made it easier to ingrain the idea of performance as something practical – not an extra project. Line managers set team and individual goals, instigated regular check-ins and opportunities to give feedback. These goals and conversations cover how people work, not just what they do. The organisation recruited and developed a network of 160 credible influencers to set the tone, and the organisation invested in an IT performance platform that can be used in real time, and is accessible from various devices.

The organisation saw significant improvements within months:

- performance focus increased by 190 per cent
- behaviour focus increased by 200 per cent
- wellbeing focus increased by 68 per cent
- safety-critical tasks that once took three months were completed in three weeks.

One reason for this success was our collaboration with the client, transferring capabilities to their team from the outset.



## 4. COLLABORATE TO INNOVATE

Pan-industry research repeatedly demonstrates the value of collaboration both ‘vertically’ (with closer, more interdependent relationships between tiers in the supply chain), and ‘horizontally’ (with collaboration across the sector). And as the engineering and security organisation example (page 28) shows, you can influence collaborative behaviour.

Factors external to the industry – such as a clearer demand signal from Government, for example – will undoubtedly enable and accelerate collaboration. But there’s already a lot organisations could do to increase collaboration and release the potential across the industry.

## ORGANISATIONS NOW

Nuclear leaders recognise the importance of extensive collaboration in delivering the industry’s contribution to social and environmental imperatives. But when we asked them about whether organisations in the sector were in a position to collaborate:

- over a third commented on a lack of cohesion across the industry
- almost a third commented on a need for greater collaboration
- a quarter said the sector has become too inward-looking and self-referencing.

Some interviewees described behaviours within the industry as “working within established cliques” and “fighting” between organisations, which means there isn’t a united leadership front. Relationships between major infrastructure and asset owners and their supply chains were described as at a transactional level of maturity – leaving value and opportunity on the table for want of a closer partnership approach and behaviours.

Leaders did share some stories of when organisations have collaborated when it really matters. For example, there’s collaboration around safety standards, and UK experts were some of the first to be rapidly deployed to the Fukushima Daiichi event in Japan in 2011.

## HOW TO COLLABORATE TO INNOVATE

- Create performance tension with stretching goals that call for collaborative and innovative solutions, and can't be achieved by silo working and simply following existing ways of working.
- Investigate where individual or individual teams' goals, rewards and/or incentives encourage silo working and create inefficiencies at organisational boundaries. Remove these incentives and instead recognise and reward the achievement of collaborative team goals.
- Enhance existing project-based improvement and continuous improvement processes with structured routines that give teams time to review how well they're collaborating and innovating. Then generate and trial ideas that help improve these behaviours.
- Equip leaders and managers with practical resources and facilitation skills to help teams surface and trial innovative ideas, and collaborate across traditional organisational boundaries to achieve higher-level goals.
- Capture and recognise successful ideas that result in more collaboration and innovation, as well as the team and individuals who made them happen. You can use collaboration technology to help.

Relationships between major infrastructure and asset owners and their supply chains were described as at a transactional level of maturity – leaving value and opportunity on the table for want of a closer partnership approach and behaviours.

## Engineering and security firm

### Embedding collaboration across diverse business units to realise efficiencies

A European manufacturer and installer of security equipment had a stretching profit growth ambition. It sought to realise operating efficiencies by creating consistent ways of working across its sites, using lean approaches and tools. But efficiency gains proved elusive because of low levels of communication and trust between sites, silo working and insufficient collaboration.

We worked with leaders to set up and embed a system of facilitated conversations from top floor to shop floor. These conversations explored how they could create more value for customers by collaborating more and generating micro-innovations to create a better customer experience.

A culture of collaboration needs to be led from within, steered by credible leaders, both formal and informal, who know the operation and how the culture works. Our team's role was to skill up their managers to facilitate transformational conversations and idea generation sessions. And we developed a cadre of 'frontrunners' who led and embedded the culture change from within.

Over two years, the client embedded conversations about the collaborative behaviours they needed to perform across all their operations: from production, logistics, and across a field sales, engineering and customer support operation. As a result, the organisation saw:

- employee engagement increase by 30 per cent in three years
- hundreds of local, team-level innovation improvement ideas generated and implemented by teams across the business
- shifts in culture and behaviours – particularly around collaboration and customer focus
- the five most profitable years in its history because of sales growth and efficiency improvements from the programme.



## 5. EMBED NEW MINDSETS

Some mindsets block the ways of working needed for high performance. These don't necessarily need to be negative or destructive – simply placing too much emphasis on one way of thinking over another can be a problem. For example, a mindset that says 'the safest thing to do if I'm uncertain is to stop' might be appropriate for potentially hazardous situations. But applying that mindset to all situations will inhibit people's ability to make decisions in complex situations.

If leaders understand the mindsets that prevail in their organisations and the ways they interact with behaviours, they can reshape mindsets to create more of the behaviours that are needed for high performance. One of the best ways to embed sustainable mindsets that lead to ongoing high performance is to make sure they're adopted deep within the operation and create an emotional connection. This is better than top-down, mandated mindset changes, which tend to only have short-term impact. The global bank example on page 31 demonstrates how you can overcome long-established attitudes.

## ORGANISATIONS NOW

Leaders say creating and adopting new mindsets within the industry is very difficult because the belief has grown that it's too different to any other sector. This doesn't just inhibit innovation within the industry, but is also a barrier to attracting those from outside industries to join nuclear organisations.

Senior nuclear leaders agreed that current leadership mindsets need to change. They recognise they'll need to model – and demonstrate they value – new behaviours and approaches. Switching from a model that rewards knowledge and engineering expertise to one that also values collaboration, delivery and commercial focus is critical.

**If leaders understand the mindsets that prevail in their organisations and the ways they interact with behaviours, they can reshape mindsets to create more of the behaviours that are needed for high performance.**

## HOW TO EMBED NEW MINDSETS

- Use qualitative techniques to understand current mindsets and why they exist. Involve your Executive, operational leaders and opinion-formers, who deeply understand how the operation works, in agreeing what mindsets are needed – and how much of a stretch they are from the way people currently think.
- Create transformational conversations about the mindsets you need to see more of, by using organisational storytelling and appreciative inquiry. This can rewire the way people think and behave, and focus every team on how they might improve to deliver and perform at greater pace.
- Truly transformational conversations will have a specific emphasis on the behaviours, mindsets, relationships and interactions that need to be in place to enable high performance.
- Embed these transformational conversations into the operational day job across all parts of the organisation, so they become a valued routine that helps drive higher performance by focusing on how things get done, as well as what gets done.
- Set clear standards for how leaders need to behave to model the high-performance mindsets, and align how you measure and reward their performance accordingly. Be clear about how you'll measure this – through 360° feedback, perhaps.

## Global bank

### Shifting from a compliance-led to a customer-centric mindset

A global bank division wanted to become the preferred bank in its South-East Asia location by creating a high service, natural customer experience delivered by all 5,000 employees.

Its challenge in achieving and sustaining a customer-centric culture was strong cultural and organisational mindsets of risk and compliance, combined with the power differential between managers and their employees. In the national culture, employees were typically compliant and highly respectful of hierarchy. That stopped them from contributing ideas for improving customer experience.

Experts worked with the bank's leadership to transform this culture using several tools over a two-year period.

First, a focus on logical, emotional and brand connections allowed the bank to understand the strengths it could build on and surface the biggest cultural challenges. Behaviour 'guidrails' described (rather than prescribed) what customers could expect, and what staff could expect from each other. And new regular 'TeamTalks' allowed each team to surface, trial and implement scores of improvement ideas that enhanced the bank's efficiency, as well as colleague and customer experience.

Clear, measurable and sustained improvements were achieved over a five-year period, with:

- 7,000 improvement ideas trialled and implemented in one year, which improved efficiency and effectiveness
- employee engagement increasing 12 per cent in the first year
- error rate reduced by 93 per cent
- customer wait times reduced by 59 per cent
- cost-efficiency ratio increased by 57 per cent.

# RECOMMENDATIONS FOR LEADERS OF THE UK NUCLEAR INDUSTRY

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In parallel to the steps taken by individual organisations, leaders need to consider how they can collectively progress as an industry. In today's world, it's no longer conceivable that any single nuclear organisation can operate independently, particularly when its ambitions sit at the societal level discussed in this paper.



To collectively progress, nuclear leaders will need to work together on the following steps:

Step	What industry leaders need to do	The outcome
<b>1. Reframe and reinforce nuclear's purpose</b>	Agree a common purpose that supports the UK's net zero agenda before COP26. It needs to be clear, simple and emotionally compelling, as well as rationally robust. And it needs to speak to the long-term, sustainable contribution the industry can make to the environment and economy.	Nuclear leaders will have a compelling purpose that communicates the social, economic and environmental contribution of the industry. That purpose will rebrand the industry and position it as a keystone for a viable net zero future.
<b>2. Activate inclusion</b>	As a starting point, fund organisations such as WiN (Women in Nuclear) and YGN (Young Generation Nuclear) to lead an outreach campaign in minority communities and schools to promote careers in the nuclear industry. Sign up to the CBI's Change the Race Ratio commitment. Develop a clear action plan that will deliver the Nuclear Sector Gender Commitment of 40 per cent women in the industry before the target of 2030.	The industry will become more relevant and diverse as a career option by promoting female and minority role models and encouraging female and minority recruitment.  More diversity of thought will be brought to bear on challenges and opportunities, bringing new and ingenious approaches that will enable increased delivery and pace.
<b>3. Create urgency for performance</b>	Disaggregate the long-term goals of nuclear's contribution of clean energy to net zero by 2050 into shorter-term milestones that can be celebrated and publicised. This needs to include milestones for clearing up the waste legacy of the past.  Have a consistent and recognisable voice for the whole industry that leads the communication of its achievements to Government and mainstream media.	The renewables sectors has excelled at publicising outcomes rather than technical milestones. Nuclear can do something similar by moving the narrative into the value of what it's achieving and its significance to net zero. COP26 is a launchpad to put the value of the near-term nuclear contributions at the heart of this.
<b>4. Collaborate to innovate</b>	Industry leaders responsible for leading exemplar programmes must agree and regularly hold themselves to account: for delivering against a set of guiding principles for collaboration, evidencing where they've been applied and how performance improved as a result.  Two of the most iconic and enduring programmes and partnerships in new build and decommissioning are Hinkley Point C (HPC) & Sellafield's Programme and Project Partners (PPP). Start there, and make them exemplars that prove how effectively the industry can collaborate.	HPC and PPP are flagship programmes. They're an opportunity for industry leaders to actively set the benchmark in terms of collaborating to innovate. It would demonstrate the industry can collaborate to achieve higher level goals, connected to the industry purpose.
<b>5. Embed new mindsets</b>	Create a cross-industry leadership forum of high-potential and next-level leaders to lead a shift in mindset across the industry. That mindset must be focused on delivery at pace, inclusion and collaboration.  Facilitate monthly capability building sessions from September 2021, to demonstrate the forum is starting to systematically embed new mindsets at an industry level at COP26.	By COP26, critical opinion leaders within the industry will be equipped with new cultural leadership skills. This will shift the narrative and language in the industry toward 'safety plus', with more focus on delivery at pace, inclusion and collaboration.

## ACT NOW

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It's an exciting time for the UK nuclear industry. Leaders tell us they recognise the opportunities and responsibilities at hand. But recognising them isn't enough.

It's imperative that individual organisations and the industry as a whole acts now to start the shift to a more connected culture.

A connected culture will allow for more than an all-consuming focus on safety. It will allow innovation, pace and economic success. And those will allow the industry to contribute to net zero, meet the Government's bold ambitions, and cement its place as part of a progressive and purpose-led energy future in the UK.

### Endnotes

<sup>1</sup>'Employees need purpose more than pay to be happy and productive', Forbes.com, 28 February 2019

<sup>2</sup>'Mark Zuckerberg's JFK quote is a master class on the role of a unified purpose', inc.com, 10 July 2017

<sup>3</sup>'Diversity confirmed to boost innovation and financial results', forbes.com, 15 January 2020

<sup>4</sup>Reference for stats: *National Skills Strategy Group, Nuclear Workforce Assessment 2019*, nssguk.com, November 2019

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