

# Leading the Next Generation: Employee Engagement, Gen Z and Psychological Bravery in the UK Nuclear Sector

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A practitioner-led paper on developing the leadership the next generation needs, and why that leadership should be treated as core infrastructure for the UK nuclear sector. It draws on three decades of leading in regulated, high-stakes environments and on a coaching practice focused on clarity, sustainable change and human, strategic leadership.

## Executive Summary

The UK nuclear sector is entering a decade of unprecedented expansion. The National Nuclear Strategy implies scaling the workforce from around 96,000 to 120,000 people by 2030, while a third of the current workforce is over 50 and most senior leaders are heading for the exit.

Three patterns put that ambition at risk. Employee engagement in the UK has collapsed — only 10% of British workers are engaged at work, with disengagement estimated to cost the UK economy around £257 billion a year. The next generation is reluctant to lead: 52% of UK Gen Z professionals say they do not want middle management roles, even though Gen Z already accounts for around 60% of nuclear sector recruits. In a high-hazard industry, psychological safety alone is not enough: leaders need to develop what this paper later defines as psychological bravery to enable people to raise concerns, challenge assumptions and improve systems without compromising safety standards.

This paper argues that these three patterns are connected, and that they can be addressed through three concrete leadership shifts: adopting five drivers of employee engagement; redesigning the leadership proposition so that it is attractive to the new generation; and creating conditions for psychological bravery as a daily leadership practice.

Together, these shifts form a practical strategy for the UK nuclear sector to develop leadership; one that protects safety, accelerates delivery, and makes leadership a genuinely attractive career choice for the next generation. These shifts are also a direct way to support emerging leaders: they give them better day-to-day management, clearer growth conversations, access to coaching and mentoring, and a more attractive model of leadership to step into.

# Introduction

This paper is written from a particular perspective: that of a former CFO and senior executive who has led across utilities, energy, retail, technology and the public sector, often in regulated environments and across cultures and geographies, and now coaches senior leaders and boards through high-stakes transitions as an EMCC-accredited coach at Senior Practitioner level.

That dual perspective matters. This paper is written by someone who has led through restructurings, board pressure, governance scrutiny, international moves and a return to work after illness, and who now coaches leaders to think clearly, decide with confidence and lead sustainably.

Leadership in the UK nuclear sector has always combined high technical demand with high stakes. What is changing now is the scale and the pace. The National Nuclear Strategy and the Nuclear Industry Association's 2024 workforce assessment describe a need to recruit and train tens of thousands of skilled workers over the coming decade, while a parliamentary inquiry has warned of a "cliff edge" in expertise as a generation of senior engineers and leaders retires.

In parallel, the wider UK labour market is showing strain. Engagement levels are at a historic low, accidental management is widespread, and younger professionals are openly questioning whether traditional management roles are worth the trade-off. These dynamics are not unique to nuclear, but they land particularly hard in a sector where leadership behaviour shapes safety culture as well as commercial performance.

This paper draws on the keynote "Leading the Next Generation" delivered at the Nuclear Professional Conference 2026. It focuses on three diagnostic problems — engagement, generational expectations, and the move from psychological safety to psychological bravery — and three practical shifts leaders can begin making within weeks.

## Development

### The leadership pipeline challenge in UK nuclear

The UK nuclear workforce currently sits at around 96,000 people and is projected to grow to roughly 120,000 by 2030 to deliver the new build programme, defence commitments and the SMR roadmap. That implies recruiting and training in the order of 25,000 additional skilled workers, while simultaneously replacing a large cohort of experienced staff: 31% of the current workforce is over 50, and over half of Britain's nuclear engineers are over 45.

The recruitment pressure is therefore not only about technical roles. It is also about leadership. The sector is being asked to develop the next generation of plant managers, programme directors, safety leaders and engineering heads at the same time as it is competing for talent with adjacent industries — defence, aerospace, AI infrastructure and renewable energy. Mid-career gaps in specialised roles such as instrumentation and control, safety case authoring and reactor physics make the leadership pipeline particularly fragile.

A pipeline this fragile cannot be fixed by recruitment alone. It must be developed — through better day-to-day management, deliberate stretch, and structured coaching and mentoring conversations that turn potential into ready-now leadership. That is where the real bottleneck sits.

## Employee engagement as a leadership issue

**Gallup's 2025 State of the Global Workplace** reported that only 10% of British workers are engaged at work, down from around 20% in 2009, placing the UK 30th out of 38 European countries. That is roughly a third of the US level (31%). The cost of this disengagement to the UK economy is estimated around £257 billion a year — comparable in scale to the annual NHS budget. For a typical 1,000-person organisation, the value at risk is roughly £10 million per year through lost productivity, higher absenteeism, higher turnover and weaker customer experience.

The drivers of disengagement are well documented: poor management, lack of meaning and growth, unfair conditions, and chronic overload. Across all of them, the single biggest factor is consistently the immediate manager. Gallup's research finds that managers account for at least 70% of the variance in employee engagement scores across business units.

In a nuclear context, this is not an abstract HR concept. Engaged teams are more careful, communicate more openly, raise concerns earlier and stay longer. Disengaged teams underreport, withhold information, and disengage from continuous improvement. In an industry where the safe operation of reactors and the delivery of major capital programmes depend on disciplined human performance, weak management is not a soft issue. It is an operational risk — and the most direct way to reduce it is to develop managers, deliberately, through training reinforced by coaching and mentoring.

## The management capability gap and accidental managers

A 2023 YouGov survey of 4,500 UK workers and managers, conducted for the Chartered Management Institute (CMI), found that 82% of UK managers entered management with no formal leadership training. They are, in CMI's phrase, "accidental managers" — promoted because they were good at engineering, finance, operations or science, and never properly taught how to lead people.

The same research found that workers reporting to an ineffective manager are around 2.5 times more likely to leave within 12 months (50% versus 21%), and that one in three UK workers has at some point quit a job because of their manager. Conversely, CMI evidence indicates that organisations that invest deliberately in management development see roughly a 23% increase in organisational performance and a 32% increase in engagement and productivity.

This is the heart of the engagement problem: it is not really an engagement crisis at all. It is a management capability problem. People do not stop caring about their work in nuclear — most join the sector because they care deeply about energy security, climate, safety or engineering excellence. They might disengage because of how they are managed, day to day, by people who themselves were never given the training, time or feedback to develop as leaders.

## Gen Z and the attractiveness of leadership

In September 2024, Robert Walters UK published "Conscious Unbossing", a study of UK Gen Z professionals. The findings were striking: 52% said they did not want middle management roles, 72% said they would prefer an individual career path over managing others, and 69% described management as "too high stress, low reward". The DDI Global Leadership Forecast 2025, drawing on a survey of around 11,000 leaders and HR professionals across more than 50 countries, reinforced the picture: Gen Z is roughly 1.7 times more likely than previous generations to actively avoid leadership positions in order to protect their mental wellbeing, and only 14% of Gen Z believe traditional hierarchical structures are still fit for purpose.

Around 60% of new recruits to the UK nuclear sector are now Gen Z, under the age of 30. If they look up the leadership ladder and see roles squeezed between executives and teams, dominated by meetings, spreadsheets and administrative load, and described in their own words as a burnout trap, the leadership pipeline does not simply thin. It breaks.

It would be a mistake, however, to conclude that the next generation is rejecting leadership itself. They are rejecting the version of leadership they have observed. What they actually report wanting is purpose, autonomy, flexibility, the chance to build greater expertise, and leaders who coach rather than command.

Françoise Merritt, CFO at Endeavour Energy, put it well in a podcast interview for Women Transforming Energy in December 2025: the new generations were "born with a screen" and approach data, connectivity and communication differently. The implication for nuclear is clear: if the sector wants Gen Z to step into leadership, it must redesign what leadership looks like, and listen first.

## Psychological safety, psychological bravery and nuclear voice culture

Amy Edmondson's work on psychological safety reframes workplace risk as a social and organisational issue: people need to believe they can speak up, admit mistakes, challenge assumptions and raise concerns without fear of embarrassment or punishment. That threshold is not being met for many UK workers. Recent MHFA England research with 2,000 working adults across the UK found that 45% of UK employees feel unable to raise mistakes or risks at work, while 35% do not feel safe asking for help and 15% say they have made preventable mistakes because they felt unsafe speaking up. This makes psychological safety more than a cultural aspiration: it is a practical diagnostic of whether organisations are creating the conditions for risks to surface early, learning to happen quickly and avoidable harm to be prevented.

In nuclear, this matters in a particular way. In "Trait Talk: Questioning Attitude" (Issue 3, December 2014) the U.S. Nuclear Regulatory Commission highlights that a healthy nuclear safety culture depends on people being willing to question, challenge and surface uncertainty. The single most dangerous failure mode in a nuclear environment is silence: a technician who does not flag an anomaly, a junior engineer who does not push back on an assumption, a manager who cannot say "I do not know yet" in front of their team.

Psychological safety, however, is only the floor. It means people feel able to speak up. Psychological bravery goes further: it is the leadership practice of actively encouraging people to question the status quo, share uncomfortable information, and test better ways of working — within disciplined guardrails. The leadership question is therefore not only "do my people feel safe?" but the stronger one: "do my people feel brave enough to help us improve?" The sector needs both: psychological safety so people can speak honestly, and psychological bravery so teams can experiment responsibly, improve systems and adapt faster without diluting safety standards.

## Three leadership shifts

The three patterns above point to three connected leadership shifts. None of them is radical. All of them are learnable. The challenge is consistency, not novelty.

### Shift 1: Adopt five drivers of employee engagement

Because managers account for the majority of variance in employee engagement, the highest-leverage intervention is to equip them with a small number of repeatable behaviours. In my own practice as CFO and executive, working with leaders across utilities and the public sector, I focus on five.

1. **Hold a regular one-to-one.** A genuine individual conversation, not a project update — at least one hour every fortnight, with the team member setting the agenda. The questions are simple: what is going well, what is getting in your way, what do you need from me?
2. **Ask questions more than providing answers.** Once clarity and objectives are agreed, shift from command-and-control to a coaching stance. Use one-to-ones to understand what is getting in the way, not just to check on progress.
3. **Give specific, timely feedback.** Within 48 hours, face-to-face, in a call or email. Not "good work this week" but "the way you handled that contractor dispute on Tuesday was exactly the right call, and

here is why it mattered." Specificity is what makes feedback land. This also applies when improvement is needed. Do not delay difficult conversations.

4. **Connect work to meaning.** Link team objectives and daily tasks to the wider mission — safe operations, decarbonisation, energy security, customer commitments — and to each person's own development.
5. **Have a conversation about growth.** Once or twice a year, ask each direct report a single question: "where do you want to be in two to three years, and what can I do to help you get there?" For emerging leaders, this conversation is especially important: it helps them see a possible leadership path before they are formally appointed, and gives managers the opportunity to identify what support, exposure, mentoring or coaching would help them grow into that path.

These behaviours are not personality traits or "soft skills". They are operational disciplines, in the same way that a maintenance schedule or a safety walk-down is. They cost time and intention rather than money, and that is precisely why most organisations fail to do them consistently.

## Shift 2: Redesign leadership for the next generation

If 52% of Gen Z do not want middle management as it currently exists, the answer is not to lecture them about resilience. The answer is to listen, and to redesign the leadership proposition so that it is genuinely attractive — without diluting accountability or safety expectations.

Four practical actions can start that work:

1. **Reverse mentoring** pairs senior leaders with younger colleagues so each learns from the other.
2. **Involving Gen Z in real decisions** — through board shadowing, project leadership opportunities and stretch assignments — gives them an early, authentic taste of leadership that is not just administration.
3. Working with HR and talent teams to **redefine the leadership proposition** makes explicit that, in this organisation, leading means coaching, developing others and having impact, not just managing workload and sitting in meetings.
4. More broadly, **mentoring and coaching** should be treated as part of the leadership pathway for emerging leaders, not as remedial support. Mentoring gives them access to experience, context and role modelling, while coaching helps them build self-awareness, confidence and judgement as they test what leadership could mean for them. Consider training as coach and mentor as a leadership and career investment.

For nuclear specifically, this redesign is an opportunity rather than a threat. The sector's sense of mission — clean energy, energy security, scientific excellence, safety as a public good — is exactly the kind of purpose that younger professionals say they want. The work is to make sure that mission is visible in everyday leadership practice, not buried under bureaucracy.

### Shift 3: Develop psychological bravery

Psychological safety is not created by policy or training. It is created by daily leadership behaviour and true company culture. Three practical behaviours, used consistently, move teams from psychological safety to psychological bravery.

1. **Frame the work as learning.** In high-hazard environments, leaders rarely have perfect information. The brave leader is explicit about what is known, what is unknown and what needs to be tested: "Here is what we know. Here is what we do not know yet. Here is what we need to learn before we move forward." People stop performing certainty and start contributing intelligence.
2. **Invite challenge before decisions.** Before important decisions, ask deliberately: "What are we missing? What assumption are we making? Who sees this differently? What would make this unsafe or unworkable?"
3. **Create safe-to-learn experiments.** Innovation in nuclear cannot mean reckless trial and error. It means disciplined experimentation inside clear guardrails: what can be tested, what cannot be compromised, who needs to be involved and how learning will be captured. When something does not work, the response is inquiry: "What did we learn? What will we change? What should we share with others?"

These behaviours operationalise the questioning attitude that the nuclear safety community has long valued. They turn psychological safety from a poster on a wall into a daily practice.

### A practical comparison: problem, shift and behaviour

The table below summarises the connection between the three problems, the three leadership shifts, and the everyday behaviours that operationalise each shift.

The problem	The shift	The behaviour
Nine out of ten UK workers are disengaged; weak management drives most of it.	Adopt five drivers of employee engagement.	Regular one-to-ones, coaching questions, timely specific feedback, purpose alignment, growth conversations.
The next generation will not step up into leadership as currently designed.	Listen first; redesign the leadership proposition.	Reverse mentoring, co-creation, stretch assignments, leadership defined as coaching and impact.
Safety and innovation are treated as opposites; silence becomes the dominant failure mode.	Develop psychological bravery on top of psychological safety.	Frame work as learning; invite challenge before decisions; create safe-to-learn experiments inside guardrails.

## Practical application

In practice, the question for any nuclear leader is not which of these three shifts to choose. It is where to start, given the team and the organisational context. A useful sequence is to begin with the engagement drivers, because they are entirely within the gift of the individual leader and produce visible change within weeks; then to open up generational redesign through reverse mentoring or shadowing; and finally to embed psychological bravery as a deliberate operating rhythm in team meetings and decision forums.

The thread that runs through all three shifts is the same. Technology and strategy do not transform organisations. People do. And people grow into leaders — particularly in regulated, high-stakes environments — through purposeful conversations: with a manager who is paying attention, with a mentor who has walked the road before, and with a coach who creates the calm, structured and challenging space to think clearly, decide with confidence and lead sustainably.

For HR and talent partners, the implication is to align the formal leadership development architecture with these shifts. That means making manager basics — one-to-ones, feedback, coaching questions, growth conversations — non-negotiable expectations rather than optional development modules; investing in management training that addresses the 82% of UK managers who entered the role without formal preparation; and making space, in leadership development programmes, for explicit work on psychological safety, challenge and learning behaviour. It also means embracing coaching and mentoring as complementary supports for leadership development: mentoring brings experience, perspective and role modelling from leaders who have navigated complex systems, while coaching builds reflective inquiry, self-awareness and purposeful action. Used together, they help emerging and existing leaders translate formal learning into everyday leadership habits. For emerging leaders, coaching and mentoring provide the bridge between potential and practice: they create space to explore career ambition, learn from experienced leaders, build confidence, and test leadership behaviours before stepping fully into formal management roles.

For senior leaders and board members, the implication is to treat leadership development as critical infrastructure for the National Nuclear Strategy, on the same footing as supply chain, regulatory engagement and digital capability. Reporting on engagement, manager capability and the health of the leadership pipeline can be added to existing operational and safety dashboards.

The numbers support the case. CMI reported that organisations investing in management and leadership development programmes see, on average, a 23% increase in organisational performance and a 32% increase in employee engagement and productivity. Gallup's April 2026 research found that 21% of leaders who use AI report an extremely positive impact on their productivity, compared with 13% of managers. This is supporting the idea that the quality of leadership shapes the return on almost every other investment, including new technology.

A short reflective exercise can help leaders translate this paper into action:

1. Of the five engagement drivers, which one am I already doing consistently, and which one would I choose to trial over the next two weeks?
2. What would make leadership more attractive to the younger people in my team — and which of those things could I begin to change myself?
3. Where does my team most need more psychological bravery: raising concerns, challenging assumptions, or experimenting with better ways of working?
4. Who in my career has acted as a mentor or coach to me — and who am I doing that for now?

## Wellbeing and leadership sustainability

Around 41% of UK workers report daily stress, and leaders are not exempt — if anything, they are more exposed to it. The five engagement drivers, the redesign of leadership for the next generation, and the development of psychological bravery all assume that leaders themselves have enough capacity to think clearly, listen well and hold their nerve in difficult moments.

Practically, that means leaders honestly assessing their own stress level, taking breaks, taking leave, talking about recovery, and asking their teams the same questions they would expect to be asked themselves: are you overloaded? what can we stop or defer? what would help? It also means creating space for people to say no or ask for help without career penalty. In a sector where leadership behaviour shapes safety culture, wellbeing is leadership infrastructure, not a benefit programme bolted on the side.

This is also one of the places coaching can be highly beneficial. A confidential, non-judgemental space in which a leader can be honest about what is working and what is not — without performing, without managing the room — is one of the few interventions that meaningfully changes long-term leadership sustainability. The practitioner's experience, both as someone who has returned to work after illness and as a coach to leaders doing the same, is consistent: the most powerful leadership comeback is not the fastest one. It is the one that allows the person to lead in a way that feels right for them.

## Conclusion

The UK nuclear sector is entering what industry voices have begun to call a "golden age" — new build, SMRs, fusion on the horizon, and a renewed strategic role for nuclear in the country's energy and industrial future. None of that happens without people, and people do not thrive under accidental managers, in cultures of silence, or when leadership looks like a punishment rather than a privilege.

The sector now needs to actively support emerging leaders before they are fully ready: through meaningful work, regular feedback, mentoring relationships, coaching conversations and opportunities to practise leadership safely. It is built on engaged teams led by capable managers, made attractive to a generation that wants purpose and autonomy as much as it wants pay, and underpinned by psychological bravery so that safety and innovation reinforce rather than undermine each other.

Coaching and mentoring can support building this pipeline and help existing leaders grow.

Listening to the next generation, developing people with purpose, and building the bravery to challenge, learn and innovate safely is how this generation of leaders will deliver Hinkley Point C, Sizewell C, the SMR programme and whatever comes next.

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