Filling the Net Zero Leadership Gap

Why being an adaptive leader is crucial to Net Zero success

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Key definitions

**Technical problem**
A problem that can be resolved using existing knowledge, expertise and established practices without requiring significant innovation or adaptive changes. There are ready-made, best practice solutions that are available that may be simple or highly complicated.

**Adaptive challenge**
A complex, ambiguous problem that lacks a known solution, requires systemic change and a mindset shift in people and demands new learning, innovation and adaptation to address effectively. Addressing these challenges often requires engaging with the values and priorities of the people impacted by the change.

**Adaptive leadership**
A leadership framework and approach that is oriented to complex and uncertain contexts. It recognises that adaptive challenges are characterised by their complexity, lack of precedent and the need for systemic change. Key principles include diagnosing the adaptive challenge, regulating distress and resistance to change, mobilising collective leadership and promoting a culture of experimentation.

**Systems thinking**
A framework for seeing the interconnections in a system and a discipline for seeing and understanding the relevant aspects of the whole system — the ‘structures’ that underlie complex situations. It is a holistic approach and mindset that understands the interconnectedness, interdependencies and dynamics of complex systems and considers relationships, patterns and feedback loops to design solutions.

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The case for change

Responding to environmental challenges is now non-negotiable for organisations. We have known for a long time that societal change is needed to drive significant reduction in emissions towards Net Zero targets, and that the knowledge and technical solutions to achieve this exist.

Yet change has not happened quickly enough and warming of more than 1.5 degrees is likely. There is a gap between what we know needs to happen and what business and governments are actually doing. We believe that this gap is one of leadership. Specifically, leadership that is able to handle the complexity the Net Zero transition creates and one that can lead people into the unknown.

For many decades, the dominant economic model globally has been premised on physical production, and leadership styles reflected this. However, today’s world is instead focused on knowledge production supported by fast-paced digital infrastructure with a pressing need to become more sustainable. This economy based on sharing knowledge with a need for sustainable, decarbonised growth requires something different.  

The challenges we face are complex and urgent, and greater pressure calls for a different approach. Moving from ambition to action requires leaders not just to connect commerciality with responsibility, but to effectively harness human ingenuity, passion and collective responsibility within their organisations to adapt to significant change. Organisations require leadership which is adaptive as it brings to bear whole system elements to drive change.

Leadership styles: where are we currently?

Organisations are facing a complex competitive landscape under increasingly changing political, economic and social conditions. There is growing understanding that the uncertainty generated by these changes means that organisations cannot plan their way through them, rather they need to adapt to them. Yet set against this backdrop of continuous change, leadership models and our assumptions as to what makes a ‘good’ leader are too often rooted in the past.

More traditional leaders may operate a top-down, bureaucratic approach as they work to achieve defined targets, such as share price growth. This technical form of leadership may not be effective in dealing with unknown challenges which require adaptation and the human element to be taken into account.

Yet, this view of leadership continues to dominate how the Net Zero transition is led. Is our commitment to more traditional leadership practices holding us back in our bid for an inclusive transition to Net Zero?

Where do we need to get to?

The top-down, bureaucratic leadership model of the last century favours a world of plans, control and predictable growth. A world of intensifying heatwaves, droughts and floods with secondary impacts of increased migration and geopolitical instability is not one easily controlled. Our response to this challenge must involve changing elements of how our economy, organisations and society function. Addressing this requires brave, new leadership styles that effectively drive the mindset shift needed to unlock progress to Net Zero.

Institutions and organisations that fail to lead adaptively into this unknown transition will likely face severe, even existential challenges. Private companies will face commercial losses if they are unable to shift to changing markets or if they find that their business models are no longer viable in an ESG focused world.

PwC’s CEO survey recognises this disruption, stating that nearly 40% of CEOs don’t think their companies will be economically viable a decade from now if they continue on their current path.6

Public institutions, already under significant pressure, will only find that these pressures increase. As that happens, there is a risk they will become unable to fully support the people, economy and environment that they aim to protect.

Crucially, businesses have a voice and a stake in getting the transformation towards Net Zero right. The business case is clear; by putting purpose at the heart of businesses, and by adapting to continuous change, leaders can unlock future value: better access to capital, stronger employee engagement and an enhanced reputation.

In a world of unpredictability, how can leadership accelerate our journey to Net Zero? There are three key elements outlined in this report.

1. Executive leadership teams must own and role model a ‘mindset shift’ towards collective leadership as all levels of the organisation feel responsibility for delivering Net Zero.

2. Organisations need to work on developing the capacity to handle complexity as part of leadership development if they are to successfully deliver the necessary changes needed for a just transition to Net Zero.

3. People are critical to organisational and societal success and the delivery of this change. The human element of the Net Zero transition has too often been forgotten and this has contributed to the failure to deliver.

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6 PwC. PwC’s 26th Annual Global CEO Survey, 2023
How can we achieve change?

The impact of climate change is a problem like no other. What is needed is a shift in mindset towards seeing leadership not just as a title, but what you do, how you learn and how you adapt. We believe that the frameworks of adaptive leadership and systems thinking provide the greatest insight on the leadership practices that are required to deliver net zero transformation.

When people think of Net Zero, they tend to think of it as a series of technical problems to be solved. For example, what is the most effective way of decarbonising a given production process? However, although there are specific and significant technical problems embedded within the Net Zero transformation, at its root lies adaptive challenges. Adaptive challenges are complex problems that lack a known solution, require systemic change and demand new learning to solve. What does a green economy look like? How can I continue to deliver a profitable company with a business model dependent on fossil fuels? These are just two of the adaptive questions organisations must grapple with.

The slow progress made globally towards the Net Zero transition has been heightened by addressing Net Zero as a series of technical problems with few organisations realising the adaptive challenge it truly presents. Leadership practices that engage these root challenges underneath the technical problems will unlock the rapid progress and transformation that is necessary. Technical delivery must be balanced with the engagement of complex and uncertain problems below the surface. Those leading must do so confidently through the subsequent adaptation despite the uncertain future landscape.

Technical challenges

Easily identifiable, surface problems. Solving them requires delivering best practice, known solutions.

The Net Zero transition presents many technical challenges.

Adaptive challenges

Complex, ambiguous, deeper problems with no known solution. Solving them requires shifts in people’s mindsets, new learning and system change.

The Net Zero transition presents many adaptive challenges.

The thinking in this section is inspired by the work of R. Heifetz around Adaptive Leadership.
Making the challenge real

To test the current extent of system thinking, leadership and a capability to manage complexity, three organisations at different stages of their Net Zero journeys were identified.

The organisations were drawn from the Public, Private and Financial Sector. As the case studies demonstrate, their organisational Net Zero journey is largely influenced by the leadership capabilities present in their organisation. In particular, the case studies illustrate the significance of working with tension and conflict, and how shifting mindsets can move the organisation closer towards their Net Zero goals.
Case study 1: early stage of adaptive leadership journey

One of the organisations interviewed recognised that it had limited adoption of sustainable processes and, in its current form, lacks the capacity and capabilities to manage the complexity of the change required.

Context
This organisation is a financial services company which recognises the importance of the Net Zero and green agenda and progress has been made by implementing initial internal environmental processes. The arrival of a new CEO and a revised corporate strategy has triggered a change curve, with ethics and a new purpose at its core. The first corporate sustainability report has now been commissioned. To fulfil the strategic blueprint, substantial changes are required internally and externally. For example, it is recognised that a Head of Sustainability must be hired.

The organisation acknowledges the importance of green procurement and having guidelines for sustainable practice with third-party contractors. Currently, however, there is a gap in implementing such policies.

Technical issues the organisation faces:
- No Net Zero strategy.
- No Head of Sustainability (candidate soon to be in post).
- No green procurement strategy or guidelines.
- Limited environmental impact monitoring (first sustainability report recently commissioned).

Adaptive issues that are the foundation of these technical challenges
- **Addressing Net Zero requires changing the organisation’s purpose:** The organisation’s purpose is to lend finance support to those that cannot get this help with ease. Significant changes around Net Zero are not possible without rethinking the entire way the organisation does business.
- **Financial objectives are prioritised above the environment:** Currently, employees have financial objectives that they need to achieve as a marker of their overall performance. There are no environmental objectives that employees across all grades need to hit. Objectives like these would create a greener mindset across departments. The absence of these objectives makes it a lot easier for the environmental agenda to be deprioritised in decision making.
- **Customers don’t want to pay more:** The organisation’s customers state that they want to go ‘green’, yet most customers are not willing to pay more for this.
- **People are happy with the status quo:** People are happy to adopt some environmental behaviours e.g. recycling in the office. However, the majority of staff are unsure about adopting environmental behaviours within their job roles or being held to account to achieve environmental objectives.
Case study 2: middle stage of adaptive leadership journey

Context
This organisation is a local authority that has made a climate emergency pledge. Progress has been made in recent years with a sustainability team established, a climate action plan in delivery and a Climate Commission set up to harness area-wide participation in the drive to Net Zero. A climate strategy will soon be published that has been co-created with partner organisations and residents from across the local area. This demonstrates that the foundations for the application of system thinking principles are already in place as this organisation strives to achieve its Net Zero ambition.

There is a recognition that although progress has been made, more is needed to integrate environmental sustainability and decarbonisation into business as usual activity across council teams. In particular, a greater mindset shift is required to change the way staff perceive the role of external partners in supporting the delivery of their own priorities.

Technical issues the organisation faces:
• Setting up governance that can embed the environment and sustainability into all areas of organisational delivery.
• Harnessing funding and developing business cases to drive Net Zero delivery at greater scale.
• Driving a behavioural shift amongst residents towards more sustainable actions.

Adaptive issues that are the foundation of these technical challenges
• Partners have their own priorities: Delivering area-wide decarbonisation has required bringing in system partners to deliver change. These partners bring their own values and priorities which can compete with the goals of the local authority.
• Fear to admit failure: Some initiatives were trialled but are not working effectively. These initiatives should be brought to a close, but people are afraid to admit failure, especially in a context of financial challenges.
• Change creates tension: Those involved in the efforts to decarbonise face significant change. There are changes to the way staff from different organisations must collaborate, whilst the priorities of the council will also be expected to evolve, along with other cultural, process and behavioural changes. During change, people fear potential loss and this can drive tension as people eventually become resistant to change.
Case Study 3: later stage of adaptive leadership journey

Context
This organisation is a private utility company operating within a highly regulated environment that is influenced by the natural environment. This heavily influences the risks and opportunities which they are exposed to, and therefore shapes their priorities surrounding the Net Zero and sustainability agenda.

They are actively engaging more with sustainable practices, both internally and externally having already begun the adaptive work required.

A sustainability strategy is in operation, and an internal carbon ‘tax’ has been implemented to both fund the organisation’s internal decarbonisation programme and wider innovation within operational delivery. In order to factor the environment into corporate governance, all decisions are tested against a recently introduced sustainability criteria, as well as against financial cost, health and safety, and quality. The organisation has also launched an internal carbon tax which funds sustainable projects. Taken together, these processes have created sufficient internal challenge to create the conditions needed for adaptation to begin.

This organisation is not only advancing its own internal processes to become more sustainable, but appreciates that their own goals cannot be achieved without influencing their external operations. Complex green commercial and procurement functions are in place which have fostered collaboration and transparency across their supply chain, helping third parties to move closer to reaching their environmental goals. This demonstrates that there is leadership beyond the boundaries of the organisation and suggests that system thinking is becoming embedded.

Technical issues the organisation faces:
• Replacing all on-site fossil fuels with renewables.
• Measuring embedded carbon in all future capital projects.
• Working with supply chain to support reduction of their carbon footprint.
• Promoting a zero-waste culture across the organisation.
• Desire for more nature-based solutions to be delivered with and through partners.
• Improving carbon literacy of all staff, especially decision makers.

Adaptive issues that are the foundation of these technical challenges
• Finance valued above the environment: Tensions are created by factoring the environment heavily into decision making when the organisation needs to generate a profit and is heavily invested in by pension funds.
• Doing the right thing for customers or the environment: Tensions generated by the need to invest in infrastructure to deliver greater sustainability and quality whilst keep utility bills for customers down.
• Progress is dependent on external partners: Sustainable improvements depend on the actions of wider stakeholders that are outside of the authoritative scope of the organisation.
Why system thinking and adaptive leadership are needed in these organisations

Any transformational change requires adaptation both within an individual body and across a wider system. This is certainly true for organisations considering the transformation required to thrive in a Net Zero world and in the face of climate change. To be effective and sustained, a systems thinking lens must be applied. Your organisation is an element within a system composed of many related parts. To effect change in your part of the system requires change in other parts; though it is equally true that changing your part of the system will have an effect on the other parts. At the very least you must understand these interrelationships to prevent them acting as a brake on the change you are trying to deliver. This kind of systems thinking is a requirement, not an optional extra. It is far too scarce in many organisations – but it can be developed.

The case studies presented provide insights both to the challenges associated with both adaptive leadership and system thinking and how it could be developed and applied.
In case study 1, there is currently a perceived trade-off within the organisation between commercial outcomes and environmental outcomes. The organisation intends to hire a Head of Sustainability and realign objectives to integrate Net Zero and reward delivery of Net Zero goals. However, there is no ‘burning platform’ that makes the need for action urgent for most staff. If these changes are delivered, they could drive a conflict with other business (and staff) priorities and might be perceived as threatening delivery of the organisation’s purpose. Leadership practices are needed that support this shift in priorities so the business can learn how to deliver commercial and environmental goals together. Leaders must stray away from linear either/or thinking which will ultimately create unproductive conflict and tensions. Instead, adaptive leadership is required to create a degree of productive tension and internal disruption by reframing the problem and insisting that ‘both and’ is required to create a degree of productive tension and internal disruption by reframing the problem and insisting that ‘both and’ thinking is needed. Leadership behaviours must capably generate a burning platform through which adapting the business model to Net Zero is seen as mission critical.

Leadership behaviours must acknowledge these losses, empathise with them whilst concurrently celebrating the gains from the ‘new normal’.

In case study 2, a systems thinking lens has been applied which has resulted in development of the climate strategy and the establishment of a climate commission. There are clear signs of commitment to action and creating momentum for change across a wider stakeholder group. This is a good example of systems leadership in action. Despite progress, there is recognition that much more action is needed. To deliver more difficult wins – especially in a financial environment – there will be a need to act innovatively and be willing to make mistakes and learn quickly. Fear within the organisation of admitting failure will make this innovative mindset tough. Different behaviours are needed across the organisation to encourage experimenting and a fail fast/learn fast mindset. There may not be a tried and tested way, so you have to expect and destigmatise failure – something that public, and especially politically-led organisations, can find especially difficult. The aim should be to create leadership behaviours and a culture that incentivises shared learning for the collective benefit of all. A culture which punishes ‘failure’ and uses it for political advantage must be avoided.

Case study 2 also evidences the challenges of systems leadership. Collaboration involves compromise. It involves balancing and confronting alternative values and priorities within your own organisation and across partner bodies. This can invariably present at the human level as resistance to change as people fear the loss of current roles, ways of thinking and certainties. Some values, behaviours, beliefs, ideas or practices will need to be discarded as progress is made.

In case study 3 it is clear that Net Zero is being integrated into operations. This is clearly demonstrated by the internal carbon tax through which each function is charged on a cost per tonne basis and all proceeds are then put into an innovation fund to finance sustainability projects. These actions influence investment and business decisions, while the organisation is also leveraging commercial and procurement functions to extend Net Zero thinking into the supply chain and partners. It is achieving this by working outside its own system into the extended system, enabling change at all levels e.g., improving carbon literacy of all staff.

There is an understanding that it is no longer adaptive to adopt zero-sum thinking. Decisions around sustainability in this organisation are seen as ‘and/ and’ rather than ‘and/ or’. While the progress this organisation has made is impressive, as our interviewee commented, it is only the start. As harder decisions need to be made, there is a risk that members of the organisation who had assumed previous action was enough might resist further change – especially if their organisation is already perceived as an industry leader. Resistance may grow and a productive tension will need to be raised with enough conflict allowed to enable change to happen, but not so much that it leads to dysfunction. There is a further risk, that the progress to date, might put pressure on parts of the internal organisation and external system that have made minimal progress. What happens when the change you have achieved puts others under pressure and they blame you?

Overall in this organisation, there is a clear orientation towards embedding system thinking, learning and improving through long-term change. These actions are being led by a brave senior leadership team who appear to be proactive, and purpose driven, creating a vision which drives adaptive change. Leadership programmes are being rolled out across the organisations, encouraging a culture of continuous improvement and shared responsibility, which is vital in delivering meaningful outcomes.
Driving change

Across all three case studies there is the overarching theme of managing tensions and driving for compromise, where individual needs may be required to be suppressed for the benefit of the greater organisation and environment.

So in considering how you apply adaptive leadership, it is critical to recognise that leadership is one component of the wider system changes needed. To effect sustainable change, all aspects of the transition across the organisation need to be planned, balanced and linked.

Taking an integrated systems thinking view of the changes needed to meet Net Zero commitments requires an organisation to understand their current maturity across all aspects of the organisation, set a clear vision and define the compelling ‘case for change’, and review and align the organisation’s ways of working to embed Net Zero into every aspect of the operation and behaviours.

Adaptive leadership will be important in creating an integrated approach to change that drives delivery. We know that the environment for Net Zero is continuing to evolve with new and updated guidance and regulations being introduced, so in this dynamic and uncertain world being bold and brave and accepting that to get things right you may make a few mistakes will be the domain of future leaders.

The Net Zero leadership gap

As the diagram across demonstrates, there is a leadership gap that often prevents organisations delivering Net Zero transformation at the required pace. It is present in organisations that address Net Zero transformation as a technical problem to be managed.

The organisation cautiously focuses on delivering through known solutions and ways of working. The organisations that address Net Zero simply as a technical problem and ignore the adaptive challenges at hand will find that some progress is made, but the leap to transformation is impossible as resistance increases and the system fails to mobilise at the required pace. On the other hand, if the leadership gap is acknowledged and alternative forms of leadership are embraced that enable systems thinking and adaptation, they will find that the technical challenges they face are unlocked and rapid progress is made.

Leaders that want to make Net Zero transformation a reality must employ three leadership steps. They must address the technical challenges at hand, identify the role of the system and then lead adaptively.
Identify and distinguish between the technical problems and adaptive challenges you face

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<th>Understand the what, the how and the why of your organisation: Identify the ‘what’ you do (process, activities, tasks), the ‘how’ you do (skills, behaviours, technology), and the ‘why’ you do (purpose). Which elements are technical and which are adaptive?</th>
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<td>2</td>
<td>Define the ‘why’ for change: define your vision and case for change. There may be technical elements in this but this is likely to require significant adaptation.</td>
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<td>3</td>
<td>Define the ‘what’ and the ‘how’ that needs to change: Having reviewed your current ‘what’ and ‘how’ as an organisation, identify what specifically needs to change in your 1) skills and technology 2) structure and organisation 3) capability and culture. Which elements are technical and which are adaptive? There may well be more adaptation required than you might initially expect.</td>
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Employ systems thinking

| 4 | Understand your system: Having articulated exactly the change required, employ systems thinking to build a picture of the system you are operating within, how it interrelates with others, and articulate which partners/elements you need to work with, harness or enable to adapt to drive the change. |

Embed Adaptive Leadership

| 5 | Understand your adaptation: Now you can view the path ahead, focus in particular on the areas where adaptation will be required. Areas that may require bold and iterative thinking where failing fast and learning fast will be needed. Identify where tensions are likely to arise within your organisation. Consider the value mindset shift that will be necessary. |
| 6 | Make the change human-centred: Develop your change plan which now articulates the technical problems and adaptive challenges that you will have to overcome. Be clear that the change is necessary, has full support and be honest about the compromises that may be required to ‘run the business’ whilst delivering your environmental commitments. |
Filling the leadership gap

As you address the leadership gap, it is crucial that you develop these leadership capacities throughout your organisation. Capacities that enable your people to handle complexity, employ system thinking and operate adaptively.

In this piece we have focused on how a new focus on leadership is vital to ensuring a successful transition to Net Zero. Once you begin embedding the right leadership practices, you are set up to embark on the change. How you implement and manage this change is critical. PwC are experienced in delivering innovative change management. We can harness our expertise to support the next crucial stages of your transition to Net Zero.

Leadership is never easy, and delivering sustained and transformational change, which Net Zero requires, is complex, and takes time, effort and investment to get right. But you are not alone: every organisation has to face this puzzle and you can learn from others, collaborate, and reshape your organisation as it emerges into a new Net Zero world stronger and more successful than it was before.
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