

Sustainability Capabilities for Business Leaders:

Guiding leaders to pioneer the transition to sustainable business outcomes







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Foreword

Strong leadership will play a critical role in driving support at enterprise level for Ireland's transition towards a more sustainable and just society over the next decade. Indeed, it is hard to imagine that we can meet our nation's key climate action targets without an actively engaged, visionary group of senior business leaders leading the way with ambition, drive and dynamic thinking to serve as the guiding light for industry. A guiding light that has the confidence and foresight to make bold decisions will be required to support our environment, embrace the complexity of navigating existing systems, transform business models and adapt ways of working to deliver tangible impacts that fast-forward our transition toa more sustainable future.

However, we must acknowledge that we cannot expect transformation to happen without ensuring that our business leaders have the capabilities required to spearhead their organisation's transition. This study is the first of its kind to focus on identifying the current and desired sustainability capabilities levels of top business leaders across large organisations in Ireland as they grapple with the challenges identified in this report.

Focusing on 6 key sustainable capabilities for leaders, the findings indicate that business leaders have a strong understanding of their stewardship role in driving change across all levels of their organisation. Crucially, these leaders identified their current capability at explorer level, in a process of active learning but with a desire to swiftly transition towards exemplar status. This showcases their collective understanding that enhancing their own leadership development is non-negotiable if they are to bring to life their ambitions to build enabling structures, systems and cultures internally, deliver new avenues towards continued competitive advantage and confront wicked problems to address the systemic challenges facing organisations as they commit to transition planning.

MARIA KELLY

DIRECTOR, SKILLNET CLIMATE READY ACADEMY This is not an insignificant challenge, but it is an imperative if industry is to serve as a driving force behind Ireland's Climate Action Plan.

On behalf of the Skillnet Climate Ready Academy, I would like to acknowledge the role of Maynooth University in delivering the project, led by Dr. Jean Cushen (Principal Investigator) from the Maynooth University School of Business and the Business in the Community Ireland (BITCI) in delivering this research. Their staff, network and cohort of visionary business leaders, generously provided their expertise, time and resources to drive the development of this important research into Sustainability Capabilities for Business Leaders.

In addition, the guidance of the steering group listed below was greatly appreciated:

Business in the Community Ireland (BITCI):

Marian Curry, Senior Sustainability Advisor and Bernadette Phelan, Head of Advisory Services.

BITCI Leader Group:

Co-chaired by Shay Walsh, Managing Director, BT Ireland and Melíosa O'Caoimh, Country Head, Northern Trust Ireland, with support from Bernard Gould, Principal Director, Talent & Organisation, Accenture and Gillian McMahon, Senior HR Manager, BT Ireland.

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Colm Gaskin, Head of Research and Communities.

Executive Summary

The business world, with its capacity for innovation, agility and resources, is ideally poised to pioneer widespread change in order to transition to more sustainable forms of industry and economy.

Indeed, the actions of business leaders will define efforts to create an environmentally safe and secure planet due to business being responsible for approximately 70% of global carbon emissions (IPCC, 2023). Urgent action is required from all sectors of the economy to meet targets set by the Intergovernmental Panel on Climate Change (IPCC) to reduce global emissions by 2030 and limit global warming to 1.5°C (IPCC, 2023). National policy, the Climate Act 2021, commit Ireland to halving greenhouse gas emissions by 2030 and reaching net zero by 2050. Looking beyond emissions, it is also imperative that business strategies incorporate action relating to the three critical challenges outlined by the World Business Council namely, the climate emergency, nature loss and mounting inequality (WBC, 2021). Leadership from business is essential, not only to mitigate severe environmental risks but also to protect economic stability, and the World Economic Forum consistently ranks climate change, and associated hazards, as one of the top global risks to businesses (WEF, 2023).

Within organisations, business leaders determine the long-term organisational value strategies that impact the sustainability of the wider environment and shape our collective future (World Business Council, 2023). Certainly, national and international regulatory landscapes are evolving with the aim of directing organisations towards more sustainable outcomes, primarily through regulating for greater reporting transparency and disclosures. Recognising this, many business leaders in Ireland are moving away from 'business as usual' and looking to the future to enact new sustainable business models. Recent insights from Skillnet Climate Ready Academy recommends an increased focus on building leadership capability in sustainability strategy to enhance firms to achieve better sustainable performance. Related research from Skillnet Ireland on, Sustainable Leadership points to a need at an organisational level to re-examine the very concept of what leadership means. Other research from Business in the Community Ireland revealed that 69% of organisations in Ireland are integrating

sustainability issues into the core of their business and 88% agree that Ireland has an opportunity to be an international leader in sustainable business practices (<u>BITCI, 2022</u>). The same research also indicates that leading this change involves a new 'leadership mindset' to confront systemic challenges as the route to enhancing sustainable business outcomes can be fraught with complexity (BITCI, 2022).

However, the challenge of moving beyond commitments and toward systemic change should not be underestimated. The complexity of the transition means the leadership 'toolkit' required to counter the escalating environmental crises and social challenges must go beyond internationally agreed sustainability goals, national pledges and reporting regulations (Pucker, 2021). Following from the Skillnet Ireland and BITCI insights, business leaders need organisational level frameworks that orient leaders' attention firmly on developing robust sustainability capabilities for leaders to drive immediate and lasting sustainable change. Leadership sustainability capabilities can be understood as the ability of a business leader to plan, direct and enact activities that consistently and successfully deliver positive environmental, social, and governance value for all its stakeholders. Of course, this raises the question regarding what these sustainability capabilities for leaders actually 'look like'.

To meet this need and answer this question, a consortium of stakeholders, from industry, third sector and academia, came together to cocreate a 'Sustainability Capabilities for Leaders (SCALE)' diagnostic. The goal is to create a diagnostic that offers an evidence-based point of departure to equip business leaders with insights into the top leadership team's view on their sustainability capabilities and priorities for capability development. The outcome of this work is presented in this report which details the results from the pilot application of this diagnostic in five large, leading Irish organisations. These five organisations are all members of Business in the Community Ireland (BITCI) whose purpose is:

"...to inspire and enable businesses to bring about a sustainable, low carbon economy and a more inclusive society where everyone thrives."

BITCI, and their member organisations, were instrumental in initiating and progressing this project.

The Sustainability Capabilities for Leaders (SCALE) 'diagnostic comprises 20 questions that investigate leader beliefs and 54 capability statements, grouped into six overall sustainability capabilities namely, 'Valuing Sustainability', 'Adaptive Action', 'Critical Systems Thinking', 'Futures Literacy', 'Supporting Fairness' and 'Leader Development'. Completing this diagnostic guides business leaders to more deeply comprehend these essential sustainability capabilities, and the specific leadership activities within them, that require development. This leadership development is crucial for organisations aiming to make significant strides in their sustainability initiatives.

The results of the pilot demonstrate that leaders within these large organisations fully endorse the importance of building more sustainable organisations and, across a variety of leadership roles, take full ownership for delivering this change. This commitment reflects the significant investments already made by these leaders to establish and commit to sustainability goals, marking a commendable stride towards a more sustainable future for their organisations. It is also clear that the participating business leaders have shown a commitment to a range of environmental, social, and governance (ESG) initiatives. However, more investments have been made in the "social" dimension of sustainability, which includes areas related to diversity, equality, and inclusion. Leaders report lower levels of capability in the 'environment' and 'governance' dimensions. Relatedly, there are many complex impediments to change that lie primarily outside the organisations. One major challenge identified is consumer resistance to change and rejection of possible higher costs associated with sustainable

change. This finding indicates how the route to greater sustainability involves overcoming 'wicked problems'. Indeed, the term 'wicked problems' is increasingly used in the sustainability literature to convey how leaders need to navigate complex and ill-defined issues that lack clear solutions. Wicked problems, such as the climate crises, are difficult to address due to their multifaceted nature, ambiguous boundaries and diverse perspectives of stakeholders. These external 'wicked problems' have the potential to delay action and require leaders focus and attention, as well as governmental and regulatory support.

Overall, several key recommendations emerge. Leadership teams have an opportunity to build on their strategic vision by investing in the governance systems needed to drive and measure change. There is also scope for business leaders to engage with colleagues at all organisational levels to establish meaningful sustainability targets for all roles throughout the organisation. It is also evident that sector-wide, multi-stakeholder collaborations will be vital to drive change among consumers and facilitate organisations to establish sustainable forms of revenue. Finally, leaders are seeking deeper insights into what sustainability means for their sector and functional expertise and the options available to them. This means that tailored leadership development programmes for different sectors and leadership functions (e.g. Finance, Human Resource Management etc) can play a pivotal role in guiding leaders to transition to a low-carbon, sustainable enterprise.

These, and more, findings are detailed in this report along with key recommendations and potential next steps. The report offers numerous valuable leadership insights and opportunities for further leadership development. By making these results available, we aim to inspire and support business leaders to join Skillnet Ireland and BITCI's respective calls for an accelerated transformation in positioning sustainability as a fundamental pillar of business strategy. This, in turn, contributes to the establishment of a resilient, sustainable Irish economy for the betterment of current and future generations.

"The choice could not be clearer. Business as usual is not an option."

Sanda Ojiambo, 2021

CEO & Executive Director of the United Nations Global Compact, the world's largest corporate sustainability initiative.

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Introduction to the literature

THE EMERGING SUSTAINABILITY REGULATORY AND GUIDANCE LANDSCAPE

Sustainability in business refers to the impact organisations have on the environment and society, and the governance systems they operate to understand and continuously improve this impact (Pucker, 2021). It is widely recognised that business leaders in Ireland, and elsewhere, are facing mounting pressure to improve and transparently report on their Economic, Environmental, Social, and Governance (EESG) outcomes. A range of international and national sustainability guidelines exist, which business leaders are urged to embrace. Among these, the most prominent guidelines and regulations are defining 'best practice' relating to business strategy and sustainability planning.

In 2021, the United Nations' Development Agency introduced the 'SDG Impact Standards for Enterprise.' These standards encompass a comprehensive set of guidelines crafted to address social, economic, and environmental challenges within organisations and foster the development of more sustainable economies by the year 2030 (SDG Impact Standards, 2021). These standards consist of approximately 120 'indicators' that organisations can utilise to gauge the sustainable impact of their 'strategy', 'management approach', 'transparency', and 'governance'.

At the European level, the Corporate Sustainability Reporting Directive (CSRD) will significantly bolster the requirements concerning the ESG information companies report on. The CSRD affords regulatory weight to the principle of 'double materiality'. Double materiality reporting means businesses should disclose, not only the risks they face from a changing climate and other ESG issues, but also the impacts they cause to the climate and society. As part of this, organisations are required to set out their internal management due diligence systems and ESG metrics in order to demonstrate their progress towards heightening positive sustainable impact. There are also a range of notable European guides that raise awareness about the characteristics of a sustainable economy and sustainable business models. Initiatives like the European Green Deal (2019) and the European Skills Agenda for sustainable competitiveness (2020) underscore the pressing environmental challenges and the critical need to prioritise sustainability within business practices. These documents emphasise the urgency of achieving sustainable change and underscore that European companies can be true leaders on the global stage through showcasing the competitiveness and sustainability of the European economy.

In Ireland, regulations and national guidelines are actively driving action and promoting awareness of the characteristics of a sustainable economy. The Climate Action Plan 2023 outlines a framework for the country to meet its 2030 emission targets. In the 'Climate Act 2021,' Ireland has committed to reducing greenhouse gas emissions by half by 2030 and achieving net-zero emissions by 2050 at the latest (Department of An Taoiseach, 2021; Office of the Attorney General, 2021). Numerous business advisory bodies are actively supporting business to understand and fulfil their sustainability obligations. Skillnet Ireland, a business support agency of the Government of Ireland, produces 'Climate Ready Insights.' These insights encompass a comprehensive array of thought-leadership articles, industry-driven research reports, and content focusing on the sustainable development of Ireland's green economy. Business in the Community Ireland has developed the comprehensive 'Sustainability Handbook' (BITCI, 2023) to assist businesses in the vital transformation for sustainability and positive change. This handbook explores the depth and breadth of organisational sustainability and offers key questions for organisations to contemplate.

It offers guidance to business leaders, sustainability practitioners and those looking to deepen their understanding of sustainability and consider how strategic EESG objectives can position businesses as potent agents of positive change. Valuable guidance is also available from the Irish Business and Employers Confederation (IBEC). The IBEC report '<u>Climate Action: A Toolkit for Business</u>' aids organisations in developing a 'best practice' climate action strategy for their businesses. IBEC has also produced a range of specialised <u>sustainability guides</u> that delve into specific sustainability issues.

Together, these initiatives and guidelines offer valuable insights into the characteristics of sustainable organisations, facilitating a collective understanding of organisational practices that lead to sustainable outcomes. While they provide a robust foundation of evidence-based insights for internal reflection and discussion, their extensive nature means further distillation and synthesis into a coherent framework is required. Moreover, given that these guidelines predominantly focus on management systems and organisational metrics, they tend to obscure the significant role individual leaders play in defining the value strategy that underlies the sustainability of business outcomes (Pucker, 2021). Consequently, when evaluating the utility of these guides to leaders, it is important to consider expert insights into leadership and sustainability and the decisionmaking processes of leaders.

Leadership and Sustainability

LEADERSHIP VALUES AND SKILLS

A substantial body of literature delves into the connection between leadership behaviours and business outcomes, with a growing emphasis on the intersection of leadership and sustainability outcomes.

This burgeoning literature emphasises the definitive influence individual leaders wield on the achievement of sustainable business outcomes. Set out in this section is an overview of the key strands of this literature followed by a discussion on how these insights inform 'sustainability capabilities for leaders'.

Research on <u>Sustainable Leadership</u> from Skillnet Ireland notes how sustainable leadership begets sustainable leadership capability (Kieran et al, 2023:67). Sustainable leadership involves seeking to:

"...improve the lives of all stakeholders while still creating present and future profits and the triple bottom line of planet, people and profit. They believe in capacity building and creating sustainable change to ensure successful outcomes into the longer-term, as opposed to the more transactional approach to short-term gains'

(Kieran et al, 2023:18)

The perception that 'what worked for us, will work for them' is now redundant. However, what new style to embrace is unclear. Many refer to older 'transactional' or 'autocratic' styles of leadership, as being replaced with a more holistic, human-centric approach (Kieran et al, 2023:9). A significant amount of research examines different leadership styles in the context of sustainability and 'relational' along with 'servant' leadership emerge as the leadership styles most conducive to sustainable change (Kurucz et al., 2016). Relational and servant leadership emphasise the value of fostering and maintaining meaningful connections with stakeholders. As sustainability efforts require multifaceted collaborations among various groups, a leader's capacity to cultivate and steward these relationships is pivotal. The research underscores the point that leaders must cultivate new relationships and new ways of relating to the wider world if they are to dismantle traditional systems that are collectively biased towards unsustainable outcomes. Transitions also require relational 'meaning-making' with existing stakeholders to unpack and reflect on the tensions that emerge from the central challenge of integrating economic with environmental and social concerns.

Other studies explore the leadership actions most strongly associated with sustainable outcomes (Hallinger and Suriyankietkaew, 2018). First amongst these actions is the need for leaders to internalise, articulate and embody sustainability values as a vital initial step in motivating and engaging others; notably values relating to gender and social equality, moderation, compassion, empowerment, and innovation. Secondly, leaders who effectively prioritise and translate such values into tangible successes are more successful in fostering stakeholder engagement and commitment to sustainable outcomes. Finally, the research underscores the need for leaders to articulate a resolute long-term perspective of sustainable value and emphasise the significance of enduring objectives, such as environmental stewardship. It is essential that leaders are clear about how longer-term preservation of the organisation and society, is more desirable than short-term gains and quick fixes. In line with commitment to long-term outcomes, sustainable leadership pairs vision articulation with continuous investment in developing organisational sustainability capabilities and adopting to new forms of sustainable value.

International guidance includes efforts to support individuals to reflect on their internal values and transition towards living more sustainable lives. The prominent 'Inner Development Goals' (IDGs) is a non-profit and open-source initiative founded by the 29k Foundation, Ekskäret Foundation. The IDGs offer an open-source framework that encompasses five behavioural dimensions and twenty-three transformational competences and skills. These serve as starting points for individuals to pursue sustainable outcomes, with a particular focus on business leaders as a key target audience. At the European level, initiatives such the 'European Education Area by 2025' (2020) call for the establishment of a European competence framework on sustainability. One notable resulting output is the European Sustainability Competence Framework, termed GreenComp, which was published in 2022 as part of the actions outlined in the European Green Deal (European Commission, 2022). GreenComp is designed to enable the European labour

market to adapt and meet the demands of the bloc's sustainable economic future. It identifies sustainability competences for integration into development programmes, facilitating upskilling and reskilling across all levels of the workforce to support the green transition (Bianchi et al., 2022). GreenComp offers a set of four sustainability domains broken out into twelve sustainability competencies. These competencies are then broken into knowledge skills and attitudes (KSA) and GreenComp offers a list of 169 KSA statements for individuals to consider. GreenComp provides a structured and in-depth understanding of the competencies necessary for individuals to engage effectively in sustainable practices and address the challenges of a green and sustainable future.

DISCOURSES OF DELAY AND DECISION-MAKING TRAPS

Despite the significant efforts of global institutions and national policymakers to advance sustainable business, there are forceful discourses and attitudes of resistance preventing meaningful action (Das & Albinsson, 2023).

This resistance is often influenced by conflicting perspectives on the role and priorities of business, resulting in opposition to regulations and a lack of engagement with sustainability guidance (Friede, G., 2019). The diversity of views highlights the complex challenges associated with fostering sustainable business and driving widespread economic change.

As the call for environmental action becomes more pertinent, there has been a concerning increase in environmental scepticism and discourses that downplay the need for change. Discourses of delay are frequently found in policy discussions and often endorsed by prominent stakeholders who use them to justify prioritising short-term financial interests over longerterm sustainability (Lamb et al., 2020). Among the twelve climate delay discourses identified by Lamb et al. (2020), several have gained significant prominence in business. These are termed relativism, individualism, greenwashing, technological hopium, doomism, and policy perfectionism. Addressing and countering these discourses of delay is essential to prevent them from becoming decision making traps that downplay needed action within organisations. Indeed, much of the scholarly work examining resistance and delays to sustainability action draws upon the work of Costanza (1987) who pioneered the notion of decision-making traps.

Leaders can, consciously and unconsciously, constrain their decision making when guided by entrenched, flawed beliefs and associated bias. Decision-making traps are pitfalls rooted, at least partly, in the beliefs of the individual rather than in the decision-making process itself (Hammond et al., 1998). Costanza applied the concept of decision traps to environmental issues to explore how these traps prompt short-term actions and policies that are at odds with the long-term global interests of individuals and society. As traps are so rife within sustainability related decision making, it is crucial for leaders to be aware of possible traps and discourses of delay to avoid the risk of making suboptimal decisions driven by problematic assumptions (Brookfield, 1992). Effective decision-making is a critical aspect of a business leader's role, particularly when changing course toward more sustainable longterm outcomes. The literature on leadership and decision-making emphasises the importance of leaders being well-informed about sustainability issues while also reflecting and refining their own values, relational skills and decision-making.

This introspective work is essential as a prerequisite for effective sustainable action. However, action itself is equally crucial. To drive action, the focus must move beyond intent and internal development and onto how leaders set sustainability goals and lead to achieve them. To do this we must explore leadership capabilities which can be defined as a business leader's ability to plan, direct, and execute activities consistently and effectively (Helfat & Winter, 2011). We adapt this to offer a definition of leadership sustainability capabilities as being 'the ability of a business leader to plan, direct and enact activities that consistently and successfully deliver positive environmental, social, and governance value for all its stakeholders. Business leaders need actionoriented sustainability capability frameworks that guide them to plan and achieve consistent sustainable change. Looking specifically at organisational change, the concept of a 'capability trap' builds on the theory of decision traps to explain business change failures (Repenning and Sterman, 2001,2002). Capability traps occur in the interaction between leader decisions and existing organisational structures. This theory situates business leaders as being responsible for overall performance. Therefore, when the performance falls short of the target, leaders have two options. Firstly, they can call for the organisation to 'work harder' through adding resources or increasing resource utilisation. This is a call for more of the same way of doing things and organisation capabilities do not change. Or secondly, leaders can guide the organisation to

'work smarter', which requires them to understand the organisation's capabilities are inadequate and then invest time and resources to tackle the systemic root cause and lead meaningful change (Lyness et al., 2016). Change is complex, uncertain and has a longer timeframe and, when trapped, it is difficult for leaders to see and develop the capability to escape it (Repenning & Sterman, 2002). In capability trap theory, the cycle of organisational performance is described as either a vicious or virtuous cycle. A vicious emerges where the mentality of "working harder" becomes ingrained, causing capabilities to continuously erode and performance to consistently fall short. Or a virtuous cycle emerges, where performance improves through 'worse-before-better' or 'failforward' behaviours due to the time lag between investing in capabilities and seeing results. In their 2016 study, Lyness et al. explore different routes of escaping capability traps and advise leaders to evaluate multiple, related practices as their combined interaction leads to capability enhancement. These insights reveal how leaders must focus firmly on change through capability development, rather than attempting to pursue piecemeal sustainability targets in parallel with business as usual (Lyness et al., 2016).

CONCLUSION: TOWARDS DIAGNOSING SUSTAINABILITY LEADERSHIP CAPABILITIES

Currently, literature guiding business leaders in their pursuit of sustainable business outcomes generally falls into two main categories. The first category takes an organisational level of analysis, concentrating primarily on the end result of what a sustainable business 'looks like'. This body of work offers comprehensive frameworks and metrics for guiding and measuring sustainable business outcomes. The second category explores the individual, behavioural and introspective aspects of leadership, focusing on leadership style, values, beliefs, and decision-making approaches. This literature underscores the significant role that individual traits, values and intrinsic characteristics play in shaping leader decisions about sustainability.

These two distinct perspectives offer valuable insights into the inputs and outputs that characterise sustainable leadership. While these perspectives shed light on the internal characteristics of leaders and the external organisational outcome, there remains a gap in guidance regarding the specific leadership actions that bridge the gap between these constructive inputs and desired sustainable outcomes.

This report aims to bridge the 'input' and 'output' focus and provide the link to action by piloting a Sustainability Capability Leadership Diagnostic with business leaders to understand both their current and target sustainability capabilities. Self-assessment plays a key role in assessing leadership capabilities as they offer leaders the opportunity to evaluate their current and target capabilities from which they can chart a path for capability development. Ultimately, business leaders need action-oriented sustainability capability frameworks, and the next section presents the methods employed to design a sustainability capability diagnostic for leaders.

Methods

Set out in this section is an overview of the project methods including literature review, qualitative data gathering and quantitative data gathering. This methods section concludes with an overview of the key components of the diagnostic.

Step 1 - Literature Review

The literature and leading sustainability frameworks discussed in section one of this report served as the basis for the design of the diagnostic. Firstly, a series of questions relating to leader beliefs were crafted based on common leader decision-making and capability traps. Secondly, IMAGEthe capability framework and statements within it were constructed using 'GreenComp' as the primary source guide, to which other leadership and business sustainability standards could be mapped. This approach ensured that the diagnostic incorporated key elements of sustainable leadership based on existing research and frameworks. GreenComp, the European Sustainability Competence Framework, was published in 2022 as one of the actions set out in the European Green Deal (European Commission, 2022). GreenComp offers twelve sustainability competencies to facilitate the development of all levels of the workforce to support the green transition (Bianchi et al. 2022). Its focus on driving individual action towards sustainability positions it as the document around which other ideas and frameworks can be connected. To adapt the content of GreenComp for industry and leadership, the competencies and lengthy list of



169 sustainability indicators were mapped against the indicators of leading industry frameworks noted below. This was an iterative process, and the final mapping was arrived at via continuous analysis of leading industry frameworks. This approach successfully retained the unique focus and emphasis of GreenComp while ensuring its alignment with the most rigorous standards of sustainable leadership. Figure Two: Core Project Frameworks and Literature.

Step 2 - Qualitative Data Gathering: Ten semi-structured leader interviews.

The 'sustainability capabilities for leaders' diagnostic was created and applied in collaboration with the leadership teams of five participant organisations who secured via convenience sampling amongst the membership group of <u>Business in the Community Ireland (BITCI)</u>. The leadership teams spanning five sectors with locations in multiple regions across Ireland. The organisations operate within 'Financial Services', 'Energy Utilities', 'Legal', 'Professional Services' and 'Pharmaceuticals'.

Throughout this project, BITCI and the participant organisations offered key insights to contribute to project success and positive impact through advising on thematic content and approach including project planning, and efficient project progression. The five CEOs/Managing Directors of the participant organisations and five sector representatives from state and professional agencies participated in semi-structured interviews of approximately one-hour duration. This involved the interviewees offering their views on key sustainability trends, challenges and opportunities. This provided a broad understanding of the business leadership sustainability capability landscape in Ireland, as well as insights into the needs and potential applications of the diagnostic tool across the business community. The sectoral bodies provided a strategic view of common sustainability priorities and trends within their respective industries, namely BioPharmChem (IBEC), the Law Society of Ireland, the Commission for the Regulation of Utilities, the Environmental Protection Agency (EPA) and the Department of Environment, Climate and Communication. The information gathered from business leaders provided valuable context for designing a diagnostic tool appropriate to the target audience's sustainability capability development needs. The key themes emerging from these interviews are presented in section three, and it is important to note that these interviews informed the diagnostic design which is presented below in Section 2.4.

Step 3 - Quantitative Data Gathering: The prototype Sustainability Capabilities for Leaders Diagnostic

Following the review of existing literature, sustainability frameworks, as well as the leader interviews, the full pilot diagnostic was designed and titled the SCALE diagnostic. A link to this diagnostic was sent to the top leadership teams of the five participant organisations and 46 responses in total were obtained. The SCALE diagnostic comprehensively examines leader beliefs and assesses leaders' current and target sustainability capability levels. To accomplish this, the diagnostic is structured into the following two main sections described below a link to the diagnostic was emailed to each participant for them to complete.

20 statements relating to leader sustainability beliefs:

The 46 participant leaders read twenty statements relating to beliefs and views that can either drive or delay meaningful sustainability action within their organisation. **Measurement:** Each of the 46 respondents reviewed the twenty statements and used a five-point Likert scale to indicate the extent to which they agreed or disagreed with each statement.

54 statements relating to leaders' sustainability capabilities:

Leadership sustainability capabilities can be understood as the ability of a business leader to plan, direct and enact activities that consistently and successfully deliver positive environmental, social, and governance value for all its stakeholders. Six core sustainability capabilities were identified and each of these six leadership capability statements were broken out into 'elements' of leadership capability (strategy, structure and culture) as well as the dimensions of sustainability (environmental, social and governance). This amounted to fifty-four capability statements in total. **Measurement:** Each of the 46 respondents reviewed these statements and evaluated their current and target capability levels in three years' time. These capability levels (newcomer, explorer, integrator, exemplar and pioneer) were adapted from the European Union competence framework for citizens (Vuorikari et al, 2016).



Step 4 – Completion of SCALE Diagnostic Component Parts

Each of the 46 participants completed the diagnostic via an online self-assessment tool and in this section, we explain the diagnostic components in more detail. It is important to state that designing the diagnostic was an iterative process, and the final design was informed by the review of current literature, existing prominent sustainability frameworks and the results of the interviews with business leaders. Further insight into how the interviews informed the diagnostic is available in Section 4 of this report.

After the diagnostic design was complete, the Maynooth University Innovation Value Institute configured an on-line data gathering tool to allow the 46 participant leaders to complete each component of via an online link.

PART 1: BELIEFS - DISCOURSES OF CHANGE / DELAY (20 STATEMENTS)

PART 2: SIX SUSTAINABILITY CAPABILITIES (54 STATEMENTS)

1) VALUING SUSTAINABILITY	SUSTAINABILITY CAPABILITY STATEMENTS 9 statements for each of the capabilities.			
	SUSTAINABLE STRATEGY ENACTING STRUCTURES		ENABLING CULTURES	
2) ADAPTIVE ACTION	1 Environmental statement	1 Environmental statement	1 Environmental statement	
3) CRITICAL SYSTEMS THINKING	2 Social statement	2 Social statement	2 Social statement	
	3 Governance statement 3 Governance statement		3 Governance statement	
4) FUTURES LITERACY	Leaders select "current	" and "target" capability levels	for each of the 54 capability	
5) SUPPORTING FAIRNESS		statements.		
3) SUPPORTING PAIRIESS				
6) LEADER DEVELOPMENT	NEWCOMER: EXPLO	DRER: INTEGRATOR:	EXEMPLAR: PIONEER:	

Figure Three: SCALE Diagnostic Components

SECTION ONE: LEADER BELIEFS

The following set of twenty statements investigate leaders' perspectives on the integration of sustainability within the value strategy of their respective organisations as well as their own professional views and aspirations. These questions collectively encompass the various decision-making and capability traps that can impede leadership progress in sustainability within organisations. They also explore the key drivers of sustainable leadership within organisations.

Leaders provided responses using a five-point Likert scale, which spans from "strongly agree" to "strongly disagree." These questions establish the context and factors that influence a leader's decisions related to sustainability, which subsequently impact the likelihood and potential for meaningful action. They encompass various beliefs known to influence climate action. Assessing these beliefs provides a foundation for understanding the leader's readiness to act before delving into the specific issues addressed in the diagnostic.



To what extent do you agree with the following statements

- 1 It is clear to me that doing more on sustainability will contribute to the financial success of our organisation in the next five years.
- **2** Our organisation needs to become more sustainable than we are today.
- **3** Our financial investors/owners want our business to become more sustainable.
- 4 Our organisation is making every effort to be more sustainable, and the blockers to progress are primarily outside of our organisation.
- **5** When it comes to tackling the climate crisis, our organisation's actions and our carbon footprint are not that significant.
- 6 Leading on sustainability issues does not seem like a direct path to advancing my own professional/career interests.
- 7 We cannot transition away from environmentally problematic products or services until we have identified viable alternatives that offer comparable revenues.
- 8 A majority of our customers will not accept higher costs for more sustainable products/services; our organisation would have to absorb most of the additional costs.
- **9** Perspectives on sustainability that involve financial 'de-growth' in any part of our organisation are too radical and not something that I can consider in a meaningful way.
- **10** I am unsure how sustainability issues are relevant to my leadership role in this organisation.
- **11** Consumer demand for unsustainable products and services will prevent us from meeting our environmental goals in the coming five years.
- **12** Halving the carbon emissions of our organisation by 2030 will involve disruptive change.
- **13** Human ingenuity will eventually lead to a technological solution for climate change.
- **14** The earth has, and will continue to have, an abundance of the natural resources that our organisation currently relies on for success.
- **15** I feel uncomfortable supporting investments in sustainability that do not have some form of financial business case associated with them.
- 16 We should wait to see what others (e.g. competitors, regulators, customers) do before we act.
- 17 It appears that our competitors are doing less on sustainability in comparison to our organisation.
- **18** Yes, our organisation needs leadership on sustainability, but it cannot be a significant part of my leadership role.
- **19** Leadership on sustainability should start with government and regulators, it is not private industry's responsibility to set new standards.
- **20** Leaders who hold a similar role to mine at another organisation like ours think it is very important for their organisations to do more on sustainability.

SECTION TWO: SIX LEADER SUSTAINABILITY CAPABILITIES BROKEN OUT INTO 54 CAPABILITY STATEMENTS

Leadership capability frameworks gained prominence in the latter half of the 20th century in response to the growing realisation that leadership can be developed and improved through specific developmental actions. The desk research and leader interviews culminated in the identification of six core leader sustainability capabilities which are outlined in table 2 below. Since capabilities are rooted in action, the leader descriptions specify the actions that leaders should undertake to develop each capability effectively.

These descriptions introduce and explain each capability to the leaders taking the diagnostic before they evaluate themselves according to the capability statements. As per figure three, each of the following sustainability capabilities is broken down into nine capability statements. It is these 54 capability statements that leaders used to self- evaluate their current and target levels of sustainability capability. Each of the 46 leaders reviewed these statements and evaluated their current and target capability levels in three years' time. These capability levels (newcomer, explorer, integrator, exemplar and pioneer) were adapted from the European Union competence framework for citizens (Vuorikari, et al, 2016).

SC1: Valuing Sustainability	Internalises sustainable business as a core leadership and professional value. Continually interrogates how own leadership and professional values interact in different business contexts and considers subsequent consequences for sustainable outcomes. Proactively advocates for and leads the business to prioritise sustainability. Encourages extensive reflection on organisational values to entrench sustainability as a shared, imperative objective. Is deeply aware that the observed values of organisational leaders create an organisation wide tacit system of desirable behaviours and incentives that drive outcomes. Understands that the organisation's values shape its social license to enjoy continued sustainable success and relevance and aspires to go beyond compliance to forge precedents and pioneer new forms of sustainability leadership.
SC2: Adaptive Action	Initiates necessary transformations for sustainability through driving action and advocacy throughout the organisation. Takes action and demands action through maintaining a commitment to the philosophy that 'no one can do everything, but everyone should do something'. Moves past the notion that financial business cases are a prerequisite for all action, particularly business cases based on short-term financial returns. Challenges discourses of delay and acknowledges that new sustainability initiatives and green innovations will yield varying degrees of success, but all efforts offer important transferable learnings. Supports trials and experimentation of sustainability initiatives aimed at identifying and driving opportunities for scalable, positive change. Understands that fostering an inclusive workplace is essential to cultivate diverse viewpoints and to empower the organisation as a whole to expand the breadth of possible actions that can be pursued.

SC3: Critical Systems Thinking	Recognises that the organisation and its value chain (i.e. full lifecycle of products and/ or services, including material sourcing, production, consumption and disposal/recycling processes) are embedded within an eco-system that is subject to planetary limits and nature dependencies. Strives to enhance the organisation's sustainability impact throughout this chain of connected outcomes. Continually examines the organisation's causal connections and line of impact with external economic actors (e.g. investors/owners, suppliers, channels, consumers/end users) to enhance outcomes. Audits and bolsters the alignment of sustainable capabilities across organisational units to ensure a harmonised, cumulative approach to pursuing sustainable outcomes. Understands that resistance and blockers to change can limit action on sustainability in systemic and exponential ways. Actively overcomes resistance and inertia through bringing stakeholders together, trialling new ideas, establishing new bodies of evidence and fostering dialogue focused on protecting, restoring and regenerating the ecosystems that the organisation impacts.
SC4: Futures Literacy	Demonstrates a profound dedication to creating a viable and sustainable business that can endure for future generations. Understands that leading on sustainability involves envisioning alternative futures and identifying the initiatives needed today to achieve a necessary sustainable future. Leads 'future planning', which encompasses strategies extending beyond a typical five-year timeframe to commit to needed, even disruptive, change. Identifies appropriate extended planning and explorative timeframes based on the organisation's line of impact, e.g. 5-10 years, 10-20 years, 20 years and beyond. Shifts focus from seeking certainties and towards cultivating exploratory thinking about possibilities, framing the future as open (but not empty) and collectively shaped. Considers the interplay between current trajectories and future scenarios, striving to understand how the organisation can best engage with changes in the physical environment, regulations, society, and technologies to drive sustainable outcomes. Appreciates the long-term dependencies of both the organisation and the broader sector on the natural world.
SC5: Supporting Fairness	In line with the idea of a 'just transition', leads sustainable initiatives that incorporate accessibility, equity, and justice for current and future generations. Positions inclusivity as a key goal in the organisation's pursuit of fair sustainable outcomes. Learns from the past and disrupts traditional hierarchies of influence to deliver sustainable outcomes for a wider body of societal stakeholders such as citizens, communities, animals, nature, and representative civic/third sector organisations. Seeks to ensure that employees are not left behind and that they can participate in the emerging sustainable organisation through access to training, education and new job opportunities. Understands that engaging with a broad range of societal stakeholders increases the likelihood of encountering conflicting views, societal tensions and belief traps. Actively devises plans to manage risks presented by disruptive actors who aim to undermine the body of evidence that illustrates the magnitude of the climate crisis and associated environmental risks.
SC6: Leader Development	Embraces the idea that leading for sustainability demands a new mindset and an unwavering commitment to crafting new definitions of success that incorporate sustainability. Assumes a pivotal role in driving sustainable transformations to heighten the positive impact of the organisation and mitigate against negative impacts. Acknowledges that environmental science is continuously evolving and underscores the importance of engaging with a diverse array of insights to remain at the forefront of knowledge regarding how to guide the business towards sustainable outcomes. Acknowledges that becoming more sustainable goes beyond surface-level symbolic actions. Instead, achieving a sustainable business involves tackling complex and challenging issues, often referred to as formidable and 'wicked' problems, by taking proactive steps to reduce the organisation's negative impact on the environment and create positive environmental and social value for stakeholders.

THE ELEMENTS OF SUSTAINABILITY CAPABILITY FOR LEADERS

Leadership capability frameworks seek to develop the leader in context by considering the organisational resources a leader has, or must develop, to achieve goals.

Building upon the framework of GreenComp, which encompasses 'knowledge,' 'skills,' and 'attitudes,' three crucial components of sustainability capabilities were identified as being integral to a business leader's ability to plan, direct, and implement activities that consistently and effectively yield positive environmental, social, and governance value for all stakeholders.

These components include:

- Sustainable strategies that create, deliver, and capture positive environmental, social, and economic value for all its stakeholders through its entire value chain; underpinned by robust and transparent governance.
- Enacting structures are the tangible systems, machinery, processes, frameworks, or mechanisms that facilitate the implementation and realisation of strategies or plans within an organisation. These structures provide the practical means through which strategy or plans are translated into outcomes.
- 3. Enabling cultures to foster and support the development and empowerment of individuals or groups to achieve goals. These cultures provide the necessary conditions, attitudes and norms that encourage people to explore their potential, take initiative, and contribute effectively to overcome barriers and achieve shared goals.

As Figure 3, presented earlier, illustrates, each of the above three elements of leadership capability was further broken out to capture the environmental, social and governance actions that leaders can develop. This ensures that each sustainability capability incorporates both the elements of leadership capability and the full spectrum of sustainability actions that leaders should pursue.



Findings from leader interviews

Ten interviews with business and sectoral leaders were undertaken early in the diagnostic design process. Five of these interviews were conducted with the top leadership role of each of the five participating organisations, namely CEOs and managing directors.

The additional five interviews were conducted with senior representatives from industry bodies that the participant organisations operate within. The main design objective was to ensure the tool would be informed by those pioneering the complex task of establishing sustainable business standards and precedents across the Irish economy. The interviews yielded valuable insights into the intricate complexities associated with sustainable business strategies. They also covered the challenges within the wider ecosystem that businesses face in their sustainability related transformations. The leaders also offered their views on how a leadership diagnostic could move the strategic sustainability agenda forward and they were an invaluable source of guidance and insights that fed into the final diagnostic design. As the five participating organisations are members of Business in the Community Ireland, all have committed to the BITCI mission of achieving sustainable change and had all initiated the sustainability conversation within their organisation. Nevertheless, all leaders discussed the multifaceted nature of sustainability challenges, highlighting the depth of transformation required if organisations and the broader business ecosystem are to successfully transition towards a more sustainable economy and inclusive society.

In this section, we set out the key themes emerging from these interviews and how these themes informed the design of the SCALE diagnostic. Specifically, the 'diagnostic design outcome' statements noted in this section explain how each theme was reflected in the final diagnostic design.





IDENTIFYING SUSTAINABILITY PRIORITIES

A common theme raised in the leader interviews was the complexity and breadth of issues that emerge when organisations embark on sustainability transitions. The concept of a sustainable business encompasses a vast array of organisational environmental, social, and governance practices. Leaders are required to consider these collectively, all the while striving to maintain financial sustainability. Leaders reported how discussions on one aspect of ESG, or sustainability in general, can often quickly expand into numerous other areas, making it difficult to establish clear parameters for decision making and priorities for action. The potential for 'drift' and the challenge with prioritisation also emerged from the sense that once a leadership team commits to sustainability, many sustainable pursuits seem worthy and important. Consequently, leaders report that establishing clear priorities and parameters when setting sustainability goals is challenging; and this challenge emerges before a leader deals with any dissenting views that may exist.

Diagnostic design outcome:

The diagnostic presents the full spectrum of E.S.G. sustainability actions to allow leadership teams to identify and express organisational sustainability priorities for capability development. The diagnostic consists of 54 capability statements, 18 statements for 'environmental' leadership actions, 18 for 'social' and 18 for 'governance'.

SETTING A SUSTAINABILITY STRATEGY AND TAKING ACTION

Notwithstanding the challenge of prioritising, many leaders had clear sustainability strategies and were working to achieve goals for their organisation. Organisations that reported progress in this area had invested significant time in developing their sustainability strategies with their leadership team, often seeking guidance from external advisors to facilitate these new conversations. Leaders also discussed the importance of simply taking immediate action and empowering others through supporting the trialling and scaling of ideas.

These leaders emphasised the importance of having some 'wins' to celebrate change and success. They also spoke about the importance of conveying the message that the organisation is not waiting for a compelling financial business case or absolute certainty on returns before setting sustainability goals, as such certainty might never materialise. Transitioning to a more sustainable business often involves venturing into the unknown, with leaders citing the combined importance of establishing both a strategic long-term vision as well as immediate momentum and successes.

Diagnostic design outcome:

The diagnostic encompasses both longer-term visionary strategic sustainability capabilities as well as the processes that facilitate immediate action; as both play a crucial role in shaping a leader's ability to successfully drive sustainable change. This is most prominent within the 'Valuing Sustainability' and 'Adaptive Action' capabilities.

MOTIVATION AND AMBITION

Leaders reported a diverse range of motivations behind their pursuit of sustainability goals. Several common motivations emerged and notable amongst these was preparing for forthcoming Corporate Sustainability Reporting Directive (CSRD), aligning with government emissions reduction targets, and meeting other regulatory obligations. Another commonly expressed incentive was the desire to position their organisation as an attractive employer, particularly for early career candidates who increasingly prioritise working for businesses with clear sustainability goals. These drivers have proven to be potent catalysts for change, and various sectors and organisations are actively leveraging them. In certain cases, sustainability is integral to the company's long-term business strategy. Also, more intrinsic

motivations rooted in personal beliefs and the aspiration to leave a more sustainable planet for future generations played a central role in driving sustainability efforts. However, interviewees were not certain of a shared motivation amongst leaders across the sector. Leaders felt more needed to be done to establish a consensus on sectoral level change and to promote sectoral collaboration to design new ways of doing business sustainably. Leaders also emphasised that, as a small open economy, taking a leadership role in sustainability represents a significant opportunity to elevate 'Ireland Inc.' on the global foreign direct investment stage. In these scenarios, leaders highlighted the necessity of establishing national and sectoral-level collaborative networks to pioneer innovative forms of sustainability leadership.

Diagnostic design outcome:

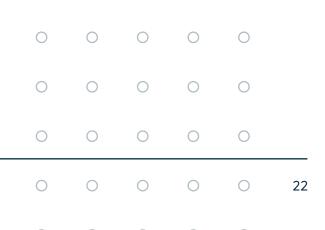
The diagnostic explores leaders' views and motivations against the highest standards of sustainability leadership to evaluate how ready leaders are to pioneer new forms of sustainability leadership. This is most prominent within the 'beliefs' questions and the 'Valuing Sustainability' and 'Leader Development' capabilities.

ENGAGING THE WIDER ECOSYSTEM

Many interviewees noted a decoupling between sustainability efforts at the organisational level and the wider ecosystem that the organisation operates within. This divide underscores the pertinence of systema-wide 'wicked problems'. A wicked problem is a complex and ill-defined issue that lacks a clear solution due to its multifaceted nature, ambiguous boundaries, and the diverse perspectives of stakeholders. These problems, such as climate change, are difficult to address because their interconnected elements create unpredictability and attempts to solve one aspect may inadvertently lead to new challenges in others. The interviewees discussed how the range of external stakeholders embedded in an organisation's value chain, as well as the broader economic environment, have a significant impact on the organisation's sustainability goals. These stakeholders include customers, suppliers, competitors, and policymakers. Some challenges, such as consumer dependence on less sustainable products, require solutions that involve a diverse set of actors.

Diagnostic design outcome:

The diagnostic incorporates the significant role external stakeholders play in shaping organisational level sustainability and how leaders can engage with the wider ecosystem to drive sustainable transitions. This is most prominent within the 'Critical Systems Thinking', 'Supporting Fairness' and 'Leader Development' capabilities.



SCOPE OF IMPACT

Interviewees noted how clarifying the scope of impact is a key issue for leaders setting sustainability goals. The scope of impact refers to how far organisations trace their sustainability impact and, relatedly, how and where they seek to have a positive impact. The term 'scope of impact' is used in emissions reporting where scope 1, 2, and 3 emissions are labels used to sort an organisation's greenhouse gas emissions. Scope 1 deals with emissions directly under the company's control, such as vehicles, chemical and fuel usage. Scope 2 covers emissions indirectly linked to purchased energy, such as electricity. Scope 3 includes other indirect emissions like those from supply chains and business travel. Many leaders mapped this logic onto other forms of impact, revealing how different organisations had distinct lines of impact and influence. Some sectors and organisations have close relationships with end-users and consumers, allowing them to collaborate on innovative solutions and support customers to be more sustainable. In contrast, some organisations are more detached from

end-users and instead work through other bodies to shape consumer actions. Leaders indicated a commitment to broadening understandings of scope of impact while also wanting to identify priorities for action.

Diagnostic design outcome:

The diagnostic embraces the full line and chain of impact, including upstream and downstream, negative and positive, to include current and future stakeholders, including nature. This is most prominent within the 'Critical Systems Thinking' and 'Supporting Fairness' capabilities.

LACK OF 'GREEN' SKILLS

A notable theme that emerged from the feedback is the lack of clarity regarding the skills needed to drive sustainable change and effectively implement sustainable practices in organisations. There was a sense that, while several state agencies are progressing this issue, graduates coming through could have clearer sustainability-related skills than they currently display. Leaders reported that if the pace and urgency regarding the provision of essential sustainability skills, organisational leaders could more readily drive internal upskilling, as they would have a clear external frame of reference. Relatedly, leaders reported that sustainable change within their organisations involved multi-disciplinary collaborations, often with external stakeholders, which had shifted the nature of project management and collaboration within firms. At the leadership level, leaders expressed that regulation regarding sustainability reporting and emissions reduction has certainly established a basis for action. However, leaders felt that a clearer consensus regarding the need and value of pioneering new forms of sustainable leadership across entire sectors would help orient more leaders to take ownership of and drive sustainability transitions within their organisations.

Diagnostic design outcome:

The diagnostic encompasses leadership development for sustainability as well as the multi-disciplinary collaborative skills and sustainability-related resource planning within organisations. This is most prominent within the 'Futures Literacy' and 'Leader Development' capabilities.

Figure 4: Overview of interview findings and the diagnostic design outcome

The SCALE diagnostic should guide leaders to ...

Identify sustainability priorities:

Diagnostic design outcome: The diagnostic presents the full spectrum of E.S.G. sustainability actions to allow leadership teams to identify and express organisational sustainability priorities for capability development. The diagnostic consists of 54 capability statements, 18 statements for 'environmental' leadership actions, 18 for 'social' and 18 for 'governance'.

Balance long-term thinking with immediate action:

Diagnostic design outcome: The diagnostic encompasses both longer-term visionary strategic sustainability capabilities as well as the processes that facilitate immediate action; as both play a crucial role in shaping a leader's ability to successfully drive sustainable change. This is most prominent within the 'Valuing Sustainability' and 'Adaptive Action' capabilities.

Understand motivation and ambition:

Diagnostic design outcome: The diagnostic explores leaders' views and motivations against the highest standards of sustainability leadership in order to evaluate how ready leaders are to pioneer new forms of sustainability leadership. This is most prominent within the 'beliefs' questions and also the 'Valuing Sustainability' and 'Leader Development' capabilities.

Engage with the wider ecosystem

Diagnostic design outcome: The diagnostic incorporates the significant role external stakeholders play in shaping organisational level sustainability and how leaders can engage with the wider ecosystem to drive sustainable transitions. This is most prominent within the 'Critical Systems Thinking', 'Supporting Fairness' and 'Leader Development' capabilities.

Understand the scope of impact

Diagnostic design outcome: The diagnostic embraces the full line and chain of impact, including upstream and downstream, negative and positive, to include current and future stakeholders, including nature. This is most prominent within the 'Critical Systems Thinking' and 'Supporting Fairness' capabilities.

Address the lack of 'Green' Skills:

<u>Diagnostic design outcome</u>: The diagnostic encompasses leadership development for sustainability as well as the multi-disciplinary collaborative skills and sustainability-related resource planning within organisations. This is most prominent within the 'Futures Literacy' and 'Leader Development' capabilities.

Findings

This section presents the responses the 46 leaders submitted to the online 'Sustainability Capabilities for leaders' diagnostic tool. As was previously mentioned, the SCALE diagnostic incorporated the following components.

20 statements relating to leader sustainability beliefs:

Each of the 46 respondents reviewed the twenty statements and used a five-point Likert scale to indicate the extent to which they agreed or disagreed with each statement. 54 statements relating to leaders' sustainability capabilities:

Each of the 46 respondents reviewed these statements and evaluated their current and target capability levels in three years' time. These capability levels (newcomer, explorer, integrator, exemplar and pioneer) were adapted from the European Union competence framework for citizens (Vuorikari, et al, 2016).

LEADER SUSTAINABILITY BELIEFS

The diagnostic presented leaders with twenty statements that investigate their perspectives on the integration of sustainability within the value strategy of their respective organisations as well as their own professional views and aspirations. These questions collectively encompass the key drivers of sustainable change as well as the various decision-making and capability traps that can impede leadership progress in sustainability within organisations. The following graphs present the range of average organisational responses to each statement; this range of organisational averages is represented by the line. The overall average of all responses is represented by the diamond. The full set of responses is contained in appendix 2.

LEADER BELIEFS THAT SUPPORT SUSTAINABLE CHANGE

The responses indicate that leaders share a strongly held conviction that their organisation must transition to becoming more sustainable and they recognise the positive connection between sustainability and the organisation's longer-term financial interests. Moreover, most firmly believe that they, as leaders, bear a pivotal responsibility in steering the organisation toward greater sustainability. This collective commitment to and accountability for sustainability is commendable. This commitment reflects the initial efforts made by these organisations to establish and commit to sustainability goals, marking an important pivot towards a more sustainable future.

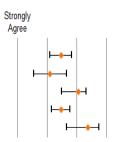
Figure 5: Leader beliefs that support sustainable change.

Strongly Agree	Strongly Disagree	
⊢ •1		Our organisation needs to become more sustainable than we are today.
I ♦I		It is clear to me that doing more on sustainability will contribute to the financial success of our organisation in the next five years.
⊢_ ♦–1		Our financial investors/owners want our business to become more sustainable.
		It is very important for our business to do more on climate change.
	⊢ ₊⊣	We should wait to see what others (e.g. competitors, regulators, customers) do before we act.
	⊨+–1	Yes, our organisation needs leadership on sustainability, but it cannot be a significant part of my leadership role.
	⊦ +1	Leadership on sustainability should start with government and regulators, it is not private industry's responsibility to set new standards.

URGENCY OF BECOMING MORE SUSTAINABLE

The statements gauging the sense of urgency reveal a diversity of opinions among business leaders. This variations in viewpoints that are worth exploring within leadership teams to assess whether they might hinder the pursuit of the disruptive change leaders feel is necessary. The responses emphasise the need to develop new forms of sustainable revenue within organisations and invest in the existing human ingenuity they feel exists. The mixed views on career progression suggest that aligning sustainability goals with leader remuneration and advancement may be a worthwhile initiative. There is a risk associated with assuming all leaders will 'opt-in' to sustainability goals, and these complex issues need to be considered to establish a clear basis for immediate change.

Figure 7: Leader beliefs relating to the urgency of sustainable change.



Strongly Disagree

> Our organisation is making every effort to be more sustainable, the blockers to progress are primarily outside of our organisation. Halving the carbon emissions of our organisation by 2030 will involve disruptive change. We cannot transition away from environmentally problematic products or services until we have identified viable, alternatives that offer comparable revenues. A majority of our customers will not accept higher costs for more sustainable products/services, our organisation would have to absorb most of the additional costs. Consumer demand for unsustainable products and services will prevent us from meeting our environmental goals in the coming five years.

SUSTAINABILITY CAPABILITIES

The second component of the diagnostic required the 46 leaders to review 54 capability statements and evaluate their own current sustainability capability level and their target capability level in three years' time. These capability levels (newcomer, explorer, integrator, exemplar, and pioneer) were adapted from the European Commission's guidance relating to competence frameworks for capability and skill development (Vuorikari, et al, 2016). A full overview of the capability levels adapted for this project are available in Appendix 3. Overall, the leaders indicated they were, on average, at the 'explorer' level of sustainability capability, and this was consistent across the elements of capability (strategy, structure, and culture) and across the dimensions of sustainability namely environmental, social and governance issues. One sustainability capability, namely Futures Literacy which involves longer term transition planning, scored at the lower 'newcomer' level.

EXPLORER (Trialling and Testing)

Who 'Explorers' are:

Explorers are aware of the stated capability and have begun to implement or trial parts of it. However, they have not yet fully embraced the connected practices encompassed by the capability.

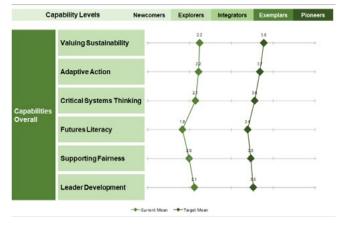
What 'Explorers' need:

Explorers are interested in enhancing this capability and need to build up more resources, insights, and ideas to do so.

Explorers are in the process of active learning, and they are working to attain a clear understanding of what a successful and scaled approach to the capability involves for the part of the business they lead.

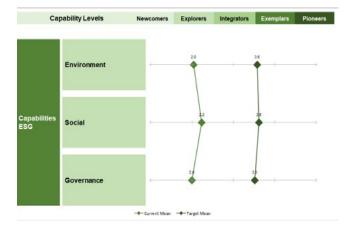
Explorers are keen to see initial benefits from pursuing this capability to better understand what works well and to start integrating the capability throughout the part of the business they lead.

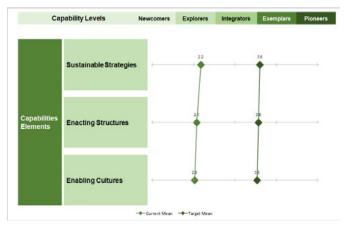
Figure 8: Overall Scores by Sustainability Capability



Overall, respondents on average indicate that, over the next three years, leaders aspire to move to the 'integrator' and 'exemplar' levels of capability, and this was mostly consistent across the elements of capability and across the components of sustainability, namely the spectrum of ESG. issues.

Figure 9: Overall Scores by Sustainability Dimension (E.S.G) and Capability Element





EXEMPLAR (Strategic Variation)

Who 'Exemplars' are:

Exemplars enact the sustainability capability in a variety of contexts and for a range of purposes. They adapt and extend the capability, connecting it to other organisational systems and processes to achieve new cumulative benefits.

What 'Exemplars' need:

Exemplars are establishing the organisation's approach to the sustainability capability as a burgeoning source of strategic competitive advantage; they invest organisational resources accordingly. Exemplars possess a clear understanding of the overall strategic positioning and value of the capability within the part of the business they lead.

Exemplars require continued engagement with a diverse range of influential internal and external stakeholders to facilitate idea exchange, establish new benchmarks, enhance the capability and ready the organisation for emerging new

and complex challenges.

VALUING SUSTAINABILITY: MOVING FROM 'EXPLORER' TO 'EXEMPLAR'

The leaders' response to the nine statements relating to Valuing Sustainability indicates they have begun the work of reflecting on and articulating sustainability values for themselves as leaders and for the part of the organisation they lead. This work is an essential first step essential to driving wider change and engagement. However, the scores for the practices associated with valuing sustainability are somewhat uneven. The higher scores for the social category demonstrate how organisations have begun to integrate sustainability values into their employee value proposition, their channels for employee voice and organisational branding. Less developed are the metrics and investment in organisational governance systems to transparently track progress. For example, leaders indicated they are

in the very early stages of integrating sustainability as a prominent feature in performance management. Relatedly, few organisations had put a tangible value on sustainability through connecting remuneration and other non-financial incentives with sustainability objectives. Leaders expressed a strong ambition for the Valuing Sustainability capability, indicating their desire to achieve a level of capability that is close to exemplar status. They are highly motivated to enhance clarity on the value of sustainability and to establish effective systems for tracking progress over the longer term. The higher level of ambition for Valuing Sustainability reflects their commitment to driving sustainability within their organisations.

ADAPTIVE ACTION: MOVING FROM 'EXPLORER' TO 'EXEMPLAR'

Adaptive action explores the how leaders drive immediate change within their organisation. The responses indicate the unevenness of change within the organisations. The strong scores on the 'social' reflect the progress made on issues relating to equality, diversity, and inclusion. Less progress has been made on issues relating to establishing new forms of governance and criteria to drive sustainability-oriented decision-making and ways of working. For example, organisations are at the initial stages of adapting their internal investment and financial governance processes, (e.g., CAPEX and OPEX allocations) to efficiently resource sustainability action and experimentation. In terms of target, leaders indicate they wished to get approximately mid-way between integrator and explorer.

CRITICAL SYSTEMS THINKING: MOVING FROM 'EXPLORER' TO 'EXEMPLAR'

The responses from leaders highlight that organisations are actively engaged in clarifying their impact on with their wider value chain, which includes internal and external stakeholders and also the physical environment. This work encompasses tracking the impact of the value chain as well as processes to drive positive outcomes across this interconnected system. The high response to the social dimension at the indicates that organisations are making significant commitments to uphold human rights and employment standards for workers throughout the value chain. In other areas, organisations are beginning to explore systems for tracking emissions and other impacts throughout the value chain. They are also in the initial stages of developing the multidisciplinary and collaboration skills necessary to engage with external stakeholders and influence them positively. These findings suggest a growing awareness of the importance of the value chain and the need for holistic sustainability approaches. In terms of target, organisations indicated they wished to get approximately mid-way between integrator and explorer.

FUTURES LITERACY: MOVING FROM 'EXPLORER' TO 'INTEGRATOR'

Leaders consistently indicated that "Futures Literacy" represents their lowest level of sustainability capability. The scores consistently fall within the newcomer and explorer categories, suggesting that leaders have not had extensive opportunities to engage in long-term future planning, especially concerning sustainability initiatives that extend beyond the typical five-year timeframe. Given that leaders also expressed a belief that disruptive change is necessary to reduce emissions and drive sustainability, enhancing their literacy and understanding of what longer term change entails should be a priority. However, leaders aspire to achieve a level of capability closer to the integrator range rather than the exemplar level. This indicates that organisations may need additional support and resources to allocate time and effort to design a more sustainable future for their operations and initiatives.

SUPPORTING FAIRNESS: MOVING FROM 'EXPLORER' TO 'EXEMPLAR'

The responses from leaders highlight the investment the organisations have made in cultivating high-quality work environments, which include secure employment terms and conditions. This foundation of security, inclusion and fairness is a great basis from which broader changes toward sustainability can be initiated. However, the results also show that fewer investments have been made to explore the organisation's interactions with and impact on wider societal stakeholders, including citizens, communities, animals, nature, representative civic/third-sector organisations and future generations. There is an opportunity for organisations to delve deeper into the concept of a "just transition" and consider what it means for their operations. This exploration can lead to the development of sustainable initiatives that prioritise accessibility, fairness, and equity for both current and future generations affected by the organisation's activities. It reflects a growing recognition of the need to consider the broader and longer-term impacts of an organisation's actions and interactions with the environment.

LEADER DEVELOPMENT: MOVING FROM 'EXPLORER' TO 'EXEMPLAR'

Many organisations have shown a commitment to leader development for sustainability, as evidenced by the responses indicating that leaders have dedicated time to developing their expertise in sustainability issues and strategies. These leaders have also worked to engage with a diverse array of insights to be at the forefront of knowledge when it comes to guiding the business toward sustainable outcomes. The responses also indicate that leaders are actively committed to going beyond surface-level symbolic actions and are encouraging genuine and open debates on sustainable business practices. They are also willing to introduce radical, critical, and sceptical viewpoints into sustainability discussions. The commitment leaders have made to sustainability is evident, and this aligns with their expressed beliefs on the importance of sustainability. However, this commitment alone does not make the process of change more straightforward. It is crucial to both recognise the dedication of leaders and build upon it by developing the necessary structures and cultures needed to drive sustainable change throughout the entire organisation.

HIGHEST AND LOWEST SUSTAINABILITY CAPABLITY SCORES

Ranking the leader responses to the 54 sustainability capability statements also offers valuable insights. The top five highest ranking statements were for the 'Social' dimension of ESG. This underscores the commitment of these organisations to create inclusive and equitable workplaces, secure terms and conditions, and upholding human rights. The lowest five ranking statements relate primarily to 'enabling cultures' and to the 'environmental' elements of sustainability. It is often the case that organisational cultural change lags behind strategy development and, as organisations are still in the explorer stage, organisational change is not yet widespread. Relatedly, the sense of disruptive change and concerns regarding customers may be delaying progress in organisations becoming more environmentally sustainable.

It appears that progress of the 'E' within E.S.G. has been slower than on the other dimensions. The top five capability gaps are an indication of where the participant organisations aspire to develop most in the coming three years. For these top five capability gaps, organisations expressed a wish to move up by almost two capability levels in the coming three years. Four of these relate to 'enabling cultures' and the 'environmental'. Again, this indicates that the 'E' in E.S.G. is falling behind the other elements of sustainability and, recognising this, leaders wish to prioritise environmental progress. Relatedly, organisations are keen to invest in practices to create the necessary conditions, attitudes and norms that encourage people to explore their potential, take initiative, and contribute effectively to overcome barriers and achieve shared environmental goals. A detailed overview of the statements that attracted the highest and lowest scores are presented in appendix 3.

We turn now to consider the significance of these findings and recommend future actions for organisations and the development of sustainability capabilities across Irish business.

Conclusion and recommendations

This report represents the first comprehensive examination of the sustainability related beliefs and sustainability capabilities of top business leaders in Ireland. The insights presented are made possible by the commitment of the leadership teams within the five participating organisations who offered their time and expertise to complete the diagnostic in full. The CEOs and managing directors of the five participating organisations indicated their motivation to participate was twofold.

Firstly, they wished to contribute to a collaborative initiative to enhance the leadership sustainability toolkit. Secondly, they saw value in going through the diagnostic process with their own leadership teams to identify opportunities for sustainability capability development. In total, forty-six leaders completed the pilot Sustainability Capability Leadership (SCALE) diagnostic that consists of twenty questions that investigate pertinent leader beliefs and fifty-four capability statements grouped into six overall sustainability capabilities namely, Valuing Sustainability, Adaptive Action, Critical Systems Thinking, Futures Literacy, Supporting Fairness and Leader Development. Leaders reviewed fifty-four sustainability capability statements and ranked their current and target ability to plan, direct and enact activities that consistently and successfully deliver positive environmental, social, and governance value for all stakeholders. This concluding section summarises five key findings, resulting recommendations and key questions business leaders need to work through to progress their sustainability capabilities.

LEADER SUSTAINABILITY BELIEFS: COMMITTED BUT CONSTRAINED BY 'WICKED PROBLEMS'

Finding One: Based on their responses, leaders are strongly committed to building more sustainable organisations and agree that disruptive change is needed. However, a majority also feel that the obstacles to progress, particularly on reducing emissions, lie primarily outside their organisations. This underscores the interconnectedness and collaborative nature of addressing sustainability challenges. Organisation-level, siloed responses will not be sufficient.

Finding One Overview: Leaders endorse the importance of building more sustainable organisations and agree it is vital for the longerterm financial success of their organisations. This sentiment is largely shared across all leadership roles, and most leaders agree sustainability is a core part of their leadership role. However, there are many complex impediments to change that they claim lie primarily outside their organisations. One major challenge identified is consumer resistance to change and rejection of possible higher costs associated with sustainability. Another challenge is that, in some circumstances, leaders report they are unable to discontinue environmentally problematic products and services without identifying alternative sources of revenue. This underscores the pertinence of systemic 'wicked problems' that define the sustainability transition. A wicked problem is a complex and ill-defined issue that lacks a clear solution due to its multifaceted nature, ambiguous boundaries, and diverse perspectives of stakeholders. This complexity means attempts to solve one aspect may inadvertently lead to new challenges.

Finding One Recommendation: Leadership teams have an opportunity to build on the commitment and momentum they have collectively established to delve deeper into clarifying what sustainability leadership means both inside and outside their own organisation. A pertinent question for leaders relates to what disruptive change 'looks like' and how they as leaders can co-create this disruptive change with external stakeholders and consumers. It is evident that sector-wide collaborations will be vital to drive change alongside policy makers, consumers and value chains to establish more sustainable forms of revenue. These initiatives should run in parallel with internal organisational efforts to innovate toward more sustainable products and services. By doing so, new consumer markets for sustainable products and services can be activated to facilitate change.

PUTTING THE ENVIRONMENT AT THE CENTRE OF ORGANISATIONAL GOVERNANCE

Finding Two: Leaders value sustainability and have invested significant time in developing and articulating sustainability strategies and values for their organisation. There is now an opportunity to integrate these strategies and values more deeply into organisational structures and governance systems.

Finding Two Overview: Most leaders have begun the work of developing and articulating sustainability values and goals for themselves as leaders, and the organisation. Less developed are the metrics and organisational governance systems to co-ordinate and track progress, particularly for environmental goals. For example, leaders indicated they are in the initial stages of developing IT based systems to monitor achievement of sustainability and environmental goals. Relatedly, organisations are exploring how to integrate sustainability and the environment as a prominent feature in internal financial governance and resource allocation processes. It is also apparent that there are challenges associated with extending resources to assess and enhance scope 3 impacts, and fewer investments have been made in understanding extended organisational impact on nature and a wider range of societal stakeholders.

Finding Two Recommendation: Leaders have an opportunity to translate their commitment to sustainability into new forms of governance and decision-making criteria that orient focus on improving the organisation's impact on the physical environment. This can involve initiatives such as adapting internal investment and financial governance processes (e.g., CAPEX and OPEX allocations) to efficiently invest in environmental initiatives, resource, trial and scale ideas. Additionally, leaders can introduce a new 'green' vernacular and decision-making criteria for the business, applicable at all levels to frame discussions and enhance the legitimacy of immediate action. These commitments can be reinforced through investing in systems to track environmental impact thus making data transparent and prominent in organisational communication cascades. Many organisations are initiating this work to meet emerging reporting requirements. The next steps involve further engagement with external stakeholders to drive change that is founded on the principles of the just transition.

LEADERS HAVE AN OPPORTUNITY TO BUILD ON SUCCESS IN THE 'SOCIAL' TO DRIVE CULTURAL CHANGE

Finding Three: Across the E.S.G. dimensions of sustainability, higher levels of capability are reported on the 'Social' dimension. Leaders have reported making significant progress in cultivating high-quality work environments, incorporating inclusion, equality and secure employment terms and conditions. However, many of the lowest ranked capabilities relate to the extent to which sustainability and the environment is a core part of organisation culture. This foundation of security, equality, and inclusion is a promising basis from which cultural change can be initiated.

Finding Three Overview: Business leaders have shown a commitment to Environmental, Social, and Governance (ESG) initiatives. The results indicate that leaders have invested more in the "Social" dimension of sustainability, which includes areas related to diversity, equality, and inclusion. However, they report lower levels of capability in the "Governance" and "Environment" dimensions. The leaders' responses also highlight the quality and security of terms and conditions plus channels for employee voice and engagement. The secure and inclusive cultures within these organisations provide an excellent starting point from which leaders can call for all levels to commit to wider change to heighten positive environmental impact, engage in new forms of governance and secure the organisation's collective future. This is important as, overall, some of the lowest scoring capability statements relate to the cultural elements of sustainability capability. This means that having a positive environmental impact is not yet a core

feature of organisational culture.

Finding Three Recommendation: There is an opportunity for leaders to engage more deeply with their own direct reports and other parts of the organisation to drive cultural change that upholds positive environmental impact. Developing commensurate people systems to measure environmental progress effectively is a required associated step. The results indicate that few organisations have begun integrating sustainability and the environment as a prominent feature in performance management, variable pay and employee development. Establishing sustainability as a prominent feature in performance management across all levels of the organisation, including multi-year performance targets, can promote long-term thinking and systemic change. Where feasible, connecting remuneration and non-financial incentives, including executive compensation, to sustainability goals is a change to reinforce and reward the organisations commitment to sustainability. All levels can be involved in a performance change management process to initiate dialogue and collaboration to re-assess key performance indicators (KPIs) that may conflict with environmental goals. Relatedly, skill development and resource planning can emerge from this as both are essential to drive new, nature positive, ways of working. Particularly, organisations can work to cultivate the multidisciplinary and collaboration skills required for widespread engagement with stakeholders.

ESTABLISHING NEW FORMS OF LEADER DEVELOPMENT

Finding Four: Business leaders are primarily at the 'explorer' level of sustainability capability. The transformative nature of sustainability leadership, necessitating new strategies, structures, and cultures, should not be underestimated. Leaders are keen to engage in novel forms of leadership development that build on the components of the SCALE diagnostic.

Finding Four Overview: Business leaders are currently working to develop their sustainability capabilities. Also, the activities that leaders

can engage in to progress to the next capability level are noted in Appendix 3. A key finding from this study is that the transformative nature of sustainability leadership, necessitating new strategies, structures, and cultures, should not be underestimated. One of the challenges leaders face is the relative lack of widespread, successful sustainable business models. The relative novelty of sustainable business practices means leaders are eager to access insights and options to inform their business transitions and sustainable outcomes. Certainly, an array of sustainability and ESG guidance exists, such as the prominent guides noted in Appendix 1 that informed the diagnostic design. However, what are less available are insights detailing successful transitions to sustainable business models that effectively bring about systemic and complex change in organisations and stakeholder behaviours. Leaders have a strong desire to gain insights and knowledge from strategic business sustainability experts to better understand emerging sustainable business systems and practices. Additionally, they seek opportunities to engage in strategic leader networks.

Finding Four Recommendation: Leaders are keen to participate in leader and expert consortiums for the exchange of sustainability-related knowledge and the development of capabilities. These networks, by facilitating knowledge exchange and providing a platform to weigh up options, can play an important role in the formation of new sustainable business strategies. Accessing feedback on the sustainable transition from experts and peers who understand leadership may be particularly valuable for business leaders seeking to pioneer change within their own organisations. Leader development experts can play a crucial role in designing workshops and customising courses tailored to the specific needs of top leadership teams. Leader guidance can address each of the six leadership sustainability capabilities, incorporating expertise that is most relevant to the organisation. By doing so, leaders can better understand their options and devise effective strategies for progress. A consortiumled approach, bringing together leadership teams, peers, expert advisors and academics, holds great potential for collaborative progress.

FRAMEWORKS AND BENCHMARKS CAN DRIVE WIDESPREAD CHANGE

Finding Five: Leadership teams can benefit from having an insight into their shared understanding of current and target sustainability capabilities and the correlation with the organisation's ability to transition towards a more sustainable business model. Establishing an industry benchmark can guide leaders to understand relative positioning. This ongoing effort can drive positive change and advance sustainability across the business landscape.

Finding Five Overview: The methodology employed in this research brings business leaders through a series of comprehensive statements that cover the breadth and depth of sustainability related actions that organisations can undertake. The results of the diagnostic presented to participant organisations reveal the issues and initiatives that organisation leadership teams can give immediate attention to make meaningful progress to pioneer new forms of sustainable business. Leaders reported that the process was thought-provoking, informative and often challenging due to the statements being pitched at the 'pioneer' level of capability. Finding Five Recommendation: Leaders can benefit from a framework that enables the identification of numerous opportunities for further capability development. In addition, this research methodology including the associated diagnostic could be adapted to suit the needs of boards of directors through customising a governancefocused version of the beliefs and sustainability capabilities. Additionally, adaptations could be made to address sector-specific challenges or role-specific requirements. Simplified versions of the diagnostic could also be developed to accommodate smaller organisations, ensuring that a wide range of leaders can benefit from the resultant insights. This presents an opportunity for organisations to effectively communicate sustainability goals and drive meaningful change across all levels. This alignment could support the integration of sustainability initiatives and leadership capabilities into the development and growth plans of the organisation, making it a central focus for every team and employee. Relatedly, building up sustainability capability industry benchmarks over time has the potential to galvanise and monitor the progress across leadership teams in Irish industry.

CALL TO ACTION FOR BUSINESS LEADERS

Emerging from the findings and recommendations are pertinent 'calls to action' for business leaders which are summarised in the following:

- Envision disruption: The challenges associated with the climate crises mean disruptive change is looming. Leaders must determine what the transformation 'looks like' for their business. Leaders can engage in scenario planning and clarifying what successful, longer-term disruptive change looks like for their organisation to successfully enact a new sustainable business landscape.
- 2. Re-imagine your sector: Leaders have an opportunity to co-create consumer markets for new sustainable products and services. This involves establishing sectoral level collaborations with influential stakeholders, including competitors, policy makers and consumers to pioneer widespread sustainable economic change. This 'critical systems thinking' is essential to unpack the 'wicked problems' that define the transition where there are many stakeholders holding conflicting values, and where the ramifications of change throughout the system can be unpredictable.
- Transform organisational governance: Leaders can identify new business priorities through embedding novel 'green' governance and decision-making criteria within organisational and financial governance processes (e.g., CAPEX and OPEX allocations). These new criteria can guide leaders to expand sustainable practices and divest in problematic areas.
- 4. Demand radical transparency: Leaders must guard against problematic practices such as 'greenwashing,' and 'virtue signalling,' which can inhibit meaningful action. Enhance leadership governance through investing in analytics and communications systems that render sustainable progress transparent. Organisations embarking on this have an opportunity to align their analytical infrastructure with the reporting frameworks recommended by CSRD and TFND.
- 5. Green your organisation culture: The transition to more sustainable businesses requires cultural change and people management practices that prioritise positive environmental impact. Leaders can position the environment as a prominent feature in performance management incorporating multi-year performance targets to promote long-term thinking and systemic change. Where feasible, connect remuneration and non-financial incentives, including executive compensation, to environmental goals. Establish new pipelines of sustainability related skills and incorporate sustainability into succession planning criteria.



- 6. Build new sustainability communities of practice to raise shared ambitions: It is essential leaders embrace the principle that creating a more sustainable economy is a collective, rather than competitive, endeavour and this involves investing in leader networks to share insights and drive action. Business leaders must become influential drivers of positive change continuously raising sustainability standards and benchmarks and building up a new body of evidence regarding sustainability best practices and successes for Irish business.
- 7. Fail Forward for sustainable success: Entering into a new business landscape involves embracing a 'fail forward' mentality to value the insights gained from adversity and to use them as a foundation for improving decision making and change management. Failing forward is an unavoidable element of the transition as leaders embark on new initiatives, challenge assumptions, take new risks and overcome adversity, all to innovate new routes to sustainable success. This also involves reflective practice whereby leaders continually interrogate their own leadership and professional values and subsequent consequences for sustainable outcomes.
- 8. Talk, all the time, about the environment: Business leaders are tasked with building new legacies of sustainable success. This transition involves positioning sustainability and the environment at the centre of organisation discussions at all levels. Leaders will encounter a plurality of viewpoints while holding steadfast to the certainty of change. Only through leading genuine and open debate and celebrating successes, with internal and external stakeholders, can new successful sustainable economy be created.

Overall, the insights offered in this research convey the work underway across a select number of leading Irish businesses to become leaders in the transition of industry to a more sustainable future. Looking ahead, it is imperative that business leaders keep this focus and learn together to extend the boundaries of what can be achieved and embrace the significant role that they must play in safeguarding the Irish economy and planet for generations to come.



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APPENDICES

Appendix 1

Noted in appendix 1 are the GreenComp competencies and how these were refined into six sustainability capabilities for leaders. Following this is an overview of the other sources that served as reference points when writing the capability statements.

No.	Leadership Capability	GreenComp Competence
SC1	Valuing Sustainability	1.1 Valuing sustainability
		1.3 Promoting nature
SC2	Adaptive Action	3.2 Adaptability
		4.3 Individual initiative
SC3	Critical Systems Thinking	2.1 Systems thinking
		2.2 Critical thinking
SC4	Futures Literacy	3.1 Futures literacy
		4.1 Political agency
SC5	Supporting Fairness	1.2 Supporting fairness
		4.2 Collective action
SC6	Leader Development	2.3 Problem framing
		3.3 Exploratory thinking

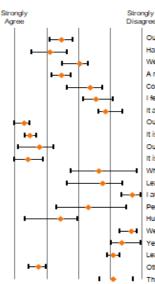


REFERENCE FRAMEWORKS:

Irish Frameworks				
Framework name	Year	Institution	Business Guidance	Link
Sustainability Handbook	2023	Business in the Community Ireland (BITCI)	To support organisations making better decisions helping businesses and investors embed sustainability and the SDGs into their management systems and decision-making practices.	<u>https://www.bitc.ie/</u> <u>sustainability-handbook/</u>
Climate Action. A toolkit for Business	2023	IBEC & Accenture	To develop a robust and enduring climate action strategy, rooted in the GHG Protocol	https://www.ibec.ie/ connect-and-learn/insights/ insights/2023/06/29/ climate-action-a-toolkit-for- business#:~:text=Ibec%20 has%20launched%20'Climate%20 Action,an%20enduring%20 climate%20action%20strategy

Global Frameworks				
Framework name	Year	Institution	Business Guidance	Link
SDG Impact Standards	2022	United Nations	To support organisations making better decisions helping businesses and investors embed sustainability and the SDGs into their management systems and decision-making practices	https://sdgimpact.undp.org/ practice-standards.html
Inner Development Goals (IDGs) Framework	2021	Inner Development Goals	To transform skills for Sustainable Development Goals.	
Flourishing Business Canvas	2022	Flourishing Enterprise Co-Lab	To design business models for the 21st Century – socially beneficial, environmentally regenerative and financially rewarding.	<u>https://www.</u> innerdevelopmentgoals. org/framework_
CDP Disclosures	2022	CDP	CDP is the gold standard for corporate environmental reporting and is fully aligned with the TCFD recommendations.	

Appendix 2: Leader responses relating to sustainability beliefs and discourses of delay.



- Our organisation is making every effort to be more sustainable, the blockers to progress are primarily outside of our organisation.
- Halving the carbon emissions of our organisation by 2030 will involve disruptive change.
- We cannot transition away nom environmentally problematic products or services until we have identified viable, alternatives that offer comparable revenues.
- A majority of our customers will not accept higher costs for more sustainable products/services, our organisation would have to absorb most of the additional costs.
- Consumer demand for unsustainable products and services will prevent us from meeting our environmental goals in the coming five years.
- I feel uncomfortable supporting investments in sustainability that do not have some form of financial business case associated with them.
- It appears that our competitors are doing less on sustainability in comparison to our organisation.
- Our organisation needs to become more sustainable than we are today.
- It is clear to me that doing more on sustainability will contribute to the financial success of our organisation in the next five years.
- Our financial investors/owners want our business to become more sustainable.
- It is very important for our business to do more on climate change.
- When it comes to tackling the climate crisis, our organisation's actions and our carbon footprint are not that significant.
- Leading on sustainability issues does not seem like a direct path to advancing my own professional/career interests.
- I am unsure how sustainability issues are relevant to my leadership role in this organisation.
- Perspectives on sustainability that involve financial 'de-growth' in any part of our organisation, are too radical and not something that I can consider in a meaningful way. Human ingenuity will eventually lead to a technological solution for climate change.
- We should wait to see what others (e.g. competitors, regulators, customers) do before we act.
- Yes, our organisation needs leadership on sustainability, but it cannot be a significant part of my leadership role.
- Leadership on sustainability should start with government and regulators, it is not private industry's responsibility to set new standards.
- Other leaders, who hold a similar role to mine at another organisation like ours, think it is very important for their organisation to do more on sustainability.
- The earth has, and will continue to have, an abundance of the natural resources that our organisation currently relies on for success.

Appendix 3: Leadership Sustainability Capability Levels.

CAPABILITY LEVEL	WHO THEY ARE	WHAT THEY NEED
NEWCOMER Willing to Learn	Who 'Newcomers' are: Newcomers are aware that sustainability is becoming more important, however they are unsure about what the specific capability involves and the practical implications for the business. Newcomers have little to no experience in implementing the capability for the part of the business they lead.	What 'Newcomers' need: Newcomers need to engage in reflection and discussion with others to comprehend how the capability aligns with their specific role. This process may involve deliberating on the relevance and necessity of the capability for the business. Newcomers can experience uncertainty regarding how to commence implementing the capability. They often require additional resources (such as external advice or new hires) to initiate the exploration of the capability within the part of the business they are leading.
EXPLORER Trialling and Testing	Who 'Explorers' are: Explorers are aware of the stated capability and have begun to implement or trial parts of it. However, they have not yet embraced the connected practices encompassed by the capability. Explorers are in the process of active learning and are working to attain a clear understanding of what a comprehensive and scaled approach to the capability involves for the part of the business they lead.	What 'Explorers' need: Explorers are interested in enhancing this capability and need to build up more resources, insights and ideas to do so. Explorers are keen to see initial benefits from pursing this capability to better understand what works well and to start integrating the capability throughout the part of the business they lead.

INTEGRATOR Meaningful Change	Who 'Integrators' are:	What 'Integrators' need:
	Integrators are implementing most, if not all, of the capability in a meaningful way. They strive for continuous scaling and connection to other activities to establish the capability as core to how the business is run.	Integrators are building their commitment to and confidence in the capability, they are interested in ideas for scaling and adapting, recognising that there are practices and options they have yet to explore.
	Integrators have established processes around the capability and are now deepening their understanding of how the capability can function in novel situations and with diverse stakeholders to add new value to the part of the business they lead.	Integrators require robust feedback and evidence-based insights to adapt and scale the capability within the part of the business they lead to become an exemplar.
EXEMPLAR	Who 'Exemplars' are:	What 'Exemplars' need:
Strategic Variation	Exemplars enact the sustainability capability in a variety of contexts and for a range of purposes. They adapt and extend the capability, connecting it to other organisational systems and processes to achieve new cumulative benefits. Exemplars possess a clear understanding of the overall strategic positioning and value of the capability within the part of the business they lead.	Exemplars are establishing the organisation's approach to the sustainability capability as a burgeoning source of strategic competitive advantage; they invest organisational resources accordingly. Exemplars require continued engagement with a diverse range of influential internal and external stakeholders to facilitate idea exchange, establish new benchmarks, enhance the capability and ready the organisation for emerging new and complex challenges.
PIONEERS	Who 'Pioneers' are:	What 'Pioneers' need:
New Sustainable Leadership	Pioneers comprehensively and successfully implement the capability throughout all aspects of their buiness, enabling them to realise their pioneering vision of a strongly sustainable business. Pioneers set new precedents and achieve new successes with the capability. Through their success and positive impact, they align the capability with other practices and guide the organisation and wider sector to novel, cutting edge, sustainable success.	Pioneers require extensive collaboration with influential stakeholders (e.g., government, policy makers, business leaders, scientific communities, society, and regulators). These partnerships are crucial for aligning the organisation's vision with external developments, thereby building on emerging science and practice and aiding in the elimination of external systemic obstacles that impede sustainable progress. Pioneers build on the capability outputs to identify new models of strongly sustainable business that set new precedents and practices across the sector and economy.

Appendix 4: Highest and Lowest Capability Scores

Five Highest Ranked Capabilities		
Sustainability Capability	Element of Leadership capability	E/S/G
1. Adaptive Action	Sustainable Strategy	Social
2. Supporting Fairness	Enabling Cultures	Social
3. Critical Systems Thinking	Sustainable Strategy	Social
4. Adaptive Action	Enacting Structures	Social
5. Valuing Sustainability	Enacting Structures	Social

Five Lowest Ranked Capabilities		
Sustainability Capability	Element of Leadership capability	E/S/G
50. Adaptive Action	Enabling Cultures	Environment
51. Future Literacy	Enabling Cultures	Environment
52. Valuing Sustainability	Enabling Cultures	Governance
53. Supporting Fairness	Enabling Cultures	Environment
54. Supporting Fairness	Sustainable Strategy	Environment

Top Five Capability Gaps		
Sustainability Capability	Element of Leadership capability	E/S/G
1. Adaptive Action	Enabling Cultures	Environment
2. Valuing Sustainability	Enabling Cultures	Governance
3. Valuing Sustainability	Enacting Structures	Environment
4 Supporting Fairness	Enabling Cultures	Environment
5. Future Literacy	Enabling Cultures	Environment

GLOSSARY OF TERMS

TERM	DEFINITION
BELIEF TRAPS	Belief traps are often inflexible views, that can delay action and result in imprudent choices and actions over time.
CARBON BUDGETING	A carbon budget is the cumulative amount of carbon dioxide (CO2) emissions permitted over a period of time to keep within a certain temperature threshold.
CARBON DISCLOURE PROJECT (CDP)	The Carbon Disclosure Project (CDP) is a non-for-profit charity that oversees the worldwide disclosure system for investors, corporations, cities, states and regions to manage their environmental impact.
CARBON RENEWAL	Carbon renewal systems refers to a type of technology that allows recycling and gives a new life to complex waste plastic
CIRCULAR ECONOMY	The transition to a circular economy where resources are used to their maximum value and form part of an enduring cycle of reuse, recovery, and regeneration.
CLIIMATE JUSTICE	Climate justice is a term used to acknowledge and challenge climate change effects on those with minimal responsibilities for causing it and frequently marginalized from decision-making procedures
CLIMATE CHANGE	Climate change is a geophysical phenomenon of disruption to ecosystems and infrastructures through severe weather events, which worsens existing social disparities and vulnerabilities related to land and water access as well as security of livelihood
CLIMATE CRISIS	The climate crises is the result of the dramatic climate change scenario we are currently in. There is a condition of urgency and life-threatening danger engendered by the climate change context involving severe weather events and the rise of global temperatures
COLLECTIVE MEANING MAKING	Collective meaning-making refers to the process through which groups come together to collectively create and interpret meaning, often in the context of shared experiences, narratives, or activities. It involves the collaborative construction of understanding, beliefs, and interpretations within a specific context.
CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD)	The CSRD is the EU's latest initiative to improve the quality and comparability of corporate ESG disclosures. The CSRD uses the term "sustainability" to refer to environmental, social (including human rights), and governance factors
DEGROWTH	Degrowth argues for a reduction in global consumption and production (social metabolism) and advocates a socially just and ecologically sustainable society with social and environmental well-being replacing gross domestic product (GDP), and other financial measures, as primary indicators of success and prosperity.
DISCOURSES OF CLIMATE DELAY	Discourses of climate delay' pervade current debates on climate action. These discourses accept the existence of climate change but justify inaction or inadequate efforts. In contemporary discussions on what actions should be taken, by whom and how fast, proponents of climate delay would argue for minimal action or action taken by others. They focus attention on the negative social effects of climate policies and raise doubt that mitigation is possible.

ENABLING CULTURES	Enabling cultures foster and support the development, growth, and empowerment of individuals or groups. These cultures provide the necessary conditions, attitudes and norms that encourage people to explore their potential, take initiative, and contribute effectively to overcome barriers and obstacles and achieve shared goals or aspirations.
ENACTING STRUCTURES	Enacting structures are the tangible systems, machinery, processes, frameworks, or mechanisms that facilitate the implementation and realisation of plans or strategies within an organisation. These structures provide the practical means through which strategy or intentions are translated into concrete actions and outcomes.
FUTURE GENERATIONS	References to future generations in climate dialogues refers to sustaining the possibility for human and other life to flourish on this planet forever.
GREENWASHING	Greenwashing is the process of conveying a false impression or misleading information about how a company's products are environmentally sound. Greenwashing involves making an unsubstantiated claim to deceive others into believing that a company's actions are environmentally friendly or have a greater positive environmental impact than they actually do. In addition, greenwashing may occur when a company attempts to emphasize sustainable aspects of a product to overshadow the company's involvement in environmentally damaging practices.
JUST TRANSITION	A just transition involves building new forms of economic and political power to shift from an extractive economy to a regenerative economy in a just way. This means the transition itself must be just and equitable, redressing past harms and creating new relationships of power for the future through reparations. If the process of transition is not just, the outcome will never be. Just Transition describes both where we are going and how we get there.
LEADERSHIP CAPABILITY	A leadership capability is the capacity of an organisation's leader to direct and/or perform a specific activity, or connected activities, consistently and successfully.
LEADERSHIP CAPABILITY LEVEL	A capability level refers to how the capability manifests and typical features of each level.
MATERIALITY	Materiality is a concept used in sustainability assessment that helps determine if an item is significant enough to be included in a report. Materiality analysis is, therefore, used to place items on a spectrum of importance. Sustainability materiality identifies material topics with direct or indirect impact on an organisation's ability to create, maintain or erode economic, environmental and social value
MEET YOURSELF AT 90	Meet yourself at 90 is a guided exercise created as part of the Inner Development Goals (IDG) in which the individual envisions themselves at their 90-year-old birthday party. This exercise helps to increase awareness of hopes, dreams, priorities and values and identify things that can be prioritised to achieve them
NATURE	Nature refers to the phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations.
NATURE POSITIVE	Nature positive is a term that focuses on interacting with nature to enhance appreciation of the need to restore the resilience of our planet and society to reverse nature loss.
PRODUCT LEVEL EMISSIONS	Product level emissions refer to all the emissions generated in a product or service life cycle and the process helps with identifications of emission 'hotspots'. In-depth guides exist such as the GHG Protocol's "The Product Life Cycle Accounting and Reporting Standard"
SCIENCE BASED TARGETS	Science based targets are company goals that are in line with the latest climate science and the actions deemed necessary to meet the goals of the Paris Agreement

SCIENCE BASED TARGETS INITIATIVE (SBTi)	The Science Based Targets Initiative (SBTi) is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the Worldwide Fund for Nature (WWF). It facilitates the pursuit of ambitious climate initiatives within the private sector by empowering organisations to establish science-based emissions reduction targets.
SCOPE 1, 2 & 3.	Scope 1, 2, and 3 emissions are labels used to sort greenhouse gas emissions from a company's actions. Scope 1 deals with emissions directly under the company's control, like its vehicles and on-site fuel use. Scope 2 covers emissions indirectly linked to purchased energy, such as electricity. Scope 3 includes other indirect emissions like those from supply chains, business travel, and waste.
SERVANT LEADER	A servant leader is a leadership philosophy and practice that emphasises the leader's role as a servant to their team, organisation and wider society. In contrast to traditional hierarchical leadership, where leaders often exert authority and control, a servant leader focuses on serving needs of others and empowering others to reach their full potential. This approach was popularised by Robert K. Greenleaf in his essay "The Servant as Leader," published in 1970.
SOCIETAL STAKEHOLDERS	Societal stakeholders include groups in wider society such as citizens, communities, animals, nature, and representative civic/third sector organisations.
SUSTAINABLE/ SUSTAINABILITY	The term 'sustainable'/'sustainability' refers to a concept or practice that can be maintained or continued over the long term without depleting natural resources, causing irreversible harm to the environment, or compromising the well-being of future generations. It involves finding a balance between meeting current needs and ensuring that resources, ecosystems, and social systems remain viable and healthy for the future.
SUSTAINABLE STRATEGY	A sustainable business strategy is one that creates, delivers, and captures positive environmental, social, and economic value for all its stakeholders through its entire value network.
SUTAINABILITY CAPABILITY	A sustainable capability encompasses intention and action that is understood to be fully contextualised and embedded within environmental, social and/or governance dimensions.
TASKFORCE ON NATURE-RELATED FINANCIAL DISCLOSURES (TNFD)	The TNFD is collective of financial institutions, corporates and market service providers who aim to formulate and implement a risk management and disclosure framework. This framework is intended for organisations to address and respond to emerging nature-related risks, facilitating a transition in global financial flows towards nature-positive outcomes
VALUE CHAIN	An organisational value chain refers to the full lifecycle of a product or service, including material sourcing, production, consumption and disposal/recycling processes. It requires collaboration between suppliers, manufacturers, retailers and customers
WICKED PROBLEMS	A wicked problem is a complex and ill-defined issue that lacks a clear solution due to its multifaceted nature, ambiguous boundaries, and diverse perspectives of stakeholders. These problems, such as climate change, are difficult to address because their interconnected elements create unpredictability and attempts to solve one aspect may inadvertently lead to new challenges in others.



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