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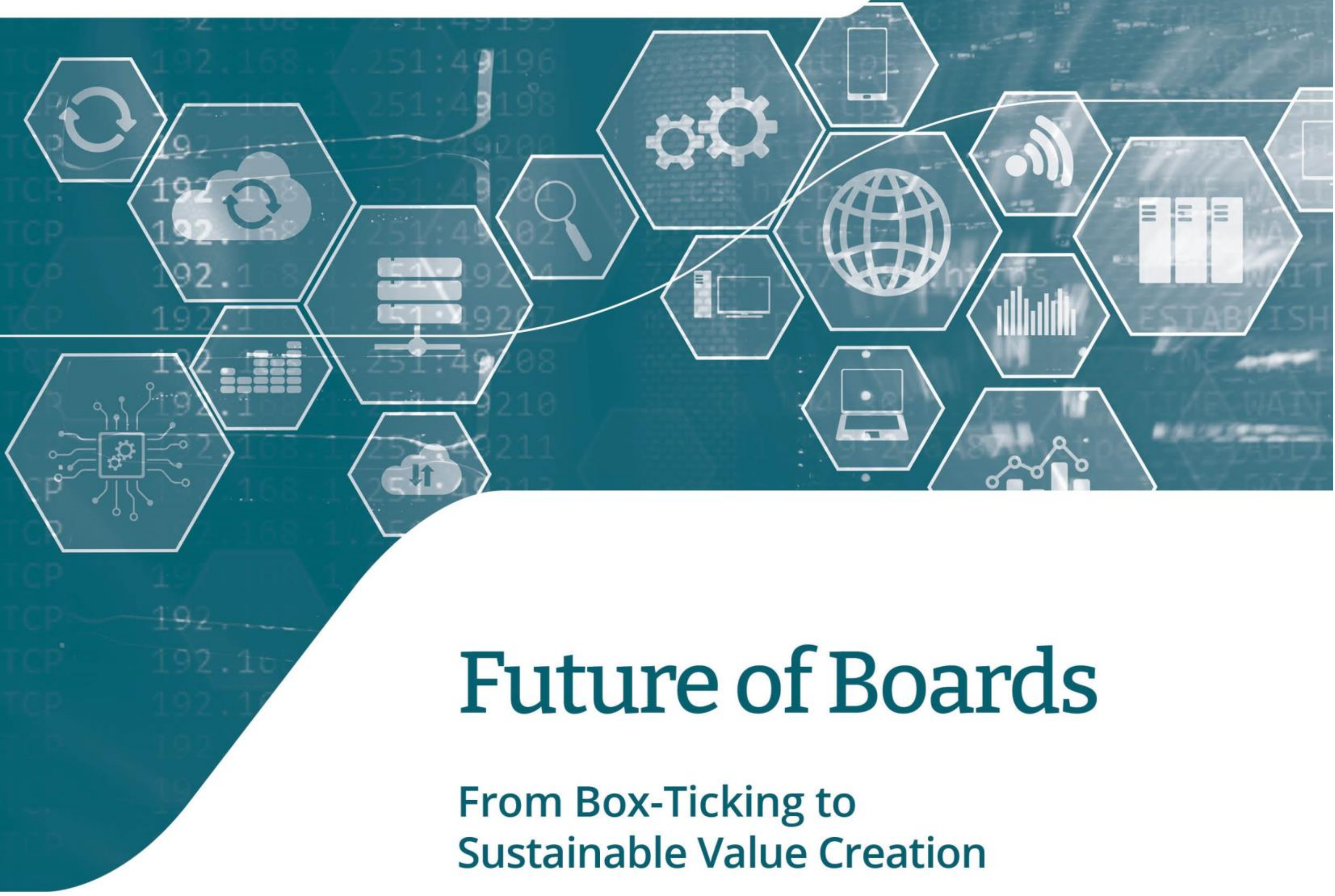
Technical Report



Future of Boards

From Box-Ticking to Sustainable Value Creation

The Use of Relevant Impact Data and Wider Information in Strategic Decision-Making

DLA PIPER

The University of Cambridge Institute for Sustainability Leadership

CISL is an impact-led institute within the University of Cambridge that activates leadership globally to transform economies for people, nature and climate. Through its global network and hubs in Cambridge, Cape Town and Brussels, CISL works with leaders and innovators across business, finance and government to accelerate action for a sustainable future. Trusted since 1988 for its rigour and pioneering commitment to learning and collaboration, the Institute creates safe spaces to challenge and support those with the power to act.

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About the Future of Boards research

The Future of Boards research has been a two-year collaboration between the University of Cambridge Institute for Sustainability Leadership (CISL) and DLA Piper exploring how business boards are responding to growing pressure and scrutiny from stakeholders to manage both climate and nature-related risks, as well as the impact of the companies they govern on stakeholders and wider society.

Phase 1 explored 22 trends affecting company boards, including the increase in sustainability-related legislation and soft law across a range of jurisdictions around the world. It also assessed these trends for their likely impact on creating a more sustainable world for people and planet.

The final Synthesis Report for Business included 20 questions that all boards should ask themselves in order to be 'fit for purpose' as they and their companies navigate a world with increasing pressure from a range of complex and ever-changing challenges, including sustainability risks and opportunities.

Phase 2 considered several key findings from Phase 1 in greater detail. This report looks at how boards use sustainability-related impact data and wider information to inform and integrate sustainability-related factors (impacts, risks and opportunities) into overall company strategy, and decision-making. The role of investor stewardship is explored in a sister publication, *Navigating Change: Institutional investors and their influence on company boards*.

Executive summary of insights

Phase 1 of the Future of Boards research suggested that sustainability impact data is often being collected primarily to fulfil legislative compliance requirements, or the needs of stakeholders such as clients, shareholders, or other finance providers. This 'box-ticking' mentality contrasts with an approach that harnesses this data – alongside wider sustainability-related information such as trends in regulation, environmental change, social trends, or customer sentiments – to better understand sustainability impacts, risks and opportunities. This analysis can then be used by company boards to create a long-term integrated strategy that realises positive value for stakeholders, the environment and wider society – in other words, 'sustainable value creation'.

The drivers for this greater alignment of business activity and the sustainability needs of people and planet are not simply the moral argument that this is the 'right thing to do', but are more existential. Mounting evidence suggests that boards need to proactively address sustainability risks and opportunities in order to survive and thrive, both in the short and long term.

To better understand what is happening, we gathered a broad range of insights from board members and advisers. The results highlight examples of emerging good practice, as well as challenges that may reduce the ability of a board to access and effectively use sustainability-related data and wider information.

These insights also suggest areas for further investigation and action, and have been used to create a checklist of 20 questions that boards can ask themselves in order to continue, maintain, or enhance their sustainability journey.

What we found

Evolving good practice

Insights from 12 food sector company boards that are leading the way in various aspects of sustainability suggest that they:

- use sustainability impact data, and wider information, to inform their strategic direction and decision-making
- do not reluctantly comply with sustainability-related reporting legislation, and other reporting requirements, but rather see them as useful tools to incorporate wider sustainability impacts into their thinking, beyond their core mission
- receive, and are further exploring, 'decision-useful' sustainability impact data, alongside financial metrics
- use data and information sources beyond those required for compliance; innovate new metrics; and/or work with higher education and other partners to create new knowledge to inform strategic decision-making
- harness stakeholder information and ideas, and horizon scan for sustainability trends or opportunities.

Additional insights emerged into how these boards maintain a long-term focus on creating positive sustainability outcomes in the face of competing short-term, and often financial, pressures:

- address sustainability factors as a full board, not only in separate committees
- make sustainability core to the value proposition of the business to design out trade-offs
- have shareholders or other investors who share similar values
- design governance and ownership structures to better ‘lock in’ a sustainability mission or purpose, and limit the ability of shareholders to privilege short-term returns over sustainability impact.

Despite these examples of good practice, these companies also identified a range of challenges to creating an effective board and wider governance.

Challenges

Alongside the food sector research, we additionally conducted further interviews with board members and advisers from a broad range of sectors, geographies and stages of the sustainability journey. The results reinforced the wider relevance of the positive board behaviours and actions identified above, and also identified additional and widespread challenges which can make it difficult for boards to fully integrate sustainability impact data and wider information including:

- *pressures from a volatile, uncertain, complex and ambiguous (VUCA) operating environment*, as well as the expectations of some finance providers and shareholders, can result in a short-term survival focus and, as a result, limit the space for sustainability-related innovation, long-term sustainability-related decision-making or business model transformation
- *heavy compliance burdens* that may distract from strategic thinking and risk assessment
- *a board mindset that does not recognise, or fully understand, sustainability risks and opportunities* as well as limited ability to effectively interrogate complex, and often uncertain, sustainability-related data and wider information
- *challenges with data access, trust, assurance and synthesis* into ‘decision-useful’ insights and implications; as well as data and information gaps, particularly in relation to sectoral data standards
- *immature frameworks to support and enable strategic decision-making* that integrate financial and sustainability data and wider information.

More specifically, there are:

- *particular constraints for small and medium-sized enterprises (SMEs)* arising from limited time, resources and knowledge, as well as their perceived lack of influence over the expectations and strategy of larger clients, which may limit their ability to innovate sustainability solutions
- *governance and information challenges for purpose-led start-ups.* These reportedly arise from limited time and resources to access and effectively use sustainability impact data and wider information; or knowledge of how to evolve their board composition and wider governance model over time to effectively support their purpose, and integrated strategy.

Ways forward

Further thinking about purpose, governance and ownership:

- revisit the company purpose or mission statement to ensure it incorporates appropriate sustainability dimensions or implications, which can inform strategic direction
- engage with investors who are aligned in their commitment to long-term sustainable value creation
- consider more radical options of changing legal form, governance arrangements, or ownership models in order to either 'lock-in' a sustainability-related mission or purpose, or ensure that the ownership structure is more likely to enable longer-term sustainable value creation.

Improve the board's ability to absorb and reflect on sustainability-related data and wider information:

- develop further understanding of material sustainability issues, as well as the nature, assurance, and relative reliability, of different kinds of data and wider information
- increase collaboration and peer learning between board members from different and related companies and organisations to understand what works
- create space in board meetings for more blue-sky thinking, scenario planning and thought experiments to support radical disruption in products or services, or the business model
- have an appropriate number of independent non-executive directors (NEDs) from a wide range of backgrounds, experiences and geographies to provide different perspectives
- ensure that NEDs have the time and personal skills to effectively challenge, and are engaged early in, the strategy development process
- develop the board role in horizon scanning or 'strategic foresight', and bring in wider perspectives through, for example, a formal sustainability advisory board or panel, or external experts
- consider how the company secretary's role (or equivalent) could evolve so that boards receive 'decision-useful' and verified sustainability impact data and wider information.

Improve sustainability impact data access, presentation and use:

- have clear sustainability-related key performance indicators (KPIs), and make use of comprehensive dashboards
- consider creating bespoke sustainability metrics to enable decision-making, and evidence value creation, where current reporting standards are lacking
- oversee the development, and use, of decision-making frameworks that enable integration and comparison of environmental, social and financial value
- explore the role of digital technology and artificial intelligence (AI) to enable sense-making and scenario planning, while also recognising the inherent biases and limitations of AI

- develop ways to directly surface and address hard choices and trade-offs which involve sustainability-related factors over both the short and long term, and be transparent about the decisions made.

Engage in pre-competitive collaboration within sectors and supply chains to support comparable sustainability-related data collection frameworks and metrics, and resolve sustainability challenges.

Further consideration of SME constraints:

- provide guidance and positive case studies to harness sustainability data and wider information to support innovation in products, services or business models
- greater focus and guidelines on supply chain journeys to, for example, net zero; and which also recognise the innovation and needs of smaller companies that are already 'ahead of the game'
- greater research is required to shape regulation, government policy and procurement, and international reporting frameworks to support SMEs on their sustainability journey.

Develop a supportive ecosystem of advice and finance for purpose-driven start-ups, with particular attention to:

- how the board role and composition could evolve during the start-up journey
- collaborative ways to support sustainability-related data collection and wider information to support strategic development
- considering the most appropriate legal model, governance and ownership structure to maintain and develop purpose and impact over the long term.

Snapshot of key facts from a survey with UK Institute of Directors members, July 2024

- **A majority (61.5 per cent) of board members surveyed believed that the integration of sustainability risks and opportunities is essential to the delivery of their company's profitability.**

Looking separately at the incorporation of risks or opportunities:

- **60.1 per cent agreed that they incorporate sustainability/environmental, social and governance (ESG) risks into their overall corporate strategic decision-making.** Of those that do not, but are considering doing so in the future, the figure is 20.8 per cent, and for those that do not, and are not considering doing so in the future, 18.4 per cent.
- **58.2 per cent agreed that they incorporate sustainability opportunities into their overall corporate strategic decision-making.** 22 per cent do not, but are considering doing so in the future. 18.5 per cent do not, and are not considering doing so in the future.

The similarity between these two responses challenges the widely held assumption that boards focus far more on sustainability-related risks, than on opportunities and innovation.

- **Most board members (63.8 per cent) have not heard of the Taskforce on Nature-related Financial Disclosures (TNFD).** 20 per cent of those people who had heard of the TNFD think it is irrelevant for them. 13.2 per cent are considering adopting it in the future, and 3.1 per cent already do so.

Questions for boards

To help boards assess their own thinking and practice, the insights in this report have been translated into 20 key questions. By considering these questions, boards can use their leadership to help direct their companies, shape supportive government legislation, and influence markets towards a more sustainable future.

Setting the scene

1. Do you, or how do you, incorporate sustainability impacts, risks and opportunities when setting the strategic direction of your organisation?
2. Does your purpose or mission statement indicate the sustainability-related value you bring to society? Do you need to spend time revisiting your purpose?
3. Do you include sustainability aspects comprehensively in your risk register?
4. How does your overall governance and ownership model support and enable the realisation of your purpose?
5. How can you ensure and improve greater similarity of purpose with your investors, or clients?
6. How do you, or could you, provide a more effective and complementary role to the executive in terms of horizon scanning and strategic foresight on sustainability risks and opportunities, and other external trends?

Accessing and using the right data and wider information to inform strategic decision-making

7. What sustainability-related impact data do you need? Are you receiving it in a format that best enables you to make strategic decisions? Is it effectively integrated with your financial data?
8. What wider information, say, on sustainability-relevant trends do you need? How could you get this?
9. Do you focus predominantly on climate-related issues, or are you thinking about wider social and environmental risks and opportunities?
10. Does the impact data you receive indicate its source? Are you assured that it is consistently produced and verified?
11. Are the right company departments and people in your company responsible for bringing you quality-assured sustainability impact data, and related insights?

12. How do you access and consider data and wider information about your impacts and dependencies on stakeholders, as well as their needs and concerns, and/or jointly consider ideas about how you could move forward?
13. Have you considered having an advisory board, or using external experts, to support your consideration of material sustainability issues?
14. How do you assess complex decisions or options, which include sustainability dimensions? Are you getting access to sufficient data to make well-informed decisions, based on reliable analysis of any potential trade-offs?
15. Could greater use of digitalisation, visualisation, and use of AI enable your sustainability impact data to be decision-useful, and/or help sense-check your decision-making processes? How would you guard against any inaccuracies, or bias, in the use of AI results?
16. How do you create space for blue-sky thinking about new sustainability-related innovation opportunities, or impending threats to your access to resources, or capital?

Increasing the board's ability to understand and effectively use sustainability-related impact data and wider information

17. Does your board need to develop further understanding of material sustainability issues, as well as the nature, and relative reliability of assurance, of sustainability impact data and wider information?
18. Do you have the optimal number and diversity of independent NEDs, with the right expertise?
19. Does your board chair, culture and available time enable and allow a good level of challenge by board members?
20. How could you, as individual board members, or as a group, network and/or collaborate with peers on boards from different sectors and business models to increase your awareness of what does and does not work in accessing and using data to realise sustainable value creation?

1. Introduction

CISL's goal is to support the shift to an economy in which business activity better aligns with the needs of people and planet. As part of that aim, the role of company boards in setting the overall company direction, and overseeing the development and execution of strategy, is critical. Boards are also legally accountable for achieving the defined purpose of the organisation in an ethical and responsible way. The drivers for this greater alignment of sustainability and commercial criteria are not simply the moral argument that this is the 'right thing to do' but are more existential. Mounting evidence suggests that boards need to proactively address sustainability risks and opportunities in order to survive and thrive, both in the short and long term.[1]

As we found in Phase 1 of the Future of Boards research, however, this is an area which has received relatively little attention from the majority of company boards. For example, our findings suggested that non-financial impact data, or what we refer to here as sustainability impact data, is being collected predominantly to fulfil legislative compliance requirements, or the needs of stakeholders such as clients, investors and other finance providers. This approach reflects a 'box-ticking' mentality, rather than one which harnesses this data, alongside further sustainability-related information, in order to inform the creation of a long-term strategic direction that realises positive value for stakeholders, the environment and wider society.

The use of sustainability impact data in strategic decision-making is different to having a separate sustainability or corporate social responsibility (CSR) strategy that addresses sustainability issues through, for example, reducing the environmental impact of employee travel, or increasing community engagement through volunteering. This kind of activity has little or no impact on the company's overall business model, and does not affect how boards make the big decisions over where to spend capital, whether to divest activities, or acquire new capacities and resources, through, for example, mergers and acquisitions.

An integrated approach to strategy considers sustainability-related factors (impacts, risks and opportunities) as part of the business model, alongside commercial imperatives and financial metrics. This approach does not just depend for its success on sustainability-related impact data and metrics such as carbon footprint, water use or relative pay levels; it also requires wider information such as that reflecting current and future assessments of, for example, regulation, environmental and social change (for example, the impacts of climate change on employee working conditions); or stakeholder needs, concerns and ideas.

Board members that only have a compliance or 'box-ticking' mindset are, however, being challenged by evolving regulation, standards and stakeholder reporting requirements. The latter increasingly include the need to disclose how a company's strategy and governance incorporates sustainability risks and opportunities into their business models, as well as demonstrate transition delivery plans (such as roadmaps to net zero) to mitigate any adverse impacts. For example, the International Financial Reporting Standards (IFRS) S2 Climate-related Disclosure Standards,[2] incorporate and build on the previous recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and the EU's

Corporate Sustainability Reporting Directive (CSRD), has further mainstreamed the concept of 'double materiality'.[3]

A further driver for boards and their companies to move beyond 'box-ticking', is that the integration of sustainability-related data and wider information can help a business be more resilient and fit for future success. Benefits include:

- **identifying, assessing and mitigating sustainability risks** – to enable business resilience over the long term, including reducing costs through, for example, timely energy or resource-use transition
- **innovating new products, services and processes** that respond to current and future trends in customer, societal and employee needs, hence increasing and/or securing their market niche
- **increasing overall and specific brand reputation** – that translates into economic value creation, and other benefits such as enabling employee recruitment and retention
- **ensuring ability to access financial resources** – finance providers are increasingly requiring evidence of both positive sustainability impacts, as well as how such factors are incorporated into strategic decision-making.

In order to address these issues, we decided to identify challenges, as well as potential solutions, to accessing and making use of sustainability-related impact data and wider information. We held interviews with companies that were likely to be making good use of such information, as well as those that may be facing difficulties. To manage the scope of this huge topic, we used three approaches.

Firstly, we interviewed the board members of 12 companies in the food sector that are publicly committed to incorporating sustainability factors into their overall strategic decision-making (Appendix 4). We loosely refer to these companies as 'vanguard' in the sense that they are ahead of many businesses, at least in their statements of intent. Our assumption was that they would be likely to have useful insights into both good practice board behaviour, as well as any challenges. By focusing on a single sector, we were also able to simplify the analysis by talking to companies with related challenges and opportunities. The food sector is particularly relevant since it faces multiple sustainability challenges ranging from climate change, to nature depletion, business viability and low incomes (Appendix 3).

Secondly, to find out whether or not these insights have broader relevance, we explored wider insights across different sectors and countries by re-analysing some of the interviews from Phase 1, as well as holding conversations with additional board advisers and board members across different sectors and geographies (Appendix 5).

Finally, we specifically looked at the situation in the UK through several survey questions and a workshop, both held in collaboration with the Institute of Directors (IoD). The workshop specifically focused on identifying solutions to some of the challenges identified in accessing and using sustainability-related data and wider information (Appendix 6).

The main report synthesises these findings into the following chapters:

Chapter 2 Insights from leading sustainability companies in the food sector

Chapter 3 Barriers to accessing and using sustainability-related data and wider information

Chapter 4 Ways forward

If you wish to explore the results of each part of the study in more depth, you can do so by reading the individual Appendices: Appendix 4 (food companies), Appendix 5 (wider insights) and Appendix 6 (research with IoD members).

For board members, this report aims to both inspire what is possible, and also suggest ways to overcome challenges to the effective access and use of data and wider information to inform the inclusion of sustainability-related factors into board-level strategic decision-making. Our ambition is to enable more companies to feel able to embark on, or continue, their sustainability journey, as well as identify areas in need of further research, and action.

The results and recommendations can also be used to catalyse and inspire future investigations into different sectors and jurisdictions; as well as to probe more deeply into the kinds of tools, support and innovations that boards may consider to help them become the most effective they can be in their leadership role.

2. Insights from leading sustainability companies in the food sector

A core part of this research was to explore how companies that are already committed to creating positive sustainability outcomes are harnessing and using sustainability-related impact data, alongside wider information, to inform an integrated strategy.

We carried out in-depth interviews in the food sector, given its wide range of sustainability impacts and challenges, from climate change, nature and resource depletion, to people's health and standard of living (Appendix 3).

As a result of these challenges, there are profound risks for food sector businesses of all kinds arising from issues such as changing climate, water and land availability; geopolitical risks affecting supply chains; as well as reputational risks from including companies in supply chains with poor employment and/or modern slavery practices, or human rights abuses.

On the other hand, opportunities also arise from changes in how and where food is produced, distributed and eaten. Technology, for example, is supporting new ways of producing and distributing food, through precision-farming techniques, hydroponics, vertical farming, or the creation of meat and fish substitutes. There is also now greater scientific understanding of how to produce food in a more sustainable way, such as through regenerative or organic farming techniques.

The following insights are drawn from interviews with 11 non-executive directors (NEDs) and five board, or other executives, from 12 companies (see Appendix 2 for the full methodology and company details).

The companies are diverse. They cover different sub-sectors, from primary production to retail; differ in size (as measured by the number of employees – with two having under 50 employees; six over 1,000; and the largest being 133,000). They also vary in whether they are public (4) or private (8); the location of their headquarters (predominantly UK and Europe); and company life stage (with two being early-stage). All companies are limited by shares with one additionally using the French legal status 'entreprise à mission', and another being an employee ownership trust.

Some businesses were set up primarily to achieve a sustainability-related purpose and the creation of related impact, while others have further incorporated sustainability dimensions over time.

Each interview was an hour long, and used the following questions to structure the conversation.

Table 1: Interview questions

Interview question	Chapter 2 sub-section
Q1: How, and to what extent, is your board involved in strategy development and/or oversight?	2.1. Insights into engaging with corporate strategy
Q2: Do you, and how do you, incorporate sustainability impacts, risks and opportunities into board-level strategic decision-making or oversight?	2.2. Insights into integrating sustainability risks and opportunities into board-level strategic decision-making

Q3: What kinds of sustainability metrics or information do you use to inform the board's strategic decision-making and oversight?	2.3. Insights into the use of sustainability data and wider information
Q4: To what extent does the data and information you use depend on existing or upcoming disclosure regulation, voluntary standards or frameworks (including supply chains) – whether general or sector specific?	2.4. Insights into the impact of related regulations and voluntary standards
Q5: What kinds of methods, criteria, frameworks, or technology, do you use to process and integrate this information so that it is decision-useful for strategy? How do you determine the outcome of complex decision-making between tough options?	2.5. Insights into how boards make complex decisions that integrate financial and sustainability-related factors

A full analysis of the insights can be found in Appendix 4. Here, the most important points are summarised.

Since nine of the businesses wished to remain anonymous and three were happy to be identified, the findings are reported below without identifying who made particular comments. However, where companies were happy to be identified, and have interesting practices, specific examples have been included with permission.

2.1. Insights into engaging with corporate strategy

All the companies interviewed observe the fundamental (indeed legally required) division between the role of the board in setting the strategic direction and overseeing its implementation, and the role of management in designing and delivering the strategy itself. This seemingly clean distinction is, however, in practice far more nuanced. Most of the boards who contributed to this study **engaged with strategy in an iterative and ongoing way,** with strategic discussions **incorporated into nearly all formal board meetings, as well as happening informally** outside these times.

There was a shared sense that this level of **strategic engagement had increased over time,** and could be greater at points of significant change or external pressure, for example, a merger or acquisition, or a period of growth and diversification. Overall, the role of the board was generally agreed not to be one of initiating strategy, but rather to set its overall direction, and to probe and challenge strategic plans. More specifically, two interviewees spoke about additional roles of setting the tone of ambition, encouraging more risk taking, as well as guarding the purpose or mission.

This shift towards increased strategic engagement was, however, not universally recognised. Two companies (one a large public limited company (PLC), and one a medium-sized private company) operated with the perspective that the board should not be engaged in the formation of strategy, but take a relatively 'hands-off' role vis-à-vis the management.

Moreover, **for early-stage companies, the strategic role of the board was more complex and 'emergent'** due to their stage of development, and the kind of inputs needed to develop, agree and execute strategy. For example, an executive of Jones Food Company, which is an early-stage agritech vertical farming company, noted that the board does not have a clearly demarcated strategic role. The design and agreement of strategy happens between finance providers, founders, executives and experienced external advisers, not all of whom sit on the board. At this stage, he noted, the founders and employees need a wide range of inputs to complement the executive's skills, particularly around commercialisation.

2.2. Insights into integrating sustainability risks and opportunities into board-level strategic decision-making

All the people interviewed said that **they incorporated sustainability impacts, risks and opportunities into their board-level strategic decision-making and oversight.** This integrated strategy flows from their overall purpose and strategic direction.

> Seafresh Group is a fully integrated seafood business, from the ownership of farms, to producing the final retail packs, and sourcing its raw material globally.[4] The Group's mission is "healthy and long-term sustainable food".
>
> They are a private company with subsidiaries, owned by a Thai PLC and the original founders of the UK business. Their CEO, in conversation for this research, said that they take a long-term perspective, are committed to supply chain sustainability, and offer full sustainability tracking of every product sold.
>
> Seafresh's board is purposely kept small with an investor representative, the CEO/founder and another family member. An 'informal' NED contributes to strategy and oversees adherence with the mission. Their board member said that their overall approach is "to do the right thing for employees, shareholders, customers and the environment" and that they see sustainability "as a way of life", and hence automatically part of strategic long-term decision-making.

An example of a company that started life with primarily social and environmental impact goals is Tony's Chocolonely.

> Tony's Chocolonely sees itself "not as a chocolate company that makes impact, but an impact company that makes chocolate".[5] A B Corp, headquartered in the Netherlands, their mission is to end exploitation in the cocoa supply chain by removing modern slavery and poverty, while also ensuring other positive social and environmental outcomes, such as reducing the impact of deforestation, and carbon emissions.[6]
>
> Tony's has a dual board, and an innovative 'Mission Lock' which uses a 'golden share' to ensure that, as they grow, their purpose cannot be diluted by future shareholders. Having no value, this share has veto power over certain fundamental corporate decisions, and is held by a foundation overseen by Mission Guardians.[7] The latter are also able to hold the management to account for any breaches of 'Tony's 5 Sourcing Principles'.[8]

The interviewees suggested a variety of ways through which they incorporated sustainability factors into strategic decision-making. These included:

- **ensuring sustainability considerations and potential enhancements are considered in all decisions**

- **incorporating sustainability criteria into large capital projects** such as mergers and acquisitions (M&A) – assessing whether they fit with purpose, add increased capabilities, or generate innovative solutions
- **investing 'ahead of the curve' in R&D or new production processes** in order to realise more sustainability outcomes and economic value through, for example, reducing long-term costs, maintaining their sustainability-focused brand, or securing future market leadership
- **having clear measures of progress,** such as KPIs.

Most of the interviewees for the ten mature companies believed that the integration of sustainability factors into strategic decision-making should be a full board discussion, and not just the responsibility of a separate sustainability committee. However, views were also shared that, because of the increasing complexity and technical nature of sustainability reporting, as well as the challenges of controversial and conflicting evidence (for example, with respect to food packaging solutions), a specific committee may indeed be useful. In fact, one company was considering introducing an 'impact' committee, not to water down the board's strategic discussions, but primarily because of the increased technicality of reporting and disclosure requirements, and a concern that, with the increasing size of the board, crucial impact discussions might not be adequate.

2.3. Insights into the use of sustainability data and wider information

Throughout the interviews, examples were given of sustainability-related impact data, as well as wider information of many kinds, that feed into board-level strategic decision-making. Examples of impact data included those relating to the company's internal and external impacts such as its carbon footprint, water use, or relative pay levels. Examples of wider information included, for example, customer sentiment which may affect how a product or service is designed and delivered; trends in water availability over time; the impacts of climate change on employee working conditions; or product quality. This sustainability-related impact data and wider information was understood to be a crucial part of the ability to address potential risks, opportunities and inefficiencies.

However, all the board members stressed that particularly **sustainability impact data, by itself, is meaningless.** It has to be 'decision-useful'. As one board member said, you need to: "spend time, not on the data but [on] the insights and the implications".

The board members across our sample, of whatever size and ownership structure, generally and regularly (often once a month) received information on progress against KPIs and/or dashboards that are the most relevant to their core mission and purpose.

> The board of a global PLC packaging company uses dashboards and periodic reviews to ensure that they are on track with their objectives, and are making an actual and tangible difference. The board member observed that they do not want just data, but rather answers to the question of "What difference does, say, the full lifestyle impact of a packaging solution make to the environment?".

The board of an Asian tea plantation company receives five to six dashboards. For example, one brings together commercial and sustainability information on plantations. They use a proprietary methodology to synthesise relevant information on, for example, temperature, rainfall, and social aspects such as living conditions, or health benefits. The information on water, for example, has been used to innovate rain water collection methods to withstand droughts in certain months.

The interviewees from small and early-stage companies said that they adopted proportionate approaches.

The board of a small family-owned farming and retail business tracks key metrics on: whether or not they are a good employer; supply chain use of sustainable ingredients, or carbon impact. Since they do not have enough internal resource, they use an external consultant to undertake their carbon audits, and to determine the most appropriate metrics to use.

Jones Food Company Limited "designs, builds and operates world-scale vertical farms, leading the next generation of UK agriculture by growing the highest quality fresh produce locally, sustainably and affordably".[9] Their vertical farm solutions use hydroponic growing techniques (cultivation in nutrient-enriched water) which reduces the need for resources such as land, water or energy. One of Europe's largest operating vertical farms, they are also a certified B Corp.

Key metrics focus specifically on energy and water use per kilo of produce produced, since this is directly relevant to their mission. Weekly updates are provided to the board, and there are live dashboards of energy use.

Additionally, many board members across the different companies said that they either currently use, or intend to make use of, digitalised data to enable easier visualisation, and the creation of appropriate dashboards. Some are also using, or are considering, AI to better assess external information on trends, as well as for internal use.

Most interviewees said that they **collected sustainability impact data beyond that required by current regulation, or generic frameworks,** particularly if it relates to the core purpose of the organisation. This wider data scope is used to inform strategy, as well as to provide evidence of sustainability impact to support their brand and reputation, and as a result, improve access to particular customers or financial resources.

An early-stage regenerative farming company undertakes representative farm soil sampling, including assessments of, for example, water, carbon, biodiversity, to assess and monitor the impacts of the regenerative farming systems they support in their value chain. They use independent audits of this information to provide their clients or direct customers with evidence of their impact and approach, as well as to assess and monitor outcomes.

Some companies said that they created new metrics to assess and manage their impact, for example, on viable livelihoods in various countries.

> Tony's Chocolonely developed, simultaneously with Fairtrade, the Living Income Reference Price (LIRP) for cocoa in Ghana and Côte D'Ivoire. This amount is the additional payment which goes direct to cocoa farmers that enables their households to earn a living income. In order to do this, they built on existing approaches, such as the Living Income Model, and incorporated standard industry benchmarks.[10]

Another company worked with higher education partners to evidence their sustainability impacts, in order to support (and de-risk) the ability to move forward in a controversial area.

> Seafresh Group, through its internal team of marine biologists, partners with universities in order to understand the most ethical and appropriate way to manage shellfish in different climatic conditions. The underpinning science has been lacking, resulting in a range of competing claims and approaches, which are sometimes, as the board member interviewed argued, "driven by emotion". They worked with Kentucky University, and more recently Sterling University, to explore the effects of electrical stunning versus using ice baths to send prawns to sleep in warmer climates. The latter proved more appropriate in that context. He added: "If the science tells us we should be doing it, we're happy to. But until we get to that stage, we're not doing it."

Other examples given by board members of accessing relevant wider information were through board members' own expertise; by engaging with external experts; or by listening to stakeholders such as customers or investors. In this way, some of the boards saw themselves as contributing to horizon scanning, bringing in new and relevant issues, and challenging management. "It is about how we open our eyes to the bigger landscape … for example what consumers are doing".

> One of the smaller companies engaged a UK government expert to come and talk to the board about the likely trajectory and timing of the Government's policies with respect to energy transition. This enabled them to better contextualise and consider the speed and extent to which they moved, for example, to using electric vehicles or solar roof panels to provide electricity, thus reducing decision-making risk.

Since early-stage companies tend to involve executives and investors on their boards, the executives of the two companies interviewed noted that they made extensive use of external consultants and advisers in many aspects of their company's current and future trajectory (including sustainability).

Some interviewees also indicated that if relevant information is missing, board members would ask the executive to provide more. There was, however, also caution expressed about the board wanting to know too much, which, it was thought, could jeopardise a more detached approach to strategic decision-making, particularly if it involved purpose-related activity to which they were personally committed.

Relevant sustainability data and wider information comes from throughout the company, and its different departments. For some companies, for example, it is brought together by a sustainability team, and there is generally close collaboration between the Chief Executive Officer (CEO) and/or Chief Finance Officer (CFO) in terms of how the data and information is synthesised. A couple of board members mentioned that they were considering a further evolution of this wider trend towards integrating sustainability and financial data, by considering whether to have, rather than a CFO, a Chief Value Officer (CVO).[11]

Finally, with regard to assuring sustainability-related data, it was clear from the interviews that many board members pride themselves on the veracity and internal assurance of their impact data. However, there was also recognition that external assurance is important to counter accusations of greenwashing, while at the same time they expressed concerns about how good and complete that assurance currently is.

> The board members of the large packaging PLC said that because of the scientific and evidenced focus of everything they do, as well as what they see as the currently evolving nature of non-financial auditing, they rely on the integrity of their own measurement systems. "We have standards in the organisation that it would not be tolerated … to give us bad data … We don't make decisions without pretty thorough analysis".

2.4. Insights into the impact of related regulations and voluntary standards

For a full account of the evolving landscape of sustainability-related regulations and 'soft law' across different jurisdictions, particularly including those which require companies to disclose their sustainability impacts, risks and opportunities, please see Report 1 of Phase 1 of the Future of Boards study.

The background scoping for this research, as well as the trend analysis in Phase 1, suggested that the speed and complexity of the introduction of this kind of legislation, as well as the evolution of voluntary sustainability impact frameworks, and reporting requirements from finance providers and others is possibly resulting in businesses focusing too much on compliance. It has been argued that this pressure can crowd out the ability to take a strategic focus on opportunities, and ultimately create sustainable value over time (Appendix 1).

We therefore asked our sample of companies in the food sector whether, and how, specific regulations, or voluntary frameworks and standards, were affecting the way that their boards used and collected sustainability-related impact data and wider information.

International sustainability reporting frameworks such as the Science Based Targets initiative (SBTi),[12] or the Global Reporting Initiative (GRI),[13] were used by many companies. Interviewees mentioned that over the past few years the Task Force on Climate-related Financial Disclosures (TCFD) (that disbanded in December 2023 and is now incorporated into the International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures standard)[14] had been particularly useful to help them frame their strategic decision-making. Another commonly cited example was the EU's Corporate Sustainability Reporting Directive (CSRD), which has further mainstreamed the concept of 'double materiality'. It was felt by some interviewees that this legislation had been particularly useful in requiring board members to discuss sustainability impacts, challenges and opportunities using this wider perspective.

> The EU's Corporate Sustainability Reporting Directive (CSRD), which entered into force in January 2023, requires defined companies to describe how their business model and strategy addresses sustainability impacts, risks and opportunities. The legislation requires the use of 'double materiality' for impact assessment, which means that businesses are not only required to consider how environmental and social factors impact them, but also how

> they impact these factors.[15] The Directive harmonises the regime previously in place for non-financial reporting, and introduces a new EU-wide set of sustainability reporting metrics.

Sector-specific frameworks are also important in the food sector, particularly for those companies that wish to show evidence of innovative farming practices. Examples cited by the smaller companies included the Farm Carbon Calculator[16] or the LEAF Marque Standard.[17]

The overall attitude to relevant legislation, and other reporting requirements, was not one of reluctant compliance. Rather, there was a recognition that, particularly in areas which were not part of their mission, it helped: "take on wider things earlier and not later. [We] see legislation as something that makes you do better and you learn from it." In one case, compliance was even seen as an "accelerator".

As we have seen, they also tend to collect wider data than is generally required to disclose their impacts. These innovations help provide 'evidence' that their, often disruptive, business models can be viable and effective; and also to reinforce their particular brand and reputation to help secure market share, as well as, in some cases, enable wider system change.

> Tony's Chocolonely does not just apply its '5 Sourcing Principles' of human rights and sustainability to its own supply chain. They have also innovated a collaborative approach. Tony's Open Chain is a global collective established in 2019. Companies active in the cocoa industry can sign up to use the 5 Sourcing Principles, and hence they contribute to multiplying positive impact and system change, rather than just relying on Tony's own growth to create impact.[18]

As a result of believing that they are often 'ahead of the game' in certain sustainability areas, some of the board members said that their companies are **involved in advocacy with government or regulators.** By being involved in the adaptation, or development, of new legislation, they can also enable wider system change, and increase the viability of their own business model (in other words, by levelling the playing field with other businesses that might otherwise undercut them).

2.5. Insights into how boards make complex decisions that integrate financial and sustainability-related factors

Finally, we asked the interviewees in our sample of vanguard food companies how the board make complex decisions, and particularly how board members adjudicate between tough options. For example, they might have to trade off investments to tackle sustainability issues with maintaining dividend payments to shareholders, or need to address the challenge of maintaining the affordability of products in the short term while securing the returns necessary to support long-term environmental resource security.

When asked, many of the interviewees believed that **the purpose and/or mission of the company provided high-level parameters (or pillars) for how the board makes decisions.** There is also a related cultural mindset of knowing 'the right thing to do' when difficult decisions arise. Those high-level parameters often translate into KPIs, and determine how data is synthesised and presented to the board in, for example, dashboards. They may also inform the criteria for scenario analysis, another approach to helping make long-term and/or risky decisions.

> Jones Food Company uses an in-house data management system called SPROUT that creates dashboards of data which enable them to look at, for example, particular R&D batches to see how yield and costs trade off. This enables them to determine future cashflow, and whether or not that particular approach should be continued, adapted or discontinued. They try to put a monetary value to everything to enable comparability, including customer product and branding preferences, in order to manage short, medium and long-term return on investment (ROI), profit and cashflow.

As a result of their overall purpose, some of the board members gave examples of clear non-negotiable criteria or cut-offs in relation to particular impacts (for example, for levels of carbon impact; an appropriate 'living wage'; a specific ratio of top to bottom pay; the level of human rights abuses in a particular country; fair price, being organic, employee conditions, or product quality levels). Within these guardrails, there is a deliberative discussion of options between negotiable sustainability aspects alongside financial metrics, for example, the ROI in the short, medium and long term.

> When exploring options, the Asian tea company board asks for, say, four scenarios. Within each, they determine, alongside profitability for the medium term, the one that has the least negative impact on relevant non-financial metrics. Guardrails (or non-negotiables) also determine decisions. These include the 'Founders Vision'; their purpose; taste quality; climate impact; and health impacts.

> The small farming and retail company has three main and three subsidiary pillars which guide their board's decision-making. These are: commercial, customer, and colleague; followed by climate, community and craft producers. The board chair gave an example of the kind of trade-off that they might face. For example, spending money on improving the employee working experience should have long-term benefits, but may reduce short-term cashflow and returns. Like the other companies in the sample, she said that they are constantly making a 'balanced' decision, while recognising that "at your peril, let the bottom line drop because it's the enabler of everything".

A key challenge raised by the interviewees is that of making long-term decisions that may also have short-term financial implications. **The outlook and needs of the company's shareholders and investors emerged from the interviews as being a strong determinant of whether or not there are trade-offs between sustainability-related decisions for the long term vis-à-vis short-term financial considerations.** This is particularly the case if the projected financial results are at odds with the needs or expectations of particular investors, or shareholders. There is a variety of ways in which vanguard food company boards have managed this dilemma:

- make sustainability core to the value proposition of the business to design out trade-offs
- have shareholders or other investors who share similar values

- design governance and ownership structures to 'lock in' a sustainability mission or purpose, and limit the ability of shareholders to privilege short-term returns over sustainability impact.

Board members from the largest listed companies, with no 'internal' shareholders, felt that their brand and business model currently enables both high shareholder returns, as well as long and short-term sustainability-related investments, as a result of their sustainability value proposition.

> The group chair of the large multinational listed food producer noted that their sustainability strategy is inextricably tied with their brand. As yet, they have not been faced with any trade-off between shareholder returns and long-term investments. However, if they did, they "would probably reduce dividends in the short term if a long-term investment was required. [There is] no point in paying dividends if they are coming out of a depleted asset."

> The chair of the global packaging PLC company felt that their value proposition was inextricably linked with creating shareholder value and securing a leading-edge market in sustainable solutions for their clients. As a result, he felt they had not been in a situation where there would be a trade-off with short-term shareholder returns but said that in that eventuality: "we'd probably choose the important long-term thing ... but we've never been faced with that challenge." He also added that innovating sustainable solutions with longer-term paybacks tends to require discussions with customers to articulate the benefits and, as a result, be assured that market risk going forward is eliminated as much as possible.

For the other listed companies, the dominance of founder, family or other 'like-minded' investors was believed to help preserve their purpose and enable a longer-term approach to decision-making.

> If the board of the Asian tea company feel that they have to make hard decisions which reduce any shareholder payouts in the short term, they provide evidenced cases to the shareholders, including the family owners. It is because the latter are the majority owners, that, despite being a PLC, they believe it is easier for them to operate with the longer term in mind.

The board members and executives of the private companies that we spoke to all had 'like-minded' investors who supported their longer-term thinking and actions, and held a more stakeholder or stewardship approach to overall governance.

> The board member of the sustainable food preparation and delivery company said that: "we're just trying to get better on our sustainability targets and not try to make as much money as possible". Their shareholders are majority family owned as well as others who all "support the ethos and what the company is trying to achieve". He believes that "food is a long run game ... and so you need a coalition of the willing to enable that." One of their main funders is a "values-led ethical finance provider". "It's the attitude of the owners per se", he argues, that matters. But this does not mean compromising on being inefficient:

> "You have to show good returns to show that you can do things this way, and so a key driver is to be as efficient as possible."

A range of governance innovations also locked in purpose for several organisations. These were designed particularly to limit the ability of future investors to dilute the mission. Examples include:

- the 'golden share' used by Tony's Chocolonely
- the use of a particular legal status, the 'entreprise à mission' with a specific mission committee
- incorporating the purpose or 'founders' wishes' within articles
- in the case of one company which is an employee ownership trust, also having a tripartite governance with a board, co-owner council, and a trust holding the shares – all elements of which it was argued contribute to, and reinforce each other, in maintaining the mission.

> An 'entreprise à mission' is a French legal company status, defined in French PACTE law. This status is used to publicly declare, and practically realise, a 'company with a mission' whose purpose is to address social or environmental challenges.[19] The company has to define its purpose; include its objectives within its articles of association; produce an audited report; and have a Mission Committee to help preserve the purpose. The board member of the company that uses this model believes that its Mission Committee, which in the case of the example in this study is composed fully of NEDs: "goes beyond simply evaluating actions and resources deployed; we serve as strategic advisors, constructive critics, and explorers of new paths and ideas."

3. Barriers to accessing and using sustainability-related data and wider information in a broader range of sectors and geographies

Despite the positive approaches adopted by the food sector boards in the previous section, the interviewees also raised a variety of challenges. This section brings together the results of the three strands of this research work, extending the research beyond the food sector, to include wider geographies and sectors.

This synthesis means that there is a larger number of both reinforcing and specific insights from which to determine both challenges, as well as potential solutions. (Summaries of the wider sectoral interviewees, and details of the Institute of Directors' survey respondents and roundtable participants, can be found in Appendix 2. The overall findings are summarised in Appendix 5 and Appendix 6 respectively.)

The challenges raised by the people involved in this research are set out in the following sub-sections:

3.1. Short-term pressures from the general business environment, and finance providers

Insights from our Phase 1 research, and wider group of interviewees, suggest that the extent and nature of pressures which arise from a volatile, uncertain, complex and ambiguous (VUCA) business environment **tend to reinforce a relatively short-term view of commercial factors**, in order to remain viable in the near term. This focus, it was argued, makes it difficult to find space to innovate new sustainable products or processes, or think more broadly about business model transformation.

An additional reported influence, which may support or inhibit more integrated strategic decision-making, is the **relative expectations of different shareholders, or other investors**. In the case of shareholders or investors who require very high and/or short-term returns, this pressure may limit the ability of boards and companies to make strategic decisions over where to invest resources in R&D for new sustainable products or services, related M&A, or to support transitions to a more sustainable business model.

As with the food sector interviews, there were comments from the wider board members and advisers that **short-term focused shareholders** (for example, distant institutional investors, venture capital or private equity) **may create challenges for some companies' business models, or for those who wish to make long-term sustainability-related investments** with relatively less economic return in the short run, but wider stakeholder value return in the long term. For example, the board member of a water utility, within a strongly regulated and 'public interest' sector, noted that, as a result, "institutional investors can be in conflict with stewardship".

3.2. Compliance burden and challenges arising from sustainability-related legislation and stakeholder reporting requirements

Phase 1 of the Future of Boards research has a strong emphasis on sustainability-related regulations and soft law being implemented around the world, some of which requires companies to provide evidence on their sustainability-related impacts and strategies. Additionally, there is a range of international and sectoral frameworks which help support and legitimise data collection and disclosure. Other stakeholders, such as finance providers, or clients, may also require impact data and transition plans as part of their contractual relationship.

Some of the wider interviews with board members and advisers noted that this kind of legislation and standards had led to some profound changes in how boards and companies operate, both practically and culturally. Some respondents noted that they had also seen changes in how sustainability data is being treated similarly to financial data.

However, we also gathered insights that suggest that **the rapidly evolving and complex nature and extent of sustainability-related reporting regulation, and wider stakeholder reporting requirements, may paradoxically perpetuate a compliance culture.** The interviewees felt that keeping abreast of this constant flux was taking a considerable amount of time and incurring costs – resources which might otherwise be used to rethink the overall business model, and/or identify new business opportunities aligned with sustainability outcomes.

> "Clients are so preoccupied with the concept of disclosure as a compliance tool ... they allow it to define their business strategy" (CISL/DLA Piper workshop participant).
>
> "I think there's a tipping point where reporting requirements and legislation become very onerous and at the end of the day it just adds costs to business" (CEO of the subsidiary of a French PLC).

Evolving legislation, including concepts such as 'extended producer responsibility' and requirements for Scope 3 assessments, was also suggested to introduce a new kind of board risk, since compliance is partly out of a board's hands.

Additionally, while there are moves to internationalise reporting frameworks and harmonise legislation, it was pointed out that there still remain differences, for example, in geographic legislative requirements which can pose extra costs on businesses.

Looking at the wider picture of stakeholder needs for sustainability impact reporting:

- There were several comments that an 'ESG' approach to sustainability impact, particularly by finance providers, may have reinforced a tendency to focus primarily on sustainability risks, and as a result, reduce attention on commercial opportunities.[20] This bias may be occurring despite a principle-based legislative approach which requires transparency on both risks and opportunities. This expressed assumption, however, contrasted with data collected in our survey from members of the UK's Institute of Directors (IoD). The percentage of respondents who said they incorporated sustainability/ESG risks into their corporate strategic decision-making was 60.1 per cent, and the number who agreed that they incorporate sustainability opportunities was virtually the same, at 58.2 per cent. These results imply that identifying opportunities was seen as similar in importance to identifying risks (Appendix 6).
- Several board members and advisers reported examples where they felt that the use of reporting requirements, by for example financial institutions, or those subject to, for example, CSRD legislation from the EU, may result in feeling pressure to divest activities which lead to, for example, a high carbon footprint, or have high risks of human rights abuses, rather than taking responsibility for mitigating that impact.
- It was also suggested that, because of the need to report on Scope 3 impacts, some companies may be reluctant to engage with other companies with poor sustainability scores or records, even if the latter are aiming to transition to realise more positive outcomes. The result may therefore hold back or limit wider transition by companies. One interviewee from a South East Asian bank suggested that some EU financial institutions may adopt criteria for who they will and will not work with that "will want the client or the project to be immediately compliant". She felt that other countries could be more open to dialogue and flexibility because they understood the need for transition.

3.3. A board mindset that does not recognise or fully understand sustainability risks and opportunities

The results of the interviews, survey and roundtable also suggest that the board's mindset is influenced by **the relative level of awareness of the impact of sustainability risks, and the potential for commercial opportunities**.

Having the right people on the board can help "challenge, test, focus and prioritise" and have "an open lens to what is evolving and changing" (IoD Roundtable participant).

The board's outlook is also affected by **the ability of the board to absorb and understand often complex and uncertain sustainability-related data and wider information**, in order to effectively probe and debate management's strategic proposals.

> "Reporting is seen as a compliance exercise. They're not really asking questions, and they're not sure what questions to ask. There's a heavy reliance that management has got the numbers right" (Argentinian governance standards specialist).

However, even with a high level of sustainability understanding, a number of people also indicated that board members may be reluctant to act, or find it too risky to do so, since they have **limited access to examples of successful integration or business transformation**, or of examples which had not worked, and why.

Additionally, some board evaluators and commentators suggested that there seemed to be **a general unwillingness by boards to acknowledge and discuss trade-offs**, in other words, the difficult strategic choices that may need to be made in the short and long term to realise a more integrated strategy.

3.4. Challenges with data access and synthesis

The wider interviewees confirmed that **data needs to be decision-useful** before it can contribute effectively to strategic decisions and option analysis. However, there were also comments by several people that **boards are not necessarily receiving appropriate insights and implications** of sustainability-related data and wider information in the most effective ways to contribute to their overall strategic decision-making.

> "If that information isn't meaningful enough … they're not going to do anything with it … [and it is] also not meaningful to investors or markets" (International business school researcher).

There were also suggestions from interviewees and roundtable participants that boards are **not always able to access all of the information they need** – whether about external sustainability trends, or stakeholder concerns or needs, for example – to effectively contribute to strategic decision-making.

There can also be a **lack of trust in the data**.

> "I think there is a confidence and trust issue when it comes to this sort of data … to assess and evaluate climate risk, for example, or social value or social impact … it's still an emerging discipline" (UK board director).

Additionally, **much forward-looking data is uncertain.** It was noted that sustainability data is far more complex than financial, and that there is a need to be transparent about the completeness of information being used to make predictions 5, 10, or 20 years forward. There was also concern that **some of the data can be inconsistent and have contradictory implications.**

> "There's always counter-data … that's a real struggle for boards … Boards that are less anxious … gather perhaps contradictory data or questions, good questions about the data" (US leadership consultant).

It was suggested that this uncertainty in the data requires a high level of risk taking, and understanding by the board. One interviewee therefore suggested that data uncertainty itself could reflect a new kind of board risk.

The interviews, survey and roundtable also signalled confusion over the **multiplicity of approaches to collecting data or legal requirements** in different jurisdictions; and a lack of clarity of the right direction in which to go, particularly where there is contradictory information about the best sustainability solution to use.

There were also repeated comments that **sustainability frameworks and regulations are too confusing, and are in flux**. Moreover, there can be **a wide variety of approaches to measuring the same thing**. For example, there may be multiple carbon calculators, or a deficit in standardised sector metrics such as measuring embodied carbon in buildings or other infrastructure. The concern was expressed by one roundtable participant that, in this kind of situation, a company may lose out on a contract because they have adopted a different way of calculating their impact to a competitor who provides a lower figure.

> A roundtable participant from the construction industry argued that the ability to measure Scope 3 emissions accurately and comparably is not present within, for example, construction industry guidelines on measuring embodied and operational carbon. He said that there will need to be more work done by the industry to be able to assess the trade-offs between cost, carbon and accuracy over time and therefore be able to create 'intelligent matrices' of options to present to a client. Currently it is unclear how to calculate the net present value of different sustainable products since the assessments are complex. For example, while concrete has a high level of embodied carbon, it also absorbs carbon over time.

Building on the points in the previous section, several interviewees suggested that not all of the data required by legislation, or informed by voluntary frameworks, is appropriate or adequate for the strategic decision-making needs of a company or board. These data gaps may relate to specific sector data, or be important for overseeing the implementation of the company's specific purpose and objectives. As we have seen, insights from the vanguard companies suggest that they tend to collect data to primarily address their own strategic needs, and create new metrics to aid their decision-making and showcase their impact.

Assurance seems to have helped increase board confidence in sustainability-related data, with several examples mentioned where this had led to resultant positive culture change in some companies and boards. Some respondents, however, also said that external assurance should not be seen as an alternative to rigorous internal audit processes.

Others drew attention to their perception that **assurance for social and nature aspects is not as developed as for carbon.**

Furthermore, some board advisers believed that **many boards are generally not informed enough about assurance** in relation to sustainability data.

Specific examples of missing data, information and analysis were suggested in our interviews and roundtable:

- scenario analysis of different future operating environments or specific options
- better understanding of future societal, client and finance sector needs and how these can be converted into clear costings and value generation
- data and wider information on the community or economy within which a company operates to assess the company's impacts and/or opportunities to attract employees
- topic-specific information, such as on 'water risk'

- clarity over government direction on sustainability-related policy
- specific sectoral measures which enable comparability between similar companies
- what 'good looks like', with which to compare particular organisational impacts
- stakeholder mappings done through a sustainability/ESG lens, not just a commercial one.

Some interviewees said that many boards are still using Microsoft Excel spreadsheets of sustainability data, whereas more **leading companies are making use of digitalisation and AI** in order to better synthesise and visualise information arising from multiple sources, and linking this to financial metrics.

> A UK National Health Service (NHS) body board member argued that a key enabler of the integration of sustainability information into investment decisions has been the increased sophistication of data analytics for turning data into usable information. This approach had required a significant investment in new technology. Sustainability issues are a standing board item, and the data analytics from their buildings can be used, for example, as part of investment decisions such as the costs and savings over time of moving to light emitting diode (LED) lighting.

> A previous board member of an examination body noted that the organisation uses technology and AI not only to pull information together, but also to sense-check the data. In other words, they use it to check that the data which is being collected falls within the parameters of what might be expected, and also to 'filter' useful information. AI has also even been used to check that the decision steps that the board uses are consistent over time.

3.5. Early days for systematic frameworks that enable integrated strategic decision-making

Our research also indicated that **systematic frameworks or specific criteria to enable complex decision-making by boards, which involve sustainability-related factors, are embryonic**. This is particularly the case for boards that wish to link sustainability-related impacts, risks and opportunities with financial implications in order to effectively assess and communicate the business case. Where this does happen, different approaches were suggested as ways to decide between competing objectives:

- using a purely monetary approach based on financial value creation in the short or long run
- incorporating non-negotiables or 'guardrails' such as specific pillars or criteria arising out of purpose or mission, or those embedded within 'founders' wishes'
- making a balanced decision between different, and sometimes incommensurate (unable to be measured on the same scale such as by applying a monetary price) criteria, informed by overall purpose.

3.6. Particular constraints for SMEs

The participants in the survey and roundtable with the IoD particularly stressed that it is often **relatively harder for smaller firms to find time or resource to integrate sustainability data and information, or to innovate new products and services**. Their primary focus may often mainly be on survival, and there was a feeling that there is a lack of simple, trusted and easily available approaches to assessing sustainability impact.

These board members and advisers also indicated that SMEs are relatively poorly resourced and **may be both unaware of, and not have the capacity to analyse, sustainability risks and opportunities**. Some, it was suggested, do not even have basic governance in place, such as a risk register.

It was also commented by several participants that they felt that **often responsibility is being passed down supply chains for action and disclosure,** even if there are challenges to their ability to comply. At the same time, they suggested that it could be unclear whether those setting the requirements were themselves 'walking the talk'.

Additionally, those SME board members who are committed to creating sustainability outcomes felt that their potential contributions, as well as ability to further innovate, **were sometimes being held back by larger clients** over whom they had little influence. For example, several people said that they could not access data from their larger clients to quantify their own Scope 3 impacts; or that clients may not pay for the extra costs of incorporating sustainability risks and opportunities, and hence limit a company's commercially viable 'strategic space' for sustainability innovation.

> "We want to do more but the client holds us back."
>
> "Our voice is very seldom heard in their long-term strategy."
>
> (Comments by IoD Roundtable participants)

An example was also given of how **reduced and streamlined legal reporting requirements for small firms could be misleading**. For example, a board chair said that an increase in a reported aggregate carbon figure may not signal an increased carbon intensity in operations, but rather be the result of business growth. A related difficulty was mentioned by an emerging growth company representative who argued that any disclosures they made became out of date very quickly.

3.7. Governance and information challenges for purpose-led start-up companies

Across our research strands, it became apparent that **start-up and emerging company boards have a different relationship with strategy development**. For example, the representative of one emerging company from the food sector quoted in the previous chapter said that the design and agreement of strategy happens between finance providers, founders, executives and experienced external advisers, not all of whom sit on the board. At this stage, he noted, the founders and employees need a wide range of inputs to complement the executive's skills, particularly around commercialisation.

The evolving boards and other stakeholders therefore also have different needs and constraints to mature boards, particularly for those starting out with a sustainability mission or purpose. Our interviewees noted that **limited time and resource constraints restrict the extent to which they can access and use sustainability impact data and wider information.** This situation, it was suggested, can create challenges for effectively developing their strategy and having the space and time to spot opportunities; provide evidence to support their developing brand; or access finance.

They also seem to have **limited time or capacity, knowledge and support about how best to evolve their board composition and wider governance** to most effectively support their continued purpose and integrated strategy.

Some of our interviewees also indicated **challenges with accessing appropriate growth finance** that fits with their desire to balance environmental, social and economic value creation, and preserve mission or purpose over the long term.

4. Ways forward

By taking the identified challenges into account, and reflecting on ideas raised within the interviews and roundtables, there are some relatively clear responses that boards can consider, as well as areas where the insights suggest the need for further research and consideration.

These suggestions are clustered under the following sections:

An additional point also emerged repeatedly across all three research strands, that of a **clear tendency for board members and advisers to talk predominantly about carbon-related risks and opportunities.** There was far less discussion of nature-related or societal factors, such as responses to high levels of inequality and poverty. This limited focus is likely to be the result of the understandable and early focus on climate change in public policy responses, and sustainability reporting requirements.

For example, in our survey of the UK's IoD members, we found that most board members (63.8 per cent) had not heard of the Taskforce on Nature-related Financial Disclosures (TNFD) and only 3.1 per cent were adopting it (Appendix 6). Environmental concerns have also seemingly taken precedence over social. Following international concern that social issues are not being given the same weight or consideration as environmental, a comparable social task force has been set up.

> The Taskforce on Inequality and Social-related Financial Disclosures (TISFD), launched in September 2024, is: "a global initiative to develop recommendations that enable businesses and investors to effectively identify, assess, and report on their inequality and social-related risks, opportunities, and impacts". The Working Group for the TISFD will aim to "reduce the systemic risks of inequality, strengthen the stability of financial systems, and improve outcomes for all people". The Working Group includes organisations such as the World Business Council for Sustainable Development (WBCSD), the Organisation for Economic Co-operation and Development (OECD) and Principles for Responsible Investment (PRI).[21]

This relatively narrow focus of board concern suggests **a need for further attention to, and awareness-raising around, wider sustainability risks and opportunities.**

4.1. Further thinking about purpose, governance and ownership

Throughout our interviews, **the importance of purpose, governance and ownership came up repeatedly as an important way to secure sustainability-related outcomes over the long term, and appropriately balancing social, environmental and financial value creation.** The board members of several listed PLCs, with predominantly external shareholders, felt that they were able to strike this balance as a result of their particular value proposition. However, it was also clear that other board members or advisers, whether public or private, believed that it was only because of their different patterns of ownership, or ways of 'locking in' their mission or purpose, that they were able to do so. Their concern was that otherwise some finance providers would prioritise profit in the short term rather than contribute more appropriately to the creation of long-term and multiple value creation.

These kinds of responses suggest that there is a need for business boards as well as academics, business support providers and others to consider the implications of these observations more deeply.

Some of the approaches taken by boards in this study begin to suggest different ways in which this greater alignment between environmental and societal need, business success and financial sector requirements may happen.

One common response can be summarised as:

- **revisit the company purpose or mission statement** to ensure it incorporates appropriate sustainability dimensions or implications, and as such informs the overall direction of the company, and its resultant strategy.

"You can't do a good job if you are pointing in the wrong direction – the needle may have shifted" (IoD Roundtable participant).

Various companies in this research use, or adopt, different financing, ownership and governance approaches to either 'lock in' that sustainability-related mission or purpose, or ensure that the ownership model is more likely to enable longer-term sustainable value creation, by:

- **engaging with like-minded investors** who are aligned in terms of their commitment to long-term sustainable value creation
- including **family or founder shareholders** in either public or private companies who may, but are not guaranteed to be, more likely to hold the longer-term vision.

And more radically:

- adapting governance and ownership models to **'lock in' mission,** such as by using a 'golden share'
- being **stakeholder-owned** (such as by employees), which again may not necessarily privilege the long-term or wider sustainability factors, but, when combined with other innovations such as embedding 'founders' wishes', appear, in the examples raised by our interviewees, to be more likely to do so
- considering and adopting **legal structures or statuses which enable the prioritisation or balancing of a sustainability-related mission or purpose with commercial considerations,** such as the French 'entreprise à mission'; the public benefit companies outlined in Phase 1; or, as in the case of one

company in this research, considering their evolution towards 'steward-ownership' through a Danish Industrial Foundation.[22]

4.2. Improving the board's ability to absorb and reflect on sustainability-related data and wider information

The interviewees and workshop participants suggested several ways to ensure that the entire board has **a shared mindset, values and capacity that supports how sustainability factors are being integrated into strategic decision-making,** and specific capabilities to absorb and effectively interrogate the sustainability-related data and wider information provided:

- provide more **training for board members in sustainability issues,** including the relative robustness, assurance and inherent uncertainty of different kinds of data and information, to enable greater effectiveness in engaging with strategic decision-making and oversight
- **increase collaboration and peer learning** between board members of different companies and organisations to support more practical learning of what is possible at board level, and how that is best realised

> Chapter Zero was set up by a group of NEDs.[23] It is a non-profit organisation based at Hughes Hall, Cambridge providing support for non-executive directors to help integrate a path towards net zero within corporate strategies. It provides peer networking and resourcing such as a Transition Planning Toolkit, Board Toolkit and a Knowledge Hub.

- create **space in board meetings for more blue-sky thinking** and thought experiments to support radical disruption and innovation in the business model, or in products and services

> The mission of Energy Systems Catapult as a purpose-led organisation is to accelerate net zero energy innovation.[24] Their KPIs centre on enabling decarbonisation and business growth. Data and wider information on sustainability factors are incorporated into annual strategy days, thought leadership sessions at board level, and within strategic planning.
>
> They hold annual thought experiments which involve blue-sky thinking to look at external factors and issues that might enable ideas to support the organisational mission, and for, as they put it, "radical disruption". These events include executive and non-executive directors, the internal senior and extended leadership team members, as well as external experts from their stakeholder community – such as start-up or scale-up businesses, energy network or retail companies, government departments, or regulators. Information is provided in a variety of forms (paper, slides, videos, interactive murals) depending on the subject. These sessions are designed to be discursive and interactive and to ensure the board has a full discussion on the areas of focus, with an effort made to strike a balance between the right level of information to inform, but not overload.
>
> Scottish Water is a publicly owned water utility company.[25] Their board has a horizon-scanning meeting once a year, which partly builds on both their own and the Scottish

Government's risk registers. While horizon scanning, from a risk perspective, had been undertaken by the Corporate Risk Team (CRT) for a number of years, the board has recently adopted this approach. They look at different megatrend themes under PESTLE headings (political, economic, social, technological, legal and environmental). For example, 'environmental sustainability' would include 'climate adaptation failure'. Or social examples would be 'demographic and social change' or 'social cohesion'. They assess the speed of change of these trends and how they might respond.

- have an **appropriate number of independent NEDs** to provide more challenge and probing of strategic plans, **drawn from a wide range of backgrounds, experiences and geographies** to provide different perspectives. Their effectiveness also depends on NEDs themselves being more challenging within meetings
- **engage NEDs early in the strategic development process** to make best use of their varied perspectives, rather than being presented with a fait accompli at the end of a purely executive-led process

"So often with decision-making, it's [about] transparency, and making sure you're talking about things at a time where input can still be welcome and it's not … so far down the process that actually nobody really wants any input" (Small family-owned agriculture and retail enterprise).

- consider how the board could **contribute to horizon scanning or 'strategic foresight'** to complement any tendency of management (particularly at times of high external pressure) to narrowly focus on short-term priorities, and/or 'rear view compliance'. This wider reflection is particularly important because of the interconnected and long-term impacts of different sustainability challenges, and their potential opportunities for companies

"Focus more on long term strategy, optionality and digital opportunity, which means less rear-view compliance, and more future orientation" (Survey respondent from Phase 1).

- **engage with stakeholders** such as employees, shareholders and other finance providers, or customers to support increased understanding of expectations and needs, and also to brainstorm ideas together to meet sustainability challenges
- **bring in external experts** when and if necessary to provide the board with another perspective, and/or additional information where needed
- **consider a formal sustainability advisory board or panel** to provide further external perspectives on particular sustainability-related issues
- **reconsider and develop the role of the company secretary (or equivalent)** to ensure that boards have access to impact data and wider information in an accessible, understandable and useful way. Company secretaries also need to be informed and independent enough to filter, check and verify the information.

"A big challenge in my professional body … is ensuring that directors have the information that they need to make decisions … The problem is we are giving them too much information … we need to be more concise", as well as "give more life to the numbers" to encourage discussion on their wider implications (South American mining company, company secretary).

4.3. Improving sustainability impact data access, presentation and use

The interviewees and workshop participants drew attention to the board's needs to have clear, comprehensive and insightful presentations of data, as well as ways of making sense of that data for practical decisions. There were suggestions that the board could:

- focus on **clear sustainability-related KPIs** at board level, making use of **comprehensive dashboards** with supportive background information
- ask the executive management for more insight and implications on the data, or for wider information, in areas that are unclear[26]
- **fill data gaps** which go beyond existing legislation or international frameworks by:
    - creating their own data metrics to guide decision-making and evidence the company's particular value proposition
    - working with external research bodies or universities, alone or in collaboration with others, to undertake research to inform new products or services, or to establish the latest state of scientific opinion to minimise the risk of future plans
- oversee, and ask for, **the development of decision-making frameworks which enable integration and comparison of environmental, social and financial value.** This is an area which, however, requires far more consideration. One example cited was the use of 'social value', a concept that was popularised in the UK in relation to public procurement through the Public Services (Social Value) Act 2012. Another was the work of the Value Balancing Alliance.

The definition of social value according to the British Standards Institution (BSI) standard: *BS 8950, Social value – Understanding and enhancing – Guide* is "individual and collective wellbeing in the short and long term".[27] It refers to contributions from social, economic and environmental value, not just social, reflecting the scope of the UK's Public Services (Social Value) Act 2012, which requires the public sector to incorporate social value within their contracts.[28] As of January 2021, at least 10 per cent of the final evaluation score of awarded contracts must include social, economic and environmental benefits. Social value is increasingly being used by private sector organisations as an organising framework to showcase their alignment with people and planet. The Social Value Portal provides a 'TOMs' (themes, outcomes and measures) framework for creating comparable measurements of social value.[29]

The Value Balancing Alliance was set up in order to: "create a global impact measurement and valuation (IMV) standard for monetizing and disclosing positive and negative impacts of corporate activity and to provide guidance on how these impacts can be integrated into business steering."[30]

A key point raised repeatedly, however, was that **care must be taken not to make all decisions subject to a common quantitative metric, such as a financial proxy.** The examples in both the section on vanguard food companies, as well as below, illustrate the need to take account of multiple criteria.

While acknowledging that this is a nascent area, and that there are a range of challenges and potential biases with the use of AI, there was also considerable interest among interviewees and workshop participants in the **potential of technological advances to assist boards to make better sense of sustainability data and wider information:**

- consider further digitalisation of board decision-making practices to better understand the implications of aggregate impact data. Examples were also given of the use of AI to enable a greater understanding of stakeholder and shareholder needs; avoid groupthink by bringing in different perspectives; create more informed future scenarios; and to overall enable agile decision-making which is more responsive to a fast-changing world
- consider how AI or other technologies or processes could **also be used to sense-check the decision-making process itself** to see if boards are adopting clear and consistent approaches to making complex decisions.

In relation to the ability to **address sustainability-related choices and potential trade-offs,** this was recognised to be an evolving area where a great deal more work needs to be done by academics, business support providers and businesses themselves to determine the best way forward. Strategic decision-making is fundamentally about choosing between potential options, and having the right information with which to make the best decisions. Contributors suggested approaches they were currently using, which included:

- starting with an open-ended discussion to capture all the dimensions before focusing on specific decision-making approaches or frameworks
- further exploring and using decision-making frameworks that focus on multiple value creation, such as 'social value'
- testing every decision against the mission or purpose
- making greater use of modelling and AI to support option and scenario analysis
- embedding sustainability factors into investment discussions and decision-making which make use of ROI metrics.

It was also felt that boards should additionally **clearly articulate and evidence the process for reaching complex decisions, and specify the decision criteria being used.** This approach was believed to be particularly important when the financial outcomes may be reduced in the short term and potentially be perceived negatively by shareholders or finance providers. Not only is this clarity an important part of a board's legally required leadership role, this greater transparency could better support early discussions with investors, or reduce the tendency for wider negative stakeholder responses.

The ex-board member of an African extractive company gave an example of the kind of difficult sustainability-related decision that has to be made. For example, if a facility has a very high Scope 3 carbon footprint which affects the company's overall 'score', one solution would be to just divest to improve the carbon metrics. However, the negative impacts of doing so could affect, for example, wider society, through for example, national energy generation capacity, or the likelihood that another buyer might not take responsibility to try to reduce those emissions.

4.4. Increasing collaboration within sectors, and with governments, to address collective challenges

One of the key messages from our interviews and roundtable was to:

- explore the potential for **more pre-competitive collaboration** to decide on, and develop, comparable metrics, as well as other ways of tackling specific sustainability challenges, particularly at sectoral level.

"For many many years we have all talked about collaboration. And I think for the first time, net zero gives us a non-negotiable legal requirement that everybody, every stakeholder has to deliver on. But none of us can deliver it alone. It forces you as an ecosystem to genuinely come together" (CEO of a group subsidiary of a French food and facilities PLC).

The Seafood Carbon Emissions Profiling Tool has been developed by the arms-length public body supporting the UK's seafood industry, Seafish, together with industry and academia. It is designed for businesses working in wild capture and aquaculture so that they can create carbon footprints for their products; understand "emissions hotspots, or risks, in product supply chain collaboration to stimulate pre-competitive supply chain collaboration" to address challenges; enable benchmarking against peers; and support reporting against the Greenhouse Gas Protocol.[31]

4.5. Further considerations of SME constraints

The particular challenges for SMEs, highlighted in the previous chapter, suggest that greater attention needs to be paid to support smaller firms in their ability to access and use sustainability-related data and wider information effectively.

The collaborative approach to simplify and consolidate tools to support data collection and use is one approach, as well, it was suggested, as support by membership and other bodies such as the IoD to provide **guidance and positive case studies of how to harness sustainability data and wider information to support innovation in products, services or business models.** More specific ideas for responses to SME challenges that are relevant to the UK can be found in Appendix 6.

With respect to supply chain challenges, it also became clear that greater focus and guidelines are needed to **create and support collective supply chain journeys towards, for example, net zero,** which include requiring larger companies to recognise and support innovation by smaller firms and their needs for reliable Scope 3 information.

4.6. Developing a supportive ecosystem of advice and finance for purpose-led start-ups

For businesses that are starting life as purpose-driven organisations, the main implication of the comments made is that **greater attention should be paid by start-up boards, together with business support bodies, to considering the most appropriate legal form, governance, ownership and board structure, for their needs.** They should also think about how their governance may need to evolve; and consider if it is necessary to find ways to 'lock in' their purpose and prevent it being diluted over time.

There could also be more thought paid to the **creation of collaborative support models** to enable start-up and emerging companies with limited bandwidth to **keep abreast of what is happening externally, including in the fast-changing sustainability context.** This knowledge is important to seize commercial opportunities, as well as enable boards to refine their business model.

Any supportive ecosystem of sustainability-oriented finance providers, and/or broader incubator support, could also help early-stage purpose-led companies to collect sustainability data (aided through, for example, collaborative technology). Such support could also enable insights into ongoing sustainability-related trends that are relevant to start-up companies through, for example, sharing collective intelligence, or through the addition of, or access to, specialist advisers.

A venture capital (VC) board member who is setting up a VC fund focused primarily on businesses that address sustainability challenges in Latvia, said that they will include relevant sustainability KPIs right from the start in the companies they support. They are also developing a data platform that all start-ups can share so that they are able to keep track of their key metrics, and also enable the fund to assess its own overall impact. Collaboration between companies would not just be limited to enabling the collection of impact data, but also extended to wider information supporting future strategy development, by sharing information on markets and technology.

EduEco+ is a new digital start-up commercial membership network that provides on-demand services for purpose-led growth start-ups.[32]

The founder who attended the IoD Roundtable said that start-up boards can and should be more dynamic and entrepreneurial since start-up founders need to create an environment for ideas generation at the board level. She believes that this shift in position has arisen from the Gen Z movement that is, she believes, more focused on empathetic and compassionate business. This means their advisory board membership structure is focused more on 'support' and 'encouragement' than formal 'challenge' and 'accountability'. EduEco+'s board also aims to lead by example for start-up members to adopt and embed.

The boards of start-up companies also expressed concern about some of the challenges of securing appropriate finance, particularly if that involves equity shares and seats on the board, which might constrain the ability of the emerging business to maintain their sustainability purpose over time. One board member suggested for **financial brokers for purpose-led start-ups to match their needs with the right kind of finance** that aligns with their values and trajectory.

> The CEO of a vertical farming start-up in the UK, which is a social enterprise and not part of the main food sector sample, argued that there needed to be far more innovation in the finance sector to support purpose-led businesses. For example, he said that a funder in the UK operates a revenue share option, rather than taking equity in start-ups, which would be more relevant to their particular business model.

5. Conclusions

This study began in response to findings in Phase 1 of the Future of Boards research, which suggested a tendency for boards to focus on compliance or 'box-ticking', rather than seizing the opportunity to better understand their sustainability impacts and dependencies. Additionally, it appeared that they were not effectively using their access to sustainability data and wider information to inform an integrated strategy, or strategic decision-making, to enable their company to survive and thrive in a changing world, as well as create positive sustainability outcomes.

Because of the limited academic and practitioner evidence in this area, we decided to speak directly to board members and advisers, using interviews and a roundtable. We believed that this approach could help surface a range of factors that might either enable or inhibit boards from effectively accessing and using sustainability impact data and wider information.

This research resulted in a wide range of suggested benefits, challenges and ways forward. These are summarised in the previous chapters, and discussed in more detail in the Appendices.

One of the strongest messages that emerges is that it is neither wise nor practical to look at data and information by itself. Not only is sustainability data and wider information obviously meaningless in isolation, that very meaning, and its practical usefulness, is also informed, prioritised and ultimately realised by multiple influences.

The process of understanding the implications of complex data, as well as the wider information on societal, environmental and stakeholder trends, is shaped by particular framings that can be fragmented, inconsistent, or contested. These sometimes competing approaches arise, for example, from legislation, standards, stakeholder needs, cultural and societal views, or even from the different values, understandings and biases between board members themselves.

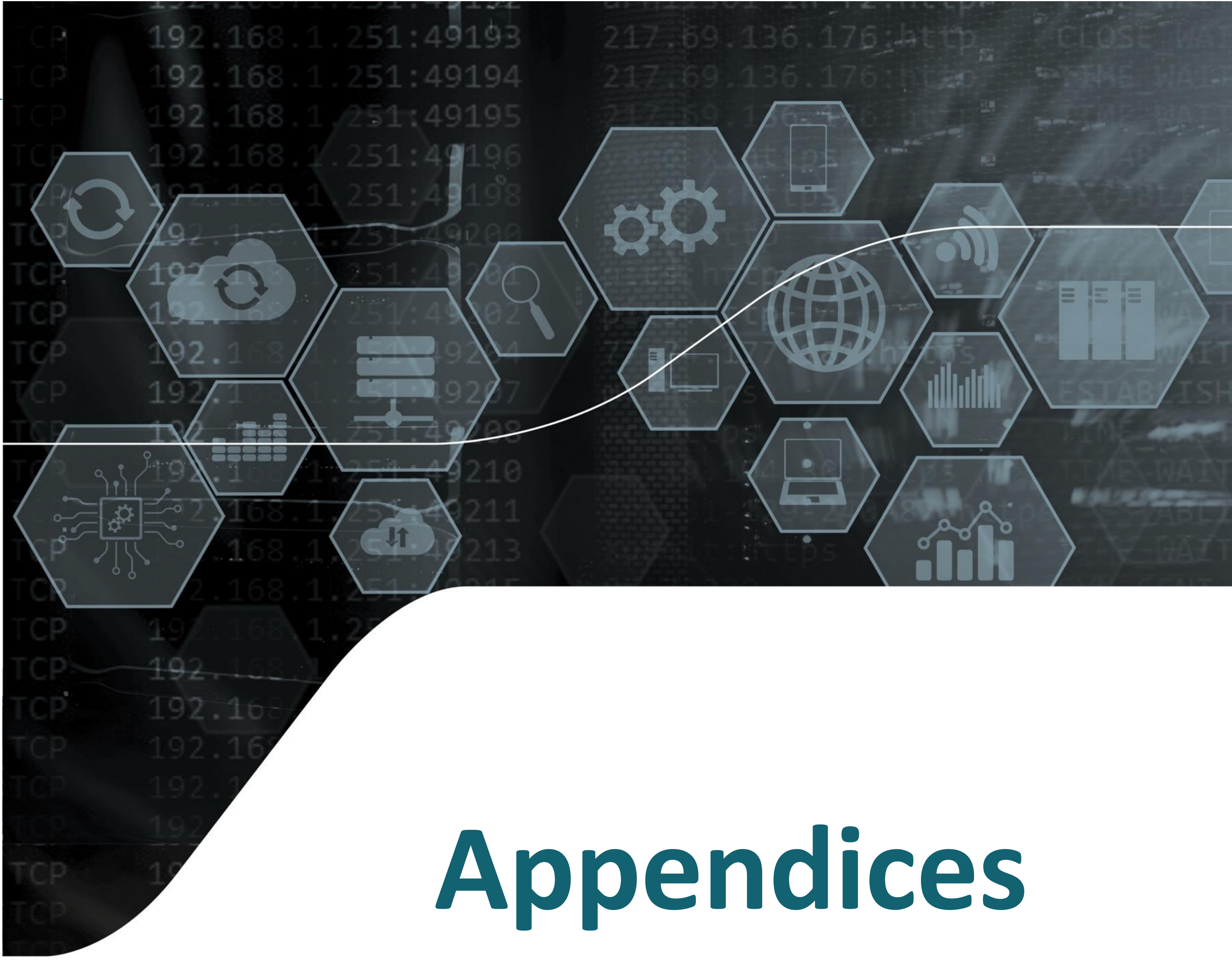
Board members therefore also need to take time to discuss and be transparent about the motivations and assumptions they bring to the table, and consider how these affect their decision-making. Additionally, their role in the creation and understanding of the fundamental purpose of the company, and how that purpose translates, through strategy into distinctive approaches to value creation, is critical.

In the midst of all this complexity, however, there are examples of companies that are already using sustainability impact data and wider information to create value by innovating sustainable products and services, and/or to encourage wider system change through their business models. The examples in Chapter 2 illustrate what is possible.

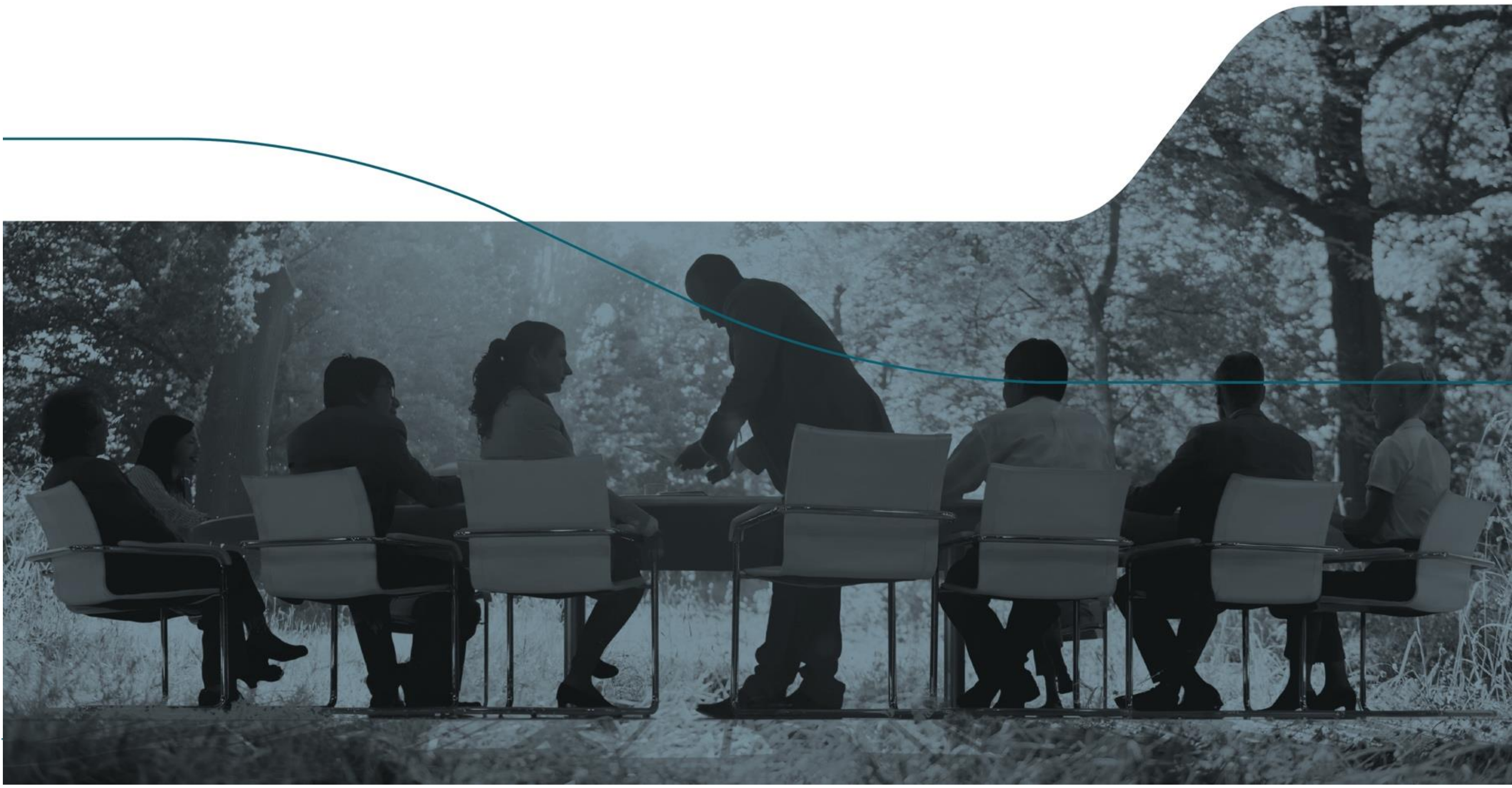
Knowledge may be power, but another lesson from this research is that shared knowledge and collaboration may be transformatory. Focusing on individual companies and organisations, in relation to any aspect of sustainability, only takes you so far. There is a clear need for more pre-competitive collaboration and alignment between businesses, particularly within sectors, and with governments, regulators, stakeholders and standard-setters – to collect, analyse and report on meaningful sustainability impact data and wider information. This kind of joint problem-solving can enable boards to more effectively trust, scrutinise and use data, and wider information; or even create wider system change through collective action.

We hope that boards, policymakers and intermediaries can take inspiration from the various insights in this report to determine if and how the findings play out across different places, sectors, or types of organisation. In this way, we aim to contribute to realising more practical actions that demonstrably support boards to create positive long-term value for stakeholders, the environment and wider society.

Part of the further development of this work will involve roundtables in different international locations to further develop advice for boards. For further information, please contact Gillian Secrett, Director for Leadership and Culture at gillian.secrett@cisl.cam.ac.uk.



Appendices



Appendix 1: Background scoping and review

In order to explore the nature and use of impact data and wider information within company strategy we first did a brief literature and scoping review to build on some of the insights emerging from Phase 1 to inform the methodology for this research. This background information was used to design an initial interview schedule for board members which was then refined and tested out with members of CISL's Board Advisory Group. It also enabled interviewers to have the appropriate background with which to probe any answers provided by interviewees. The information was also used to inform the questions that were included in the IoD survey questions, and within the brainstorming roundtable (Appendix 2).

We focused on four areas:

- The role of boards within company strategy – Any investigation of the role of sustainability data and wider information integration into strategic considerations obviously depends on the prior question about the extent and nature of board engagement with strategy. The results in Phase 1 suggested that this area needed further exploration. Our research indicated that boards were not as engaged with overall direction and strategic decisions as might be thought, although this involvement was increasing.

- The incorporation of sustainability factors (impacts, risks and opportunities) into overall company strategy – In order to understand how sustainability and wider information is used to inform overall strategy and specific strategic decision-making, the extent and nature of the incorporation of overall sustainability factors within strategy needs to be first discussed to inform the context within which that knowledge is being used.

- How data and wider decision-making is accessed and synthesised within strategic decision-making – To provide the background for interviewees to ask and probe questions on the use of sustainability impact data and wider information, we also looked at the nature and kind of information that may be used.

- Regulation and standards which require disclosure of sustainability impacts – This is an important driver of company and board behaviour with regard to incorporating sustainability factors into decision-making.

The role of boards within company strategy

Corporate strategy can be simply thought of as the direction, goals and activities of a company. It is often reflected in an annual (or longer period) plan, associated with a specific allocation of resources – financial, human and physical – and where performance is monitored against these aims.[33]

In 2004, David Nadler suggested thinking about strategy as involving four types of activity:[34]

- **strategic thinking** (collecting and analysing information about the competitive environment, or other issues such as customer value propositions)

- **strategic decision-making** (including specific investments, M&A, nature of the business portfolio and business model)
- **strategic planning** (specific plans and budgets following resource allocation)
- **strategic execution** (implementation and monitoring).

However, these four areas are not distinct, and neither do they follow a simple linear progression.[35] Some commentators have rather seen strategy as a "pattern in a stream of decisions", often being more emergent than planned,[36] or as "ongoing, punctuated by strategizing episodes".[37]

Corporate strategy is also embedded within overall corporate direction – the mission or purpose of a company – and itself informs more specific business unit or functional strategies:

- **corporate direction** which could also be seen as mission, or purpose, and which sets the framework for:
  - ↳ **corporate strategy** – how you devise overall activities and plans to meet that overall mission, which requires:
    - ↳ **business unit strategies** – specific plans to realise the corporate strategy.

The role of the board in strategy

Both norms and regulation determine the role of the board. The traditional (and indeed legal) view of the role of the board with respect to strategy is that the board is primarily responsible for the overall purpose or mission, and strategic direction of a company, as well as being primarily accountable for the oversight and implementation of the strategy. The CEO, on the other hand, takes primary responsibility for the development and realisation of strategic plans, drawing on the work of the wider executives and employees. The board therefore provides oversight of the strategic processes involved, and monitors the results achieved, but does not, in this view, have any direct involvement in formulating strategy. However, they can affect the context and direction within which that strategic development takes place.

Philip Styles and Bernard Taylor, for example, argued in 2002 that the role of the board within strategy fundamentally involves three areas:

- **gatekeeping** – assessing, reviewing and commenting on proposals, within the scope of a constantly reviewed overall 'definition' of the company
- **confidence-building** – supporting and encouraging managers who may have strategic insights
- **selecting directors** – and indicating the kind of suitable person required.[38]

The authors recognised differences in how boards address the gatekeeping role, ranging from rubber-stamping the proposals of senior management, probing and questioning what is presented, to deciding between strategic options, and being part of creating the overall vision of the company.

However, while the primary driver and formulator of strategy is still recognised to be the CEO, the role of boards appears to be becoming more engaged and nuanced.[39] These shifts towards greater board involvement are suggested to arise, for example, from the increased complexity of decision-making, pressure from regulators and investors, and from a younger generation of board members.[40]

Boards appear to be relatively more actively involved in shaping strategic development, and do not just comment on executive-led strategic plans. Roger Martin, for example, argued in 2018 that the CEO should get maximum insights from the board at the earliest possible stage.[41]

However, there is a wide spectrum of strategic engagement, with some boards being totally hands off, and others more fully engaged.[42] This strategic engagement may take a range of forms, whether as part of formal board meetings (what has been called procedural engagement) or interactive engagement (away days and other events where shared meaning is created).[43] There is also some evidence that there is more creativity and risk-taking happening on boards. The Aspen Institute, for example, argues that this increased activity is being driven by a range of factors. One particular driver is that of the board's reputation, which is now more in focus and subject to greater activism by shareholders, requiring the need to justify strategic decisions, or argue against hostile takeovers.[44]

One of the main arguments for boards to engage with strategy is that this involvement increases the performance of the company, predominantly through 'better' decision-making arising from board members' knowledge of both external and internal risk and opportunity factors, as well as from personal experience.[45,46]

Taking this argument further, Reeves et al, writing for the BCG Henderson Institute in 2018, believe that, at a time of immense pressure on companies, a key role for the board should be to think about the long term, not just the short, and to work more with management to interrogate the assumptions, scenarios, resource needs, and even potential for disruption. As a result, they suggest that there should be more strategy time in all board meetings and communication between the board and executive outside meetings to save time when meeting together.[47]

In 2022, PWC found that 71% of board directors said that they discuss strategy at every meeting in areas such as capital allocation, talent oversight, executive compensation, risk oversight, and CEO succession.[48] When boards engage with shareholders, the main topic is likely to be strategy. They therefore argue that board members need to be informed about the rationales for certain courses of action. The authors also believe that annual sessions specifically devoted to strategy are inadequate, since it is a continuous process, with assumptions continuously changing, and therefore should be addressed throughout the year.

The particular role of non-executive directors (NEDs) in relation to strategy

The diversity and skills of independent NEDs are seen as a core aspect of effective contributions to strategic decision-making.[49] Their added value should be to detect changes in the operating environment, whether threats or opportunities, which are both complementary and additional to that of the executive, and provide alternative points of view and challenge.

There is, however, some evidence that suggests that the more complex and messy the strategy development process, the less likely NEDs are to be involved, since clear points for engagement do not exist, unless there is a culture of more informal engagement. Additionally, there are also indications that, whilst there is a belief that NEDs should be far more involved in scenario and option appraisal, as well as overseeing delivery plans, NEDs are under-resourced.[50]

The particular role of the chair in relation to strategy

The role of the chair is also important with respect to the nature and urgency of strategic discussions, how sustainability challenges are brought to the board and incorporated, and whether or how short-term profitability is balanced with long term sustainable value creation.

> **Board effectiveness and the chair of the future: Five fundamental forces that define the modern chair's role.**[51]
>
> In 2022, Deloitte sought insights from interviews, surveys and roundtables with around 300 chairs from 16 countries around the world, including a mix of large listed and private companies (including family owned). The responses suggested that the responsibility and role of the chair in managing a fast-changing world, with increased societal expectations of business, climate change, governance challenges, the need for more agility and use of tech, and crises, had increased. This they believed requires that chairs act more as stewards of the organisation, helping to accelerate strategies and their implementation, horizon and scenario scan for risks, support talent acquisition and culture shifts, provide leadership in crises, as well as support and challenge the CEO.
>
> The report also mentions leadership by the chair on stakeholder engagement, bringing wider societal and environmental issues/challenges to the board, integrating ESG into strategy and performance frameworks, and directly addressing the tension between short-term profitability and long-term sustainability.

The level of strategy engagement

While the trend towards increased engagement in strategic decision-making appears to be continuing, surveys from international business consultancies also seem to find that the level of desired engagement on strategy is falling short of what board members believe is optimal, particularly as a result of other pressures on their time.[52]

The ability to take on a greater strategic role is not just a function of prioritisation and time, but will also depend on who is present, and the dynamics of how the board operates (issues we also explored in Phase 1).

As a result of this evolving situation, and the importance of considering the level of strategic engagement before considering how data and information are incorporated into decision-making, we decided to ask our interviewees the following question:

Q1: How, and to what extent, is your board involved in strategy development and/or oversight?

The incorporation of sustainability factors (impacts, risks and opportunities) into overall company strategy

As we discussed in Phase 1 of this research, there are moral, regulatory and business rationales and drivers for involving sustainability factors within both purpose and related strategic decision-making. Some of these drivers are likely to be similar to those more generally given by directors for addressing sustainability.

A study of 879 global corporate directors in 2023 by BCG, INSEAD and Heidrick & Struggles, for example, found out that the main drivers for addressing sustainability issues in general were primarily related to increasing legislative and regulatory requirements as well as being 'the right thing to do'.[53] Interestingly, drivers affecting overall strategy were relatively less cited, but acknowledged, including investor requirements, talent expectations, customer demands and community pressure. Impacts on the business model, and recognition of a potential threat to survival and overall performance, accounted for less than 20 per cent of responses. These relatively low figures for areas which relate to overall strategic decision-making are similar to our findings from Phase 1. There, we found that the integration of financial and non-financial factors within strategy was, while increasingly the case, not happening to any great extent.

Increasing numbers of studies and case studies, however, highlight the known business benefits of including sustainability risks and opportunities within overall strategy. These include:

- identifying, assessing and mitigating sustainability risks to enable business resilience over the long term, including reducing costs through, for example, timely energy or resource-use transition
- innovating new products and processes which respond to current and future trends in customer, societal and employee sentiments, hence increasing and/or securing future sales, as well as creating products and services that meet unmet needs
- increasing overall and specific brand reputation – which translates into economic value creation, as well as, for example, enabling employee recruitment and retention
- ensuring ability to access financial resources – finance providers are increasingly requiring evidence of positive sustainability impacts, and evidence that such factors are incorporated into strategic decision-making.[54]

Another way to look at the importance of integrating sustainability factors into decision-making also relates to the implications of not doing so, and what that could mean for long-term business success or even survival.

While there has been a great deal of emphasis on the benefits of incorporating climate change impacts, risks and opportunities, as well as certain social aspects, such as employee diversity, into overall strategic decision-making, there has been far less attention paid to nature-related risks or opportunities, or to the effects of wider social issues and impacts, such as business' impacts on inequality and poverty.

The business case for engaging with nature-related factors, particularly to avoid risks for businesses that are heavily dependent on natural resources, are set out, for example, in the Taskforce on Nature-related Financial Disclosures (TNFD) publication, *TNFD in a Box: Board-Level Overview*.[55] Drawing on work by the Stockholm Resilience Centre, they cite the highest ten priority risks facing the global economy over the next ten years, including three that are nature related: biodiversity loss and ecosystem collapse; natural resources crises; and large-scale environmental damage incidents. At the same time they believe that businesses are currently unable to effectively address these.

Threats to social stability, as well as reduced market opportunities which arise from high levels of inequality and poverty within and between countries, have risen up the agenda as significant factors affecting business risks, as well as opportunities. For example, a report from The Business Commission to Tackle Inequality, *Tackling Inequality: An Agenda for Business Action* addresses business threats from inequality, and the benefits from acting individually and collectively to mitigate harms and realise effective solutions.[56]

As a result of these kinds of arguments, international consultancies are exhorting companies and boards to include sustainability impacts, risks and opportunities into their strategic decision-making. Examples below come from EY, PwC and Deloitte.

EY, in its 2020 *Five ways boards can unlock ESG's strategic value,*[57] identifies how the board can help shift away from an ESG compliance approach by the "integration of ESG into a purpose-driven strategy" to improve their competitiveness through:

- showing the long-term sustainability of the company's business model including sustainability opportunities and risk
- demonstrating market differentiation through "strategic positioning in terms of sustainability"
- innovating products, services and processes "with sustainability attributes to capture larger market share and address unmet stakeholder needs"
- enhancing brand and reputation, and improving stakeholder relationships among, for example, consumers, employees and investors.

Other aspects of strategy include incorporating sustainability factors into capital allocation, supply chain management, marketing, partner choice and investments.

PwC argued in 2022 that 'ESG' issues should be included in any strategic plan, since climate risks, for example, could be crucial to stakeholders, and should be part of long-term value creation.[58] They also suggest that sustainability controls and practices should be integrated into core management functions – such as accounting, target setting, compensation, risk management and capital allocation.

With regard to strategic reflection and implications, they believe that the societal and business context should be part of board discussions, including how to use sustainability concerns as a source of competitive advantage and value creation. Their argument is that boards should spend most of their time here, not on governance hygiene factors, which they feel could be best dealt with in board committees.

Cleveland et al, writing in Deloitte Insights in 2023, believe that "leading companies have already integrated sustainability into standard operations and decision-making processes". They suggested that one practical way to encourage this integration would be to link CEO compensation with environmental goals, but found that only 3 per cent of the companies they surveyed had done so.[59]

There is some concern, however, that, where there is a focus on sustainability-related factors, it is primarily on risk, not on creating opportunities for new products and services. For example, Natalia Olynec and Julia Binder from IMD (International Institute for Management Development) argue in a 2023 article *Reframing sustainability: from risk to opportunity*[60] that this emphasis on sustainability risks arises from adopting an 'ESG' lens, with its primary focus on financial risk management, which supports and reinforces an excessive focus on compliance and efficiency.

In *Reframing sustainability: from risk to opportunity*[61] by IMD, the authors suggest how to shift from a focus primarily on risk, to one integrating opportunity:

1. Make sustainability a core part of strategy and culture – and reassess what value creation means.
2. Define opportunities via a materiality framework.
3. Inspire creativity through a positive vision – rather than just focusing on ameliorating negative impacts.
4. Identify opportunities and embed sustainability across the organisation.

Integration of sustainability factors into strategy

It appears, however, that, despite these drivers, business boards are not adopting a sustainable business strategy and/or model to any great extent. For example, Deloitte found in 2023 that while 59 per cent of companies surveyed had increased energy use efficiency or use of sustainable materials, far fewer had incorporated such factors into their "strategy, operation and culture".[62]

Looking specifically at the board, a survey by BCG and the INSEAD Corporate Governance Centre in 2022 found that 91 per cent of directors surveyed think that their boards need to spend more time considering the strategic aspects of 'ESG', believing that they can better add value by "stewarding the company over the long term by ensuring that sustainability is integrated into the corporate strategy." However, more than half (53 per cent) of directors think that their boards are not doing this effectively.[63]

A 2023 survey by these two organisations, along with Heidrick & Struggles, of 879 board directors from 45 countries and 19 sectors, was even more pessimistic. It found that 68 per cent of respondents thought that sustainability considerations had no, or only a slight effect, on their financial performance, and only 19 per cent were acting because they thought "sustainability will severely impact the way we do business today".[64]

EY UK surveyed 200 corporate directors and senior managers across 15 European countries in late 2023. Twenty per cent were board chairs or NEDs, 20 per cent CEOs and the rest C-Suite. Half had more than €1 billion a year turnover, with the rest between €100 million and €999 million. They felt that part of the reason for this relative lack of integration was to do with too much focus on what they term sustainability 'hygiene' factors, including ESG reporting, by board members, and not enough on "strategic reflection and implications". In their March 2024 report *How can boards convert sustainability from a wish to a winning reality?* the authors argue that, rather than seeing businesses grasping sustainability opportunities, they see "worrying indications" that many companies are "rowing back rather than racing forward", part of which they argue is because of not understanding or addressing the need for "difficult strategic choices".[65]

As a result of this background information, we decided to also ask interviewees:

Q2: Do you, and how do you, incorporate sustainability impacts, risks and opportunities into board-level strategic decision-making or oversight?

How data and wider decision-making is accessed and synthesised within decision-making

Sustainability-related impact data and wider information and data of many kinds feeds into board-level strategic decision-making – whether that knowledge relates to impact data about the company's internal and external operations such as on carbon footprint, water use, or relative pay levels – or wider information such as customer sentiment which might affect how a product or service is designed and delivered; trends in water availability over time; or the impacts of climate change on employee working conditions; production processes or product quality. Overall, sustainability-related impact data and wider information is a crucial part of addressing potential risks, opportunities and inefficiencies.

Data may be quantitative or qualitative. It may be a precise metric such as energy use over a period of time, or more uncertain and probabilistic, indicating a likely future state, and based on estimates. Data used for short-term decision-making will likely be different (more certain) than that used for long-term decision-making which, by its nature, is likely to be more speculative. Uncertain data may be best presented as ranges, with acknowledgement of a lack of certainty, and through setting out scenarios or changes in the pace of trends.

Some data or wider information is internally generated, in the process of business activity, or comes from external sources (whether that is comparable business data, or outlining wider societal or environmental trends).

> EY, in 2024, explored *How can boards convert sustainability from a wish to a winning reality?* Firstly they found that non-executive directors and chairs are particularly sceptical about the business rationale for incorporating sustainability impacts, risks and opportunities, with only 8 per cent "completely satisfied". The authors believed that part of this reluctance relates to a "significant strategic data and information gap at the board level", one which is, however, being addressed by the 'leaders' in their survey. EY argues that vanguard businesses: "prioritize robust sustainability metrics that show financial impact and are much more likely to have complete confidence in the metrics that support decision-making by the board".[66]

Using sustainability data for decision-making

While there is a move towards integrated reporting and accounting which brings together financial and non-financial metrics, there also still seems to be a general difficulty for businesses in linking this data together for use in decision-making. Although regulation has created more focused attention on sustainability-related challenges, the Value Balancing Alliance (VBA), for example, believes this awareness is not translating into business transformation at the rate necessary.

> The Value Balancing Alliance (VBA) was set up in order to: "create a global impact measurement and valuation (IMV) standard for monetizing and disclosing positive and negative impacts of corporate activity and to provide guidance on how these impacts can be integrated into business steering."[67]

The VBA argues that part of the reason for this difficulty is that, since most data has been designed and collected for external reporting and assessment purposes, it is not necessarily 'decision useful': "corporate reporting and disclosures are only at the surface – the underlying challenge is to generate reliable information to better manage environmental and also social impacts."

They argue that disclosure and decision-useful information are fundamentally different: "Disclosure has an external focus and must fulfil the requirement of comparability. Management accounting serves an internal function and information used for this purpose must fulfil the requirement of decision usefulness."

Looking specifically at climate-related disclosure, for example, the VBA believes that this inability to effectively bring financial and non-financial information together makes it difficult, for example, to apply the principle of 'double materiality', citing evidence from the Climate Disclosure Standards Board (CDSB) that: "only 8% out of 50 listed European companies applied double materiality in climate-related disclosure due to the absence of indicators linking financial and non-financial information amongst others."

One method used to align data is to use monetary proxy data to "put this into a language that business understands".[68] This information can then be used to assess the value created beyond just the financial, as well as increase transparency over the range of impacts, with the additional benefit of helping identify, and quantify, trade-offs that might have been "previously ignored or difficult to assess".

However, strategic decisions are not purely made on the basis of monetary equivalence or direct financial valuation techniques. There are many criteria which determine if a strategic decision should go ahead: from impacts on reputation (although this can be priced to some extent); to non-negotiables such as not paying suppliers or employees below a certain amount; not working within certain jurisdictions on the basis of their human rights record; or adopting certain practices, such as in the examples from the food sector of organic or regenerative farming techniques.

Boards' information requirements

It is not clear that boards always get the information they need. PwC, in 2022, for example, noted that while their results do not relate specifically to sustainability-related data, boards feel they need better information from management on, for example: strategic options, emerging technology, customer and supplier feedback. They recommend that boards discuss with management what information they need, and at what level of detail. But they also believe that this is not enough and that boards" have to do their own homework".[69]

While most information is brought together by the executive, and presented to the board as board papers, or in other digital formats, other sources of information come directly to the board, or from board members themselves. For example, relevant information and insights can come from stakeholders such as investors, or through dialogue with customers, regulators, non-governmental organisations (NGOs), employees, or parts of the supply chain. Some companies have specific mechanisms to engage stakeholders, whether through advisory boards, panels, or taskforces on particular topics, shadow boards of young people, or formal and informal representation of stakeholders on boards, whether nominated by finance providers, or legally required, as in German corporate legislation.[70]

Use of AI and tech

There is also an increasing use of technology, including AI, aided by increased computing power, to present complex data to boards in simpler visual and condensed forms that are useful for board decision-making, including in supporting complex modelling. EY, for example, emphasises the enhanced use of technology as necessary for the 21st century board.

> EY's *Board of the Future summary report*[71] and *Global summary piece for the future of boards study*[72]
>
> One of the conclusions of this work is that future boards will be "constantly plugged into real-time performance dashboards and systems for early warning, assessment and control".
>
> The EY Center for Board Matters held interviews with executive and non-executive directors, as well as CEOs and CFOs, from 64 publicly listed and 29 private Australian companies. They supplemented this work using insights from relevant EY colleagues.
>
> Their overall conclusion is that the 20th century board is not fit for the 21st. The pressures and speed of change are putting the board's effectiveness under strain, with high-profile governance failures further reducing trust in their ability to operate well. In summary, they identified a lack of time, skills and appropriate supportive technology as being challenges to their overall effectiveness, as well as the need to substantially change their role and the way they work, to be 'future fit'.

Internally produced and externally relevant information is constantly changing. Reeves et al in 2018, writing for BCG, argue that not only do you need robust knowledge systems, but these also require keeping up to date in a fast-moving world with frequent updates on what is changing externally, as well as understanding what is going on in the company.[73] AI can also help sense-check complex data streams, or horizon scan for upcoming and changing issues.

The background information from this section led to the following question:

Q3: What kinds of sustainability metrics or information do you use to inform the board's strategic decision-making and oversight?

Regulation and standards which require disclosure of sustainability impacts

As we saw in Phase 1, changing regulation and standards are driving boards towards greater consideration of sustainability issues, most notably through the disclosure of various impacts and related metrics. These policy and practice initiatives are motivated primarily to ensure that stakeholders are able to assess how well businesses are addressing environmental and social sustainability risks and opportunities. In some cases such as the EU's Corporate Sustainability Reporting Directive (CSRD), this builds on the concept of 'double materiality', which means that businesses are not only required to consider how environmental and social factors impact them, but also how they impact these factors.

> The EU's Corporate Sustainability Reporting Directive (CSRD), which entered into force in January 2023, requires defined companies to describe their business model and strategy, including their sustainability impacts, risks and opportunities, and to use a 'double materiality' approach to consider how environmental and social factors impact them, but also how they impact these factors.[74] The Directive harmonises the regime previously in place for non-financial reporting and introduces a new EU-wide set of sustainability reporting metrics which include requirements to report on how various sustainability issues are being addressed by reporting on businesses' strategies.

Emerging reporting guidelines already focus on the incorporation of strategic risk and opportunity. They are now also beginning to expand away from an early focus primarily on carbon.

For example, the Taskforce on Nature-related Financial Disclosures (TNFD)[75] has widened the scope of what was until December 2023 the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations (now incorporated into the IFRS S2 Climate-related Disclosure standard) to include nature dependencies and impacts.[76] It argues that companies need to see nature as a strategic risk management issue, and consider they can "identify, assess, manage and disclose their nature-related dependencies, impacts, risks and opportunities by adopting TNFD recommendations".[77]

Following international concern that social issues are not being given the same weight or consideration as environmental, a comparable social taskforce is being set up.

> The Taskforce on Inequality and Social-related Financial Disclosures (TISFD), launched in September 2024, is "a global initiative to develop recommendations that enable businesses and investors to effectively identify, assess, and report on their inequality and social-related risks, opportunities, and impacts". The Working Group for the TISFD will aim to "reduce the systemic risks of inequality, strengthen the stability of financial systems, and improve outcomes for all people". The Working Group includes organisations such as the World Business Council for Sustainable Development (WBCSD), the Organisation for Economic Co-operation and Development (OECD) and Principles for Responsible Investment (PRI).[78]

Because one of the biggest drivers to increasing board awareness of sustainability-related factors has been evolving regulation and standards, we therefore also decided to ask:

Q4: To what extent does the data and information you use depend on existing or upcoming disclosure regulation, voluntary standards or frameworks (including supply chains) – whether general or sector specific?

And finally, to provide some insights into how these boards manage potentially difficult decisions where aspects of sustainability and commercial considerations may come into conflict:

Q5: What kinds of methods, criteria, frameworks, or technology, do you use to process and integrate this information so that it is decision-useful for strategy? How do you determine the outcome of complex decision-making between tough options?

Appendix 2: Methodology

Within the available resources for this research, we decided to explore this complex topic using three reinforcing approaches:

- **Food sector board interviews.** Sixteen formal interviews with 12 companies of different sizes, stages of development, ownership structure and business models in the food sector, all of whom are publicly committed to recognising and incorporating sustainability factors into their overall corporate strategy. These interviews were designed to elicit insights into how these companies incorporate and use data and information in order to inform their overall corporate strategy and strategic decision-making, highlight any challenges, and suggest ways in which these might be overcome.
- **Wider interviews with board members and advisers.** Thirty-three interviews were held with people sitting on or advising boards around the world, who were already known to CISL and DLA Piper. This included a review of 17 interviews undertaken during Phase 1 which included comments relating to the topics under discussion, 12 exploratory interviews undertaken early in Phase 2 to address the broad landscape in relation to strategy and data use by the board, as well as four further interviews using the same interview schedule as for the food sector interviews. Additionally insights were drawn from a meeting of CISL's Board Advisory Group. These broader insights provide a way to check whether similar points are being made within different sectors, and across geographies, to extend the applicability of any findings, and surface any new insights or interesting practices.
- **Survey questions and a roundtable with the Institute of Directors.** Through a collaboration with the Institute of Directors (IoD) in the UK, we used survey questions answered by 486 members, and a roundtable discussion with 24 IoD participants. The survey questions were incorporated into the IoD's monthly survey to explore whether sustainability risks and/or opportunities were incorporated into board discussions; and the roundtable was designed to particularly explore how to overcome some of the challenges experienced by company boards in accessing and using data and wider information.

The results were analysed using thematic analysis.

Food sector board interviews

In order to investigate how boards are accessing and using sustainability-related data to inform and integrate sustainability impacts, risks and opportunities into overall corporate strategic decision-making, we decided to focus on board members from a sample of companies within the food sector who are publicly committed to adopting this integrated approach and creating positive sustainability outcomes.

The assumption behind making this choice was that it is possible that these 'vanguard' companies would be more likely to have useful insights into the benefits and challenges facing their boards as they grapple with the challenges and opportunities of an integrated corporate strategy. The second assumption is that these results will be useful to businesses in other sectors.

We chose 12 companies to work with. These were identified in several ways to create a purposive (chosen with specific criteria in mind) and convenience (ease of ability to access) sample. Firstly, we identified suitable candidates where we had strong personal and trust relationships through existing CISL relationships, or through personal connections of colleagues, students or alumni. Other interviewees were found by searching through high-scoring B Corp[79] companies in the food sector, as well as start-up companies directly pursuing a sustainability-related purpose within the food system, identified through an online search. Since this is a purposive and convenience sample, the findings from this interview approach can only be indicative.

This final group of companies was extremely diverse. They include different business, legal, ownership and governance models; come from different parts of the food sector; are headquartered in different countries, operate with single or two-tier boards, and are at different stages of development.

While this diversity would be problematic if we were looking to make definitive statements about a clearly defined sample of similar companies, in this exploratory study, the diversity in fact enabled us to identify indicative commonalities and differences arising from the different contextual variables, which could provide the basis for further work with larger sample sizes.

The diverse characteristics of the companies involved are summarised below.

The overall characteristics of board members and executives of the 12 businesses interviewed

The 12 businesses spanned all **parts of the food sector** from primary production, through farming, fishing and aquaculture; to food and ingredient processing; distribution and retail; as well as packaging solutions.

There is a mix of **both public and private** companies. Four are listed PLCs, with a mix of investors – institutional, retail, family/founder and in one case 11 per cent shareholding by an agricultural co-operative. Of these, one is predominantly owned by the original founder family, and the two largest are both groups.

Of the eight private companies, one is around 50 per cent ‘owned’ predominantly by a listed PLC. The shareholders and investors in the remaining seven companies are varied, from the two early-stage companies mixing founder and other early-stage investors; to mixes of private equity, employee, and family/founder ownership. One private company is an employee ownership trust.

In terms of **size**, as measured by the number of employees: three are SMEs (0–250 employees) including two with under 50 employees; three have between 250 and 1,000 employees; and six have over 1,000 employees, with the maximum number being 133,000. While three of the PLCs are the largest companies by employees, one PLC at 634 employees is smaller than four of the private companies.

Seven are **headquartered** in the UK, four in the rest of Europe, and one in South East Asia.

In terms of company **life stage**, ten of the companies are mature/growth, and two are emerging companies.

In terms of **legal form**, all are standard businesses limited by shares, with one except one, additionally having the French legal status 'entreprise à mission'.

Ten have single boards and two, both of which are private, operate with a dual board.

Most of the companies source and/or sell internationally, with only two operating within national boundaries, both of which are based in the UK.

The 16 people interviewed are spread across the 12 companies. Overall, we spoke to 11 NEDs, of whom nine are independent (including four independent chairs) and two are not independent. The remaining five are executives, including a joint Chair and CEO of the board; and four non-board members, a Head of Sustainability; a Chief Finance Officer, a Chief Operations Officer and a Chief People's Officer/Chief Sustainability Officer.

Further details of the interviewees and companies can be found below:

Role	Subsector	Public/private	Size/employees	Headquartered	Stage
CSO – not on board	Regenerative Farming	Private	10-50	UK	Early stage
Chair	Processing	Group PLC	Over 100,000	UK	Mature
Head sustainability – not on board	Processing/ Farming	Group PLC	Over 10,000	Europe	Mature
NED	Farming Processing	PLC	250-1,000	South East Asia	Mature
Chair	Packaging	PLC	Over 10,000	Europe	Mature
NED	Packaging	PLC	Over 10,000	Europe	Mature
CEO	Farming – fish Processing Retail	Private	Over 1,000	UK	Mature
NED	Processing Distribution	Private	Over 1,000	UK	Mature
Chair	Farming Retail	Private	10-50	UK	Mature
Chair	Organic farming	Private	50-250	UK	Mature
NED	Organic farming	Private	50-250	UK	Mature
NED	Organic food processing	Private	Over 1,000	Europe	Mature
NED	Processing/ chocolate	Private	250-1,000	Netherlands	Mature
NED	Processing/ chocolate	Private	250-1,000	Netherlands	Mature
CFO – not on supervisory board	Processing/ chocolate	Private	250-1,000	Netherlands	Mature

COO – not on board	Farming – agritech	Private	50-100	UK	Early stage

To respect board members' limited availability we created an open-ended interview schedule which could be completed within one hour. We interviewed between one and three board members and/or senior executives from each company. The questions were devised as a result of the background review as shown in Appendix 1. It was also further tested with CISL colleagues and members of CISL's Board Advisory Group.

All participants signed ethics and consent forms where they could indicate if they or their company would be happy to be named in the report. Three companies – Jones Food Company, Tony's Chocolonely, and Seafresh – were happy to be named to provide some practical examples and nine chose to remain anonymous. All individual interview contributions on board practice were synthesised and not attributed to individuals.

The results were analysed using high-level thematic analysis, as well as identifying interesting examples of good practice, and areas which warrant further investigation.

The sampling approach and its limitations

The 12 companies were chosen because they are publicly committed to integrating sustainability factors within their overall strategy. Our approach for determining their commitment drew on a key framework introduced in Phase 1, that of **three business logics** which categorise the different ways in which a business might approach the integration of sustainability-related factors in their company strategy and strategic decision-making.

BAU CSR

Business-as-Usual Corporate Social Responsibility (BAU) – focus on short-term shareholder financial value maximisation; primarily self-interested motivation.

ESV

Enlightened Shareholder Value (ESV) – focus on creation of long-term shareholder financial value, recognises the importance of operating within accepted environmental and social limits.

PDO

Purpose-driven Organisation (PDO) – has a clear purpose which defines the company's reason to exist as an optimal strategic contribution to the long-term wellbeing of all people and planet – achieved in a way that assures the health of social, environmental and economic systems, stakeholders and capitals – and with profitability being a vital means to achieve the purpose.

These logics suggest that those boards that adopt a Business As Usual (BAU) orientation will not integrate sustainability-related factors into their board strategic decision-making to any great extent; Enlightened Shareholder Value (ESV) companies will do so in recognition of the need for long-term shareholder viability and success; and the more purpose-driven businesses (PDOs) may operate with a wider sense of overall stakeholder value creation (including shareholders where appropriate, and the environment).

Information on a range of companies, many of which were suggested by CISL colleagues and/or were part of the B Corps Directory,[80] was gathered from publicly available sources such as company websites, annual reports, and media or company analytics commentary and rankings. They were roughly categorised according to these logics on the basis of what could be ascertained from these sources. Those that seemed the most promising were approached, and there was a long process of identifying 12 companies that were both willing to participate and represented more pioneering practices on the spectrum from ESV to PDO.

We found that it was extremely difficult to gain access to and interview food sector boards, particularly those of the largest multinationals. This is likely because board members are extremely busy, and also because we are addressing sensitive strategic issues that boards do not always feel able to discuss openly. For this reason we had to combine our purposive approach with a convenience approach to sampling, as outlined above.

The rough orientations of the final group of 12 food companies ranged between ESV and PDO. Where possible we interviewed more than one person per board: in most cases two, and in one case three.

Four businesses were set up primarily to achieve a sustainability-related purpose, and the creation of related impact, as the defining aspect of their business model (PDO). The rest operated on a spectrum from ESV to PDO, with sustainability factors incorporated within their business model as part of their operations, purpose and brand (including two larger companies that had gone on a journey to fully integrate sustainability alongside securing shareholder returns, spanning ESV and PDO).

A limitation of the sample in this study, as a result of the approach adopted to securing interviews, is a predominant bias towards companies that are headquartered in the UK and Europe. Moreover, the approach provides a snapshot of individual perspectives which necessarily can limit the objectivity of the research, and could be remedied in future by in-depth case studies involving multiple board members, and other stakeholders. Nonetheless, the perspectives shared still provide important qualitative insights into the dynamics of board practices.

The interview schedule

As a result of the background review in Appendix 1, we designed an interview schedule.

The interview schedule

Q1 The role of the board in strategy development and oversight

- How, and to what extent, is your board involved in strategy development and/or oversight?

Q2 Inclusion of sustainability impacts, risks and opportunities in strategy discussions

- Do you, and how do you, incorporate sustainability impacts, risks and opportunities into board-level strategic decision-making or oversight?

Q3 Board use of, and access to, relevant sustainability metrics and information

- What kinds of sustainability metrics or information do you use to inform the board's strategic decision-making and oversight?
- How does your board ensure the veracity/robustness of the different kinds of sustainability information you use for internal use, or external disclosure?

Q4 Impact of sustainability-related regulation, standards and frameworks

- To what extent does the data and information you use depend on existing or upcoming disclosure regulation, voluntary standards or frameworks (including supply chains) – whether general or sector specific?
- What opportunities do legislation and sustainability frameworks create for the board's strategic decision-making and oversight? Do they create any problems or barriers?

Q5 Decision-making criteria, tools and frameworks

- What kinds of methods, criteria, frameworks, or technology, do you use to process and integrate this information so that it is decision-useful for strategy?
- How do you determine the outcome of complex decision-making between tough options – in other words, if you are having to trade off investment in tackling sustainability issues with, say, maintaining dividend payments to shareholders? Or affordability of products in the short term versus longer-term security of supply?

Q6 Anything else?

- Any other barriers for you as a board in integrating or embedding sustainability impacts, risks and opportunities into your strategic decision-making and oversight? How could these be overcome?

Wider interviews with board members and advisers

In order to check whether similar points are being made within different sectors, and across geographies, as well as to extend the applicability of any findings, and surface any new insights or interesting practices, particularly among companies that are not 'vanguard', we gathered and re-analysed a range of further perspectives.

Overall 34 interviews were analysed for this part of the research. This number was made up from the following sources:

- 17 interviews undertaken during Phase 1, that were reanalysed for Phase 2 since they included comments relating to the topics under discussion.

Interviewee	Sector	Country
Governance expert	Multiple	Argentina/Global
Management consultant	Multiple	UK
Sustainability consultant	Multiple	Netherlands
Lawyer	Multiple	UK
ESG consultant	Multiple	Trinidad/Global
Board advisory board member	Multiple	SE Asia
Governance expert	Multiple	UK/Global
Governance expert	Multiple	UK/Global
Management consultant	Multiple	UK/Global
Academic	Multiple	Europe/Global
Board adviser	Multiple	Africa/Global
Board adviser	Multiple	Global

Impact expert	Multiple	UK/Global
Leadership consultant	Multiple	Americas/Global
Governance expert	Multiple	Caribbean
Governance expert	Multiple	Brazil/Latin America
Sustainability expert	Multiple	UK/Global

- 12 exploratory interviews were undertaken early in Phase 2 to address the broad landscape in relation to strategy and data use by the board. These interviews were less formal and more exploratory but largely aligned with the interview schedule themes and analysed with this schedule in mind.

Interviewee	Sector	Country
CEO	Trading/real estate	Nigeria
Board adviser	Multiple	Europe/Middle East/Africa
Board member	Unknown	Japan
NED	Unknown	Nigeria
Co-opted board member	Corporate governance research	UK
NED	Finance	UK
Director and company secretary	Infrastructure/ telecommunications	Hong Kong
Adviser to chair	Unknown	UK
Board Adviser	Multiple	UK
NED	Utility	UK
Board adviser	Energy/multiple	UK
Ex-chair	Extractive	Africa

- A further five detailed interviews using the same interview schedule as for the food sector interviews.

Interviewee	Sector	Country
Multiple board director and investor	Finance	North-East Europe
Chair group subsidiary	Food processing and retail	Europe
Company secretary	Mining	South America
NED	Finance	South East Asia
CEO	Food	UK

Additional insights were drawn from a meeting of CISL's Board Advisory Group.

Survey questions and a roundtable with the UK's Institute of Directors

The questionnaire was designed with similar questions to those that are generally used in an online survey that goes out to IoD members every month, the *IoD Policy Voice*.[81] It was sent out between 14 and 27 June 2024 to roughly 14,000 IoD members.

The questions were designed to focus primarily on people who sat on the boards of businesses, rather than including non-profits or government boards. This was not because of a lack of interest in the latter, but in order to focus the results on a clear population.

The first question therefore filtered out non-profits and government board members from subsequent questions and analysis.

Questions to IoD members

Q1 Are you:

- An executive board member □
- An independent non-executive board member (NED) □
- Trustee, or other not-for-profit board member (including government boards) □
- Member/employee (or other stakeholder) nominated board member □
- I currently do not sit on a board □

[IF ANSWERS d OR e THEN END QUESTIONS]

Q2 When developing your overall business strategy, is the integration of sustainability risks and opportunities considered essential to the delivery of your company's profitability? (By sustainability risks and opportunities, we mean social factors that relate to the wellbeing of your non-financial stakeholders and wider society, as well as environmental factors such as nature, use of resources and climate.)

Yes □ No □ Don't know □

Q3 Do you incorporate sustainability/ESG risks into your overall corporate board strategic decision-making?

- Yes □
- No, but are considering doing so in future □
- No, and are not considering doing so in future □
- Don't know □

Q4 Do you incorporate sustainability/ESG opportunities into your overall corporate board strategic decision-making?

- Yes □
- No, but are considering doing so in future □
- No, and are not considering doing so in future □
- Don't know □

Q5 Responding to and reporting on business impacts on nature (such as water use or biodiversity loss) are increasingly seen as part of being a sustainable business, and nature-related factors can provide both business risks and opportunities. For example, **the Taskforce on Nature-Related Financial Disclosures (TNFD) sets out a voluntary framework**

for business which may also inform future regulatory change. Which of the following statements best applies to your organisation?

- I have not heard of the TNFD □
- I have heard of the TNFD but believe it is irrelevant to our business □
- My board is aware of, and considering, the implications of the TNFD □
- My board is already incorporating all or some aspects of the TNFD into decision-making □

Q6 Do you have any other comments on incorporating sustainability considerations into corporate strategic decision-making? For example, are you missing any useful data or information that you need, or are there any challenges or barriers (legislative or otherwise)? How do you think these problems could be overcome?

Who responded? – Demographic analysis

In terms of demographics, the people who initially replied to the questionnaire were:

Question 1	No. responses	Percentage
An executive board member	386	65.3%
An independent non-executive board member (NED)	74	12.5%
Member/employee (or other stakeholder) nominated board member	26	4.4%
Trustee, or other not-for-profit board member (including government boards)	26	4.4%
I currently do not sit on a board	79	13.4%
Total	591	100.0%

591 people responded. Those that did not sit on a board, or who were trustees, were excluded from answering the subsequent questions. A total of 486 people therefore went on to answer the main questions. Of these 486, 79.4 per cent are executive board members; 15.2 per cent are NEDs, and the remaining 5.3 per cent are stakeholder-nominated board members.

The characteristics of the 486 respondents could be further analysed according to their answers to standard demographic questions asked by the IoD on which part of the country their self-defined 'primary organisation' is headquartered; their sector; turnover; and number of employees. The identified sector corresponds to Standard Industrial Classification (SIC) categories.

Respondents are spread mostly across the UK with a strong bias towards London and the South East of the UK, with five operating entirely outside the UK.

Headquarter region	Number
London	119
South East England	112
South West England	51
East of England	39
West Midlands	28

Scotland	28
North West England	27
East Midlands	20
North East England	15
Yorkshire and the Humber	15
Northern Ireland	13
Wales	12
We operate entirely outside the UK	5
Total	484

The respondents cover the full range of sectors, with the top five categories accounting for 61.9 per cent of respondents: professional, scientific and technical activities (19.2 per cent); manufacturing (12.2 per cent); information and communication (11.5 per cent); other services (9.7 per cent); and financial services (9.3 per cent).

Sector	Number	Top 5 percentages
Professional, scientific and technical activities	93	19.2
Manufacturing	59	12.2
Information and communication	56	11.5
Other services	47	9.7
Financial services	45	9.3
Construction	34	
Education	23	
Administrative and support services	21	
Health and social work	19	
Real estate	17	
Accommodation and food services	14	
Wholesale and retail trade (including motor repair)	13	
Transportation and storage	9	
Arts, entertainment and recreation	9	
Electricity and/or gas supply	9	
Agriculture, Forestry and Fishing	8	
Civil service/public administration	4	
Water supply, sewerage and waste management	3	
Mining and quarrying	2	
Total	485	61.9%

There is a wide spread of turnover, with 24.6 per cent under £250,000 and 14.4 per cent over £50 million.

Annual turnover	Number	Percentage
Under £250,000	116	24.6
£250,000 – up to £2 million	114	24.2
£2 million – up to £10 million	97	20.6
£10 million – up to £50 million	76	16.1
Over £50 million	68	14.4
Total	471	99.9

There is also a broad spread of businesses represented with different numbers of employees. The majority have under 50 employees, in other words they are small businesses, at 65.3 per cent. Medium-sized businesses (50–249 employees) account for 21.4 per cent and large (over 250 employees) 13.4 per cent.

Number of employees	Number	Percentage
0–1 employees/sole trader	46	9.5
2–9 employees	155	31.9
10–49 employees	116	23.9
50–99 employees	53	10.9
100–249 employees	51	10.5
250+ employees	65	13.4
Total	486	100.1

IoD Roundtable – The Future of Boards: Effectively incorporating sustainability risks and opportunities into the board's strategy discussions

This workshop roundtable, with members of the IoD, was held online on 2 July 2024 as a breakfast meeting from 08:30 to 10:00 with 24 people. Looking at the distribution of their main identified organisation, six were large (over 250 employees); eight were medium-sized (50–249); and nine were small (under 50 employees) and with one academic. They covered a wide range of sectors. This group included businesses, with some people being members of government bodies and non-profits.

The participants were identified by the IoD using a multi-stage approach. Firstly the IoD identified board members who were believed to be engaged in sustainability activities from their responses to previous IoD surveys. They then randomised this group and sent invitations in batches of 50 in order to manage the number of invitees to around 28. Of the 321 eligible members identified, 250 received invitations before the desired number of attendees was obtained.

The agenda included introductions, and brief presentations on the Future of Boards work. It also included two sessions.

The group was split into breakout rooms of three to five people in a structured way that maximised diversity of sector and size of business. The facilitators came from CISL, DLA Piper and the IoD.

The results were transcribed and analysed using qualitative thematic analysis, as well as identifying individual insights and interesting examples.

Outline of the event

08:30–08:45	Introductions and overview of the Future of Boards research
08:45–09:10	Breakout Session 1

How does information about your sustainability impacts, risks and opportunities inform your overall corporate strategic decision-making and oversight?

What information is missing? Are there any barriers or challenges?

How could those challenges be overcome?

09:10–09:25 Report back in plenary from the breakout groups

09:25–09:45 Breakout Session 2

How do you decide between different strategic options, or significant investments, that incorporate sustainability factors?

What practical changes might improve how you make these complex decisions?

09:45–09:55 Report back in plenary from the breakout groups

09:55–10:00 Next steps

Sector in which participants worked

Sector*	Number
Financial services	4
Professional, scientific and technical activities	3
Health and social work	4
Education	3
Information and communication	2
Real estate	2
Manufacturing	1
Membership body	1
Construction	1
Water supply, sewerage and waste management	2
Individual	1
Total	24

*Determined using the main organisation identified for IoD membership and based on SIC (Standard Industrial Classification) codes

Number of employees

No. of employees*	Number
0 to 1	3
2 to 9	3
10 to 49	4
50 to 99	3
100 to 249	5
250+	6
Total	24

* In the main organisation identified for IoD membership

Specific business activities included: insurance, a social impact fund, health delivery, manufacturing, waste management, renewables, and economic research.

Appendix 3: A brief background to food sector sustainability challenges

In order to provide some context for conducting the interviews with the 12 food sector companies, and to enable further probing of questions, we undertook a brief analysis of the sustainability challenges facing the food sector. This background summary includes: some of the risks and opportunities for businesses that this situation creates, and some of the responses that have already been made, whether through legislation, voluntary frameworks, or individual or collaborative responses by businesses themselves.

Overview of the food sector and sustainability challenges

The food sector is a complex system of primary producers, processing, distribution and retail[82] which is also at the heart of multiple sustainability challenges facing people and planet. It accounts for about one-third of global greenhouse gas emissions, and fundamentally depends on, and impacts on, the health of ecological systems – from water quality and availability, to productive land availability, as well as biodiversity on land, in freshwater and at sea – all of which are under threat.[83]

Food is obviously crucial to human existence, affecting health both positively and negatively. Lack of appropriate nutrition underpins some of the major diseases and health problems of our time, from severe malnutrition, to cardiac disease and diabetes.[84] It is also increasingly being implicated in ensuring good mental health.

At the same time as people are suffering food shortages, famines, or food poverty, food is also wasted along the supply chain. It has been estimated that food that is not eaten contributes to 8–10 per cent of global greenhouse gas emissions.[85]

This sector is also one in which viable livelihoods, as well as poverty, are of great concern. It is a major employer, accounting for a quarter of the world's workforce, particularly in lower-income countries.[86] It is also one of the lowest paying sectors. The Food and Agriculture Organization (FAO) has estimated that even if the incomes of the 'moderately poor' working in agrifood systems increased by, on average, 57 per cent for low-income countries, and 27 per cent for lower-middle-income countries, this would only just raise them above the poverty line, although significantly reducing food insecurity and undernourishment.[87] In richer countries, widespread protests by farmers are happening in response to what they see as changing agricultural policies (which include increased sustainability criteria), as well as cheap imports, affecting their viability.[88]

Risks and opportunities

As a result of these challenges, there are profound risks for businesses of all kinds arising from issues such as changing climate, water and land availability; geopolitical risks affecting supply chains; as well as reputational risks from including companies in supply chains with poor employment and/or modern slavery practices, or human rights abuses.

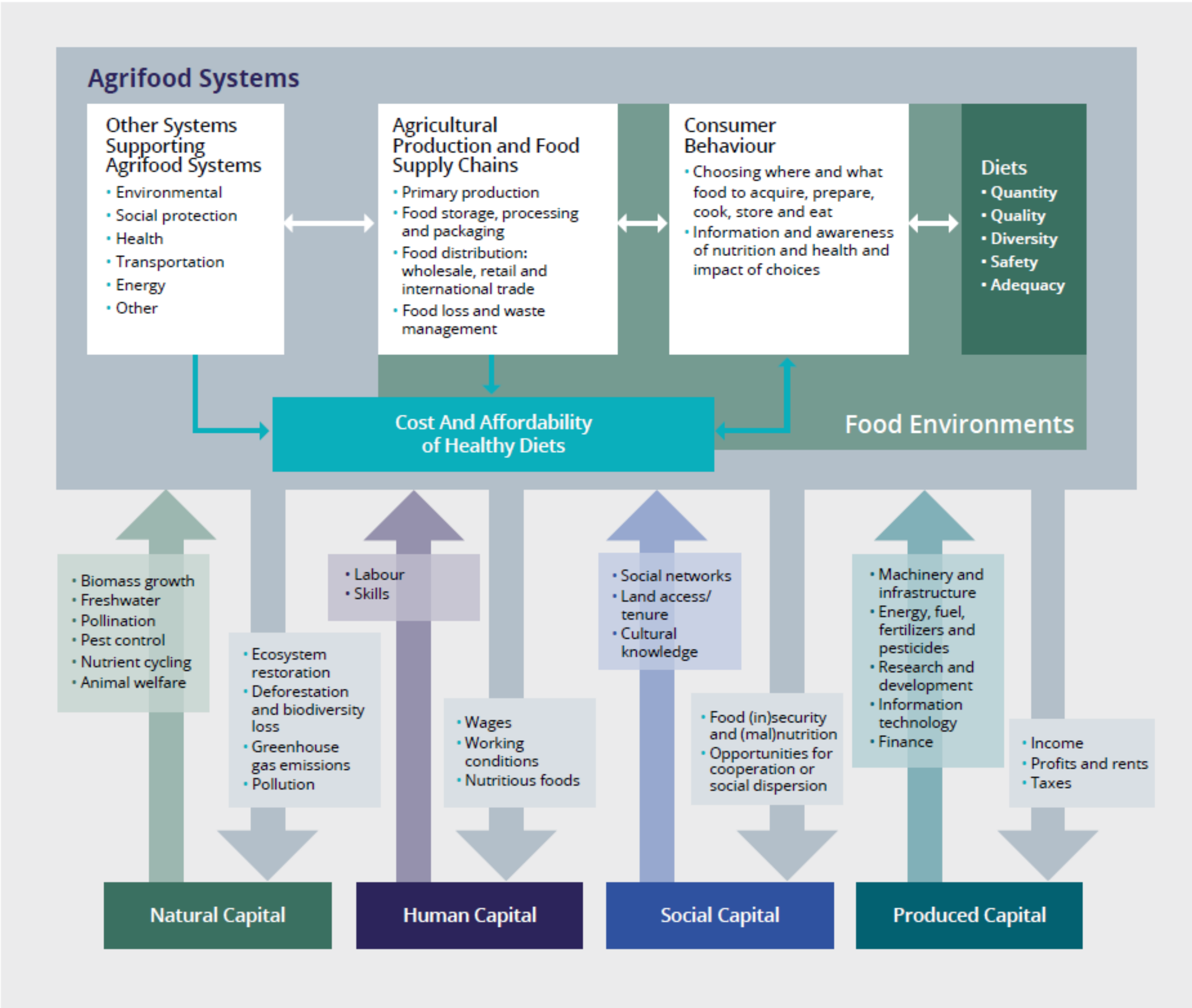
On the other hand, opportunities are also arising from changes in how and where food is produced, distributed and eaten. Technology is supporting new ways of producing and distributing food, through precision farming techniques, hydroponics, vertical farming, or the creation of meat and fish substitutes. There is also now greater scientific understanding of how to produce food in a more sustainable way, such as through organic and regenerative farming techniques.

Challenges to business and economics as usual

These environmental and social challenges can create negative impacts (or externalities) that are not always accounted for, or addressed within, business models. For example, a report by the FAO in 2023 found that the hidden costs, or externalities, of the agrifood system, arising from poor health or environmental degradation, is $10 trillion. This amount is 10 per cent of the world's gross domestic product (GDP), with low-income countries bearing the highest burden.[89]

The implications of these costs not only challenge 'business as usual', but also 'economics as usual'. The FAO, for example, argued, as a result of this negative value created, that governments and businesses should adopt forms of True Cost Accounting (TCA).

Figure 1: Diagram of the different factors and capitals affecting food systems



Source: FAO, *The State of Food and Agriculture 2023 – Revealing the true cost of food to transform agrifood systems* (Rome: FAO, 2023), https://doi.org/10.4060/cc7724en.

Despite these profound environmental and social impacts, the food sector was, however, only included in international climate change Conference of the Parties (COP) agreements in late 2023. The final declaration: *COP28 UAE Sustainable Agriculture, Resilient Food Systems and Climate Action*,[90] endorsed by 158 countries, signalled recognition of its importance, and the need for co-ordinated governmental action.

One response to significant societal and environmental externalities (or market failures) has been regulation. Food production is subject to many forms of government intervention, whether in relation to health and safety, environmental or social impacts, or to ensure viable food sector incomes. For example, the EU's Common Agricultural Policy[91] subsidises and incentivises certain kinds of food production, and increasingly incorporates environmental criteria.

However, regulation and government action can be relatively blunt instruments. As a result, there has also been a great deal of international effort to create food sector guidelines, benchmarks and voluntary commitments for companies operating in the sector, with the aim of encouraging and embedding more sustainable business models.

There have also been awareness-raising reports, specific frameworks and standards for businesses, as well as road maps and national plans, directly aimed at the food sector. These range from international to national, sectoral and local initiatives.

For example, the Taskforce on Nature-related Financial Disclosures in March 2024 produced *Additional Sector Guidance for Food and Agriculture*.[92]

The World Benchmarking Alliance assesses companies' performance against the UN's Sustainable Development Goals (SDGs).[93] It has a specific focus on the Food and Agriculture Sector.[94]

Business for Nature in collaboration with the World Economic Forum (WEF) and WBCSD have developed guidance for 12 sectors including food.[95]

The Sustainability Accounting Standards Board (SASB) Standards enable companies to "identify and disclose material information about sustainability-related risks and opportunities" if International Financial Reporting Standards (IFRS) do not exist.[96] These include food sector guidance:

- Agricultural Products[97]
- Alcoholic Beverages[98]
- Food Retailers and Distributors[99]
- Meat, Poultry and Dairy[100]
- Non-Alcoholic Beverages[101]
- Processed Foods.[102]

However, many sustainability challenges cannot be tackled by individual businesses alone, and require sectoral collaboration (including with government). Practical examples include pre-competitive collaboration between companies to manage scarce resources.

For example, in response to challenges over data collection and comparable sustainability-related metrics (which enable companies to know how they are performing relative to others) businesses and business support bodies have collaborated to create tools to enable companies to both prove and improve their performance. For example, in the UK food sector, retail companies have come together to create a carbon footprint tool.

> Companies such as Tesco, Asda, M&S and Ocado have come together as part of a pre-competitive collaboration, the British Retail Consortium (BRC) Mondra Coalition, to create a standard for product carbon footprints, and develop technology to enable it to be widely used. It is designed to help companies effectively measure and manage Scope 3 emissions, linked to the British Retail Consortium's ambition to achieve net zero by 2040. The technology uses AI to enable food producers to run life cycle assessments on their products, as well as model future trajectories to reduce emissions.[103]

Co-operation has long been part of addressing challenges in the food sector. For example, small producers often come together to create economies of scale, this time not because of limited resources but because of a relative lack of power vis-à-vis large companies, through for example, joint marketing or resource sharing. Indeed, the first co-operatives were set up to deliver safe and affordable food.[104]

Taking these challenges and societal responses into account, the food sector merits particular focus in any research on the future of boards. It is buffeted not only by economic and geopolitical pressures, but also by more existential challenges to the future of businesses, as well as having a high level of responsibility for their effects on human health, viable economies, future generations and the environment.

As one of our interviewees said, food "is a social good. You cannot live without food. People forget it's not a normal good".

Appendix 4: Insights from interviews with board members in the food sector

This section explores how a purposive and convenience sample of 12 business boards from vanguard companies in the food sector are accessing and using sustainability-related data and information to inform their strategic decision-making.

We interviewed 11 non-executive board members and five board or other executives across 12 diverse companies (see Appendix 2 for the full methodology and details of the sample) using a semi-structured questionnaire.

These companies are diverse, differing on the following characteristics: food sub-sector; whether they are public (4) or private (8); size (as measured by the number of employees); location of headquarters; company life stage; legal form (all companies limited by shares with the exception of one that also used the French legal status 'entreprise à mission'[105]).

Since seven of the businesses wished to remain anonymous and five were happy to be identified, the analysis that was undertaken has been reported below without named quotes from individuals. However, where companies were happy to be identified and have particular practices that may be useful to know for context, specific examples have been included with permission.

The findings below are organised according to the five overall questions that formed the basis of the interview schedule.

Boards and engagement with corporate strategy

Q1: How, and to what extent, is your board involved in strategy development and/or oversight?

In order to probe more deeply into how data and wider information is being used by vanguard boards in the food sector, as part of more integrated corporate strategy and decision-making, we first explored how board engagement with strategy is changing and why, and asked our food sector board members about their own involvement.

> **Summary of insights into the relationship of vanguard food sector boards with corporate strategy development**
>
> While all companies respect the fundamental (indeed legally required) division between the role of the board in defining and overseeing implementation of the strategy, with the strategy itself being primarily designed and delivered by the CEO and employees, that seemingly clean distinction was perceived to be in practice far more engaged and nuanced.
>
> The food sector boards we interviewed are generally engaged with strategy in both an iterative and ongoing way. Strategic discussions are incorporated into nearly all board meetings, as well as happening informally outside formal meetings.

This level of strategic engagement was perceived to have increased over time, and could be greater at times of significant change or external pressure, for example, an M&A, or period of growth and diversification.

While this increased engagement was the prevalent view, the board members of two companies (one large PLC and one medium-sized private company) operated with a more normative view that the board should not be engaged in strategy formation at all, and rather be 'hands-off'. This perspective did not seem to be a function of size per se, although the PLC was a group board, which may have affected their response, being further away from the individual company strategies.

An effect from having different board structures – which might be assumed to make a difference – was not reported. For example, two purpose-driven companies had dual boards. Rather than showing a clear distinction in role between the operational board and the supervisory board, they both seemed similar in the levels and scope of strategic engagement by the supervisory board to single boards. This may have been related to the complex and difficult nature of the economic environment, as well as the extensive range of impact goals they are pursuing.

The two emerging companies had an even less clear delineation of the board's role than mature companies vis-à-vis strategic design, agreement and oversight. They were reliant on a much wider and more fluid group of founders, investors and advisers for their strategic development.

The interviewees had several suggestions to increase the effectiveness of the board in relation to strategy, through the greater use, engagement and challenge of NEDs. These included:

- more independent NEDs are needed, for all kinds of companies, including start-ups and/or emerging companies, in order to provide diverse perspectives and experiences
- non-executive board members should be far more challenging than they currently are, a skill particularly appreciated by CEOs
- NEDs should be engaged early in the strategy-making process to make best use of their skills and diverse perspectives.

General insights

From the interviews with the board members and other executives of the vanguard food sector companies, we found that there was general agreement among the diverse businesses that the role of the executive is to prepare strategic plans and options which the board questions and probes, and over which they have final approval. They all expressed the following view in different ways: "the best decisions are made by those closest to the action". In contrast, the board's role was also understood to be that of setting the overall corporate direction (mission or purpose) which informs the strategy.

The comments from the interviews also aligned with the insights gathered from existing research (Appendix 1), which suggested that board engagement with strategy is iterative and ongoing, formally incorporated into nearly all meetings, and happening informally outside formal board meetings.

This level of strategic engagement was also perceived to have increased over time, and could be greater at times of particularly significant change or external pressure, for example, an M&A, or a period of growth and diversification. None of the board members seemed to think that they needed to spend more time on strategy and, in fact, one was concerned that perhaps they spent too much time, a result perhaps of the commitment and motivation of the system change desired by the purpose-driven company.

There were, however, several differences between the companies:

- firstly, a difference in perception between the majority of the sample of mature businesses, and two companies relating to how involved they should or should not be in strategy discussions
- secondly, a different kind of strategic engagement and board role in early-stage companies.

Opinions on the extent of strategic engagement by the board

The majority of the sample seemed to highlight strong engagement in strategy using away-days, and regular meeting times to review and probe strategy in an iterative way, from inception through to implementation. Two companies were, however, at least in how they articulated their position, far more 'hands off'. They believed that their role should just be to agree the framework of goals and ambitions and to sign off on implementation plans. One of these was the largest listed PLC which was a group board, and the other a medium-sized family-owned company.

The independent chair of the large group PLC said that they have a "devolved way of thinking about strategy" and that, other than broad statements of purpose, and high-level sign-off and discussion, the group board is not involved. They believe that in relation to the different business units: "their strategy is best formulated by those closest to the market and customers" and that "if you get good people and empower them to get on with the job, they will make the best decisions."

The independent NED of a family-owned small company argued similarly, adding that the board should not in fact know too much: "The board should not be too self-important, and allow those closest to the action to design and present strategies … the role of the board is to set up a purpose-driven process to deliver a clear strategy".

The other companies in the sample were, however, more nuanced in their views, stressing the various and subtle ways in which the board contributed to strategy, whether through "informal discussions about ideas outside board meetings", to issues raised either in specific strategy meetings, or at general board meetings that might inspire future investigation by the executive. Overall, however, the role was seen as not to initiate strategy, but rather to set direction, probe and test.

Two board members summarised the overall approach as one of ideally being "push me, pull me, tone up or tone down", in effect setting the tone of ambition, and encouraging more risk taking; and of guarding the purpose or mission, considering "the implications for different stakeholders and shareholders, and protecting impact".

The different strategic roles of the boards of early-stage companies

The strategic role of the board of the two early-stage companies is far less clear as a result of their stage of development, and the kind of inputs needed to develop, agree and execute strategy. For example, an executive of Jones Food Company, an emerging vertical farming company, noted that, at their stage of development, the board does not have a clearly demarcated role, since the design and agreement of strategy happens between finance providers, founders, executives and experienced external advisers, not all of whom sit on the board. At this stage, he noted, the founders and employees need a wide range of inputs to complement the executive's skills, particularly around commercialisation.

An emerging company in regenerative farming also pointed out that their board is more of a formality and that, similarly to Jones Food Company, they engage monthly with a large 'advisory' group of supporters, investors and founders, which behaves in many respects like a board, and are heavily involved in strategy. At their stage of development, they said that ideas for their future development come "both top down and bottom up".

The relationship of the dual board members to strategic engagement

In one area where a difference may have been presumed, that of having a single or dual board, the two companies with dual boards seemed to be little different in their orientation to strategic engagement than those with a single board.

It was noticeable that, despite the demarcation in responsibility with respect to strategic responsibility between the two boards (in other words, supervisory boards having a more hands-off monitoring role and not involved in co-creating strategy), NED board members of both supervisory boards spoke in many ways similarly about their roles as those sitting on single boards. One board member acknowledged this directly: "We behave more like a single board". Another noted that strategy development is iterative between the executive and supervisory board, built over time with the board's input, and not just presented at the end for agreement.

This similarity may relate to them both being purpose-driven companies, and having highly complex decisions to make involving impact and mission. In addition one of the companies, is also an 'entreprise à mission', a French legal status that supports mission or purpose-driven companies.

Insights to increase board effectiveness in strategy engagement

In response to a question about how to improve the board's role with respect to strategic engagement, several ideas were raised in relation to NEDs:

- **Greater numbers of independent NEDs.** This was mentioned by most of the interviewees, particularly those who were early stage, and who had a preponderance of founders and investors on the board; or those who were PLCs with particular shareholder dominance. The reason for considering more NEDs related to a desire for more independent challenge and probing on their strategic plans, drawing from a wider range of experiences and geographies.
- **More challenging non-executive board members.** There was a general feeling, particularly from the founders and executives interviewed, that having external challenge led to far more effective decision-making, but, that in some cases, it was not as strong as it could be.

- **Earlier engagement of NEDs in the strategic development process.** There was some concern expressed, particularly from one of the smaller companies, that sometimes the engagement of NEDs at an appropriate and early stage of strategic development did not happen as well as it could: "so often with decision-making, it's [about] transparency, and making sure you're talking about things at a time where input can still be welcome and it's not … so far down the process that actually nobody really wants any input."

The integration of sustainability risks and opportunities into board-level strategic decision-making

Q2: Do you, and how do you, incorporate sustainability impacts, risks and opportunities into board-level strategic decision-making or oversight?

Before focusing on how vanguard food sector companies use sustainability-related impact data and wider information, we asked the board representatives about the extent to which they are involved in strategy, and also if, and how, sustainability-related factors are integrated into their strategic considerations.

Summary of insights into how the boards of vanguard food sector companies incorporate sustainability factors into their strategic responsibilities

All the interviewees said that they incorporated sustainability impacts, risks and opportunities into their board-level strategic decision-making and oversight.

They also talked about how these sustainability factors are built into their overall purpose and direction, which both requires and informs how these issues fit within their board-level strategic decision-making.

Sustainability considerations are considered in most board-level decisions, including for large capital projects, such as M&A.

Some companies talked about investing 'ahead of the curve' in R&D, or in new production processes, in order to realise more sustainability outcomes, as well as creating economic value through, for example, reducing long-term costs, maintaining their sustainability-focused brand, or securing future market leadership.

All companies used clear measures of progress on sustainability outcomes, such as KPIs, and these were targeted on their most material impacts.

The majority feeling of the ten mature companies was that integration of sustainability aspects should be a full board discussion, and not just the responsibility of a separate sustainability committee. However, there was also a feeling that, because of the increasingly complex and technical nature of sustainability reporting, as well as adjudicating conflicting evidence about the right direction to go in certain areas where there are currently controversies (for example, with respect to packaging solutions), there could be additionality from having a specific committee. Indeed, one company was considering introducing a specific 'impact' committee for this reason.

All the people interviewed felt that their company incorporated sustainability impacts, risks and opportunities into their board-level strategic decision-making and oversight. Nearly all talked about how sustainability factors are built into their overall purpose and direction, which both requires and informs how these issues fit within their board-level strategic decision-making.

Looking at more specific ways in which sustainability factors are incorporated into major strategic decision-making, this happens through, for example:

- ensuring sustainability considerations and potential enhancements are considered in all decisions
- incorporating sustainability criteria into large capital projects such as M&A – assessing whether this fits with purpose, adds increased capabilities, or innovative solutions
- investing 'ahead of the curve' in R&D or in new production processes in order to realise more sustainability outcomes, reduce costs and/or secure future market leadership
- having clear measures of progress, such as KPIs.

Not all of the companies had specific impact or sustainability committees. This is not necessarily to do with size, although it is unlikely to be a credible option for the early-stage companies. The majority feeling of the ten mature companies was that integration of sustainability aspects should be a full board discussion. However, despite this general orientation, one board was considering introducing an 'impact' committee, not to water down the board's strategic discussions, but primarily because of the increased technicality of reporting and disclosure requirements, and a concern that, with the increasing size of the board, crucial impact discussions might not get adequate attention.

The use of sustainability metrics and information

Q3: What kinds of sustainability metrics or information do you use to inform the board's strategic decision-making and oversight?

The next interview question directly asked about the kinds of impact data and wider information that boards need in order to effectively consider sustainability-related factors alongside other commercial and market-related information.

Sustainability-related impact data and wider information of different kinds feeds into board-level strategic decision-making. Examples cited were impact data about a company's internal and external operations such as: carbon footprint; water use; or relative pay levels, or wider information such as customer sentiment that might affect how a product or service is designed and delivered; trends in water availability over time; or the impacts of climate change on employee working conditions, production processes or product quality. Overall, sustainability-related impact data and wider information is a crucial part of addressing potential risks, opportunities and inefficiencies (see Appendix 1).

> Summary of insights into how the boards of vanguard food sector companies access and use sustainability-related impact data and wider information

The interviews surface examples of a variety of sustainability-related information that informs strategic decision-making, from internally generated impact data, to wider external trends and insights, and information from different stakeholders.

However, by itself, board members stressed that this data is meaningless: it has to be decision-useful. Most received information in the form of KPIs and dashboards to assess and integrate sustainability-related data into their decision-making.

Additionally, many board members either currently, or intend to, make use of digitalised data to enable easier visualisation and the creation of appropriate dashboards. Some are also using, or considering, AI to better assess external information on trends.

The interviewees reported that some sustainability impact data collected, particularly if it relates to the core purpose, goes beyond what is required by current regulation, or even generic frameworks. This wider scope is used to inform strategy, as well as provide evidence of sustainability impact, which supports their brand and reputation. Some companies have even created new metrics to assess and manage their impact, for example on viable livelihoods in various countries. They might also work with universities to evidence 'new' sustainability impacts, or provide evidence to support how to move forward in a controversial area.

The boards also access wider information through their own expertise; by engaging with external experts; or listening to stakeholders such as customers. In this way they are contributing to horizon scanning, bringing in new and relevant issues and challenging management.

There was a spectrum of opinion, however, with two interviewees believing that the board should not get too involved in horizon scanning or the details of sustainability metrics, but rather just oversee the direction of the company and its strategy.

Several board members and company executives felt a more formal advisory board or panel may be a useful addition to provide further external perspective on particular sustainability-related issues. Allied to this idea, some board members believed that in a complex sector such as food, which requires high levels of scientific literacy to make sense of sometimes contradictory information, there is also a case for far more relevant board expertise and training.

Information that boards felt was missing included:

- external sustainability trends and markets
- customer and client insights
- scenario analysis of different future operating environments or specific options.

If relevant information is missing, board members suggested they would ask the executive to provide more. But there was also caution about the board wanting to know too much, which could jeopardise a more detached approach to strategic decision-making, particularly if it involved purpose-related activity to which they were personally committed.

There were also several mentions of the need for better and more standardised tools to track, say, carbon emissions; and more collaboration between companies to share good practice and experiment with new approaches.

With regard to assuring sustainability-related data, many board members said that they pride themselves on the veracity and internal assurance of their impact data. However, they also recognise that external assurance is important to counter accusations of greenwashing, but also expressed concerns about how robust and complete that assurance currently is.

Relevant sustainability information was reported as coming from throughout the company and its different departments. It is either brought together by a sustainability team, or in one case the Chief Operations Officer, and there is close engagement and integration with and between the CEO and/or CFO. A couple of board members mentioned that they were also considering having a Chief Value Officer rather than a Chief Finance Officer as an evolution of this trend towards integration.

As outlined above, a variety of sustainability-related information was reported to inform strategic decision-making from internally generated impact data, wider external trends and insights, and information from different stakeholders.

Turning data into decision-useful information and insights

The interviewees reiterated the point that sustainability-related impact data does not automatically provide useful insights for current and future strategy. As one board member said, you need to: "spend time, not on the data but the insights and the implications".

The board members across our sample, of whatever size, or ownership structure, generally and regularly (often once a month) received information on progress against KPIs and/or dashboards that were the most relevant to their core mission and purpose. They also had discussions on particular topics of emerging importance, which may involve external experts, and assessed information, discussed and analysed often through a 'double materiality' lens.

The smaller and early-stage companies adopt proportionate approaches.

However, it was reported that some of the data collected, and its analysis, particularly when relating to core mission, goes far beyond what would be expected in terms of current regulation, or reporting guidelines, because the interviewees believed that the existing international guidelines or particular established metrics are inadequate for their purposes. Additionally, it was suggested that a company may also go beyond what is required by regulation for their size, in order to enhance their reputation and be true to their particular branding, or in order to work with particular clients who themselves may be subject to regulatory requirements, or have their own sustainability data and reporting needs.

In addition, it was reported that information about wider trends and issues that affect a company's business model can come to the board in a variety of ways – "it is about how we open our eyes to the bigger landscape … for example what consumers are doing". It can also come from board members themselves, particularly if they are expert in particular areas.

The vanguard boards represented in this study also tended to use external advice, or commission work from universities, in areas that are complex or controversial.

Since early-stage companies tend to involve executives and investors on boards, both examples made particular and extensive use of additional external consultants and advisers in many aspects of the companies' current and future trajectory (including sustainability).

Use of AI and tech to support the inclusion of sustainability-related data and wider information

Some of the board representatives said that they used Microsoft Excel spreadsheets of information to pull the metric and KPI data together, while others appear to be making greater use of technology to synthesise and simplify data, whether through the use of visualisation and dashboards, or through the more complex use of AI to sense-check this data, or assess external information on trends

The board's role in horizon scanning

Some interviewees indicated that sometimes ideas come directly from people who are on the board. It was also recognised that one of the board's roles is to bring in ideas (or at least new and relevant issues) from the outside, and challenge management, as well as to engage with external experts and others in order to horizon scan for emerging risks and opportunities. The companies also do this internally and provide information to the board.

However, several of the interviewees did not think that they were realising this role as effectively as they could: "It's not one of those things you ever feel that you're completely on top of".

There was also a spectrum of opinion, with two respondents arguing that the board should not get too involved in horizon scanning or the details of sustainability metrics, but rather just oversee the direction of the company and its strategy.

The role of advisory boards or panels

As a result of feeling that they were not getting as much of an 'outside-in' perspective as they would like, several of the board members interviewed felt that a more formal advisory board or panel may be a useful addition on sustainability issues to provide further external perspective and insight.

Relationship between the finance department and sustainability-related information providers

Relevant sustainability information was reported as coming from throughout the company and its different departments. It is either brought together by a sustainability team, or in one case the Chief Operations Officer, and there is close engagement and integration with and between the CEO and/or CFO. A couple of board members mentioned that they were also considering having a Chief Value Officer rather than a Chief Finance Officer as an evolution of this trend towards integration.

Missing information

There were quite a few mentions by the smaller companies, particularly by the SMEs, of **the need for better tools to track, say, carbon emissions and more standardisation over which method is the most appropriate to use.** The wider point was also made by some of the SMEs: "we want to know what best practice looks like elsewhere; what good KPIs are; lived experience of how people are doing things, clear standards for packaging."

The point was also made that you can never know enough, and several board members suggested that they needed **more information on external sustainability trends and markets.** Several board members of companies particularly felt that they would like to have, **for example, more information on customer and client insights**, including face-to-face conversations to really understand their sustainability challenges and how they can address them. Some also felt that in difficult and uncertain areas with changing customer needs and sentiments, for example, it would be useful to conduct **more scenario analysis.**

Often, the board members interviewed said that they would **ask the executive to provide more information**, particularly where they were comfortable that they have the internal expertise, for example, on how climate change might affect a particular product, or information on external trends. This may mean also considering whether the company needs to engage more internal expertise in certain areas, rather than relying on external experts.

But there was **caution about the board wanting to know too much.** This was expressed by several board members: "The role of the board is to guide and assess and monitor what management is doing. I wouldn't really want more information – we just want to know that they are going in the right direction".

Assuring data through internal controls and external audit

Many of the board members of these vanguard companies in the food sector appear to pride themselves on the veracity of their impact data. They internally audit it and have trust that it is correct.

It was also recognised that assurance was important to counter accusations of greenwashing. For those that are subject to regulation, or where this is a stipulation of large clients, external assurance is required, and is provided usually by large accountancy companies who specialise in this area.

There were, however, some concerns raised about how robust and comprehensive that assurance currently is, with some board members believing that it was just creating a new industry.

For both smaller and larger companies, they often went beyond a regulatory compliance approach, to secure trust in their brand, and maintain their reputation.

> A medium-sized organic food producer originally did their own carbon audits. With the increasing complexity of assessing Scope 1, 2 and 3, and the need to provide comparable data (even though they do not have clients that directly require this information), they now work with external support, and hence external assurance, from a university.

One company also felt that it had to do its own assurance on Scope 3 impacts, since they felt that suppliers were not providing correct information. As a result, they stopped using suppliers from a country where the information on labour standards was too hard to verify.

The impact of regulations and voluntary standards on data and information use

Q4: To what extent does the data and information you use depend on existing or upcoming disclosure regulation, voluntary standards or frameworks (including supply chains) – whether general or sector specific?

We have already seen that, in addition to those companies that voluntarily take a compliance approach to sustainability-related regulation which requires disclosure of impacts, there are also indications that the speed and complexity of change in legislation, and other reporting requirements and guidelines around the world, has resulted in many businesses devoting too much energy to compliance. This excessive focus crowds out the ability to take a strategic focus on opportunities, and ultimately creation of sustainable value.

We asked our sample of vanguard companies in the food sector whether and how specific regulation, as well as voluntary frameworks and standards, were affecting the way that their boards used and collected impact data and information on sustainability-related factors.

The emerging landscape of sustainability-related regulation, soft law and frameworks has been mapped out in detail in Phase 1 of this research.

Summary insights from vanguard food sector company boards into the impact of regulations and standards on the collection and use of sustainability-related data and wider information

Interviewees said that sustainability-related regulation and standards frame and enable their impact data collection. There was also a recognition that, even for these vanguard companies, in areas that are not related to their purpose or mission, it can help speed up adoption of wider sustainability metrics.

These companies are therefore collecting, and innovating, new sources of data and metrics which are appropriate to their strategic needs and help evidence the impact they are making.

As a result of often being 'ahead of the game', many of these boards noted that their companies are involved in advocacy with government to adapt or bring in new legislation, which not only enables system change, but also increases the viability of their own business model.

Even those companies that are not legally required to adopt particular legislative requirements may choose to do so, either because their clients require it, or it adds further to their sustainability brand and reputation.

The 'simplified' reporting requirements for smaller companies, while less onerous, were felt to be misleading. One board member said the required figures were often meaningless and out of context, since the reporting did not enable a narrative to explain why, say, a particular metric may have increased, whether through growth or alternatively poorer performance.

International sustainability frameworks were used by many companies. The previous TCFD was found to have been particularly useful for framing decisions, and the CSRD, for further encouraging the use of the concept of 'double materiality'.

However, there was also a strong emphasis on the importance of specific food sector frameworks, and a need for their further development.

Most of the board members of vanguard food sector companies did not think that sustainability-related regulation and standards "led" the kinds of data and information that they collected and used, but rather "framed" and further enabled what they did.

Attitudes and responses to sustainability-related disclosure regulation

The overall attitude to such regulation was not one of reluctant compliance, but rather a recognition that, particularly in areas which were not part of their mission, it helped them "take on wider things earlier and not later. [We] see legislation as something that makes you do better, and you learn from it." In one case, compliance was even seen as an "accelerator".

However, it was also recognised that the speed of change, and the level of reporting required, can be onerous. In one case, despite virtually all companies seeing this as a whole board issue, one company believed that they may need to introduce an 'impact' committee just to oversee the complexity of the compliance required.

Most board members therefore felt that they have been, and are still, 'ahead of the game' in certain sustainability areas, specifically those which are part of achieving their core mission or purpose. In those areas they often require, and hence collect and innovate, new sources of information and metrics.

These innovations in data collection, as well as their role in 'proving' that certain, often disruptive business models work, is not only being seen as a key differentiator and enabler of their brand to secure market share, but also as a way, in some cases, to enable wider system change.

However, at the same time, the scope of existing standards or guidelines can be difficult for more disruptive companies, since some of the sample said that they do not necessarily recognise what they do.[106]

Engaging in advocacy for more supportive legislation and policy support

Many of the companies interviewed also spoke about their advocacy with government, the public, their supply chain and the wider sector, to further encourage positive sustainability-related performance. For example, advocacy, with a view to changing legislation, can help 'level the playing field' with those who do not currently adopt positive practices.

Using voluntary frameworks

The larger companies studied used additional relevant international frameworks such as Science Based Targets,[107] the Global Reporting Initiative (GRI)[108] and the previous TCFD, as did many of the SMEs. In some cases, the latter said that they may use both voluntary standards, as well as regulatory requirements for larger companies, partly because these may be required by customers, but also because they fit with their own brand, credibility and reputation; or could be seen as a "useful data tool". This approach was also adopted by the early-stage companies that we interviewed, which were looking to grow rapidly and access different markets in order to realise their 'value proposition'.

The previous recommendations of the TCFD (now incorporated into the IFRS S2 Climate-related Disclosure standard) was found to have been particularly useful for framing decisions. The board member of the large packaging company, for example, said that the TCFD had encouraged them to collect data in a different way, and encouraged them to do more scenario planning.

CSRD was also found to be useful since it reinforced the concept of 'double materiality'. For those who were already using this approach to impact assessment, it was seen as a supportive enabler. One board member said that their board had had to upskill in this area but that the result of this, plus wider awareness raising in the company, had led to significant culture change.

In contrast, TNFD was generally seen by the vanguard food sector companies as being in its early days, including some controversial and difficult areas such as the challenge, it was suggested, of needing to use forms of plastic packaging for food until viable alternatives could be found. The challenge was however also being addressed by the large packaging company through innovation in R&D partnerships, and through corporate venturing with innovative start-ups in order to stay 'ahead of the game'.

Sector-specific frameworks are important in the food sector, particularly for those companies looking to innovate farming practices. Examples used were the Farm Carbon Calculator[109] or the LEAF Marque Standard[110] which supports sustainable agriculture through 'Integrated Farm Management'.

However, there was also concern that these sector frameworks were not as widespread or developed as they could be.

Regulatory challenges for smaller and growing companies

The smallest companies we interviewed said that they were generally able to comply with 'simplified' requirements from legislation relative to larger companies. However, while designed to be less onerous, concerns were also raised that these could be misleading. For example, one board member argued that they just had to use aggregate carbon impact figures which are meaningless out of context. For example, a particular figure could indicate that a company had become more carbon intensive, but could equally reflect the fact that the company had grown. This board member also noted that there was no ability to distinguish the carbon impact of cattle that are reared well, or not, thus illustrating some of the complex relationships that can occur between nature and climate impacts.

Another challenge for regulatory compliance may affect particularly early-stage companies since, for example, their carbon footprint is changing constantly. "The problem is that the guidance is about existing not emerging businesses".

How boards are making complex decisions which integrate financial and sustainability-related factors

Q5: What kinds of methods, criteria, frameworks, or technology, do you use to process and integrate this information so that it is decision-useful for strategy? How do you determine the outcome of complex decision-making between tough options?

Finally, we asked the interviewees in our sample of vanguard food companies how the board made complex decisions, and particularly how board members adjudicate between tough options, where for example, they might have to trade off investments to tackle sustainability issues with, say, maintaining dividend payments to shareholders, or where they may have to maintain the affordability of products in the short term versus securing long-term resource security.

Summary insights from vanguard food sector company boards into decision-making criteria or frameworks which involve sustainability-related factors

For some of the companies, it appeared that the alignment between their purpose and business model meant that there was no perceived trade-off between having positive sustainability impact and profitability.

Where there are difficult choices to be made, most of the board members talked about how the purpose and/or mission of the company provided high-level parameters or pillars to enable the board to make that decision, alongside a cultural mindset of the 'right thing to do'.

Additionally, there are also clear non-negotiables that delimit the boundaries of decision-making.

A key challenge raised was that of making long-term decisions which may have short-term financial implications. This was perceived to be the case particularly if the projected financial results are at odds with the needs of particular investors, or shareholders. The vanguard food company boards reported a variety of ways through which they have managed this potential dilemma:

- The largest listed companies with no 'internal' shareholders felt that their brand and business model currently enabled both high shareholder returns, as well as long and short-term sustainability-related investments, as a result of their sustainability value proposition.
- For the other listed companies, the dominance of founder, family or other 'like-minded' investors was felt to help preserve their purpose and enable a longer-term approach to decision-making.
- The private companies reported having 'like-minded' investors who supported their longer-term, and more stakeholder or stewardship approach, rather than shareholder primacy business models.

- A range of governance innovations locked in purpose for several organisations, including through, for example, a 'golden share'; use of a particular legal status, the 'enterprise à mission' with a specific Mission Committee; incorporating the purpose or 'founders' wishes' within articles; or represented in the shareholding by family members.

Choosing between different options, particularly if they involve large capital outlays, is difficult for any business. This is particularly the case when involving sustainability-related factors which may involve long-term investments that may conflict with profitability and/or investor needs in the short term, or which may involve trade-offs between different stakeholder/sustainability outcomes.

However, there is evidence to suggest that the business model itself may be designed in some cases so that these trade-offs are not inevitable.

When asked, most of the food sector interviewees said that the purpose and/or mission of the company provided the high-level parameters (or pillars) for how the board makes decisions, as well as a related cultural mindset of 'the right thing to do' when difficult decisions arise. Those high-level parameters are then translated into KPIs, and as noted before determine how data is synthesised and presented to the board, for example, by using dashboards. They can also inform the parameters for scenario analysis – another approach to making decisions.

As a result of the overall purpose, there may also be clear non-negotiables or cut-offs in relation to particular impacts (for example, levels of carbon impact, an appropriate Living Wage, a specific ratio of bottom to top pay, the level of human rights abuses in a particular country, fair price, being organic, employee conditions, or product quality levels). As such, the interviewees reported more deliberative discussion between what is negotiable between the different core pillars that define the purpose and resultant strategy, as well as related financial metrics on the different options, for example, in relation to the ROI in the short, medium and long term.

Another approach is to start with the question that needs answering: "What do we need to know to answer that" and go back to the executive to ask for the appropriate information.

Shareholder and investor expectations

The outlook and needs of the company's shareholders and finance providers emerged as a repeated theme in the interviews, with the suggestion by some that such expectations were a strong determinant of whether or not there are trade-offs between tough decisions for the long term vis-à-vis short-term financial considerations.

For most of the companies, it was suggested that the sustainability-related brand itself supports their ability to be profitable, although this does not mean they are maximising profitability at all costs. Rather their aim is to generate appropriate profit to satisfy investors balanced with returns to other stakeholders including the environment. The two largest listed companies do not feel, as a result, that they currently need to trade off high returns to shareholders (such as dividend payments).

It was interesting that the other listed companies signalled that they felt it may be easier for them to make longer-term decisions because some of their shares (and often the controlling percentage) were held by, for example, family concerns even if they were PLCs.

For the private vanguard companies, a clear alignment in values with shareholders, including external financial investors, was reported.

Appendix 5: Wider insights across different sectors and geographies

In order to see how the specific views of the food sector sample are aligned or otherwise with wider perspectives from different sectors or geographies, we used 34 interviews with people sitting on or advising boards around the world, who were already known to CISL and DLA Piper. This included:

- a review of 17 interviews undertaken during Phase 1 which included comments relating to the topics under discussion
- 12 exploratory interviews undertaken early in Phase 2 to address the broad landscape in relation to strategy and data use by the board
- five further interviews using the same interview schedule as for the food sector interviews
- additional insights drawn from a meeting of CISL's Board Advisory Group.

The findings are organised by the five questions that formed the basis of the interview schedule.

Boards and engagement with corporate strategy

Q1: How, and to what extent, is your board involved in strategy development and/or oversight?

> **Summary of wider insights into the relationship of boards with corporate strategy development**
>
> Increased strategic engagement by the board was presented as driven by legislation, stakeholder scrutiny, a more complex operating environment, and by more diverse and younger board members.
>
> The role of the board in taking a longer-term strategic perspective is believed to be important, but not widespread.

As noted in Phase 1 and Appendix 1, there is a growing legislative push around the world towards the board needing to take greater responsibility for strategy, with greater scrutiny of the board (with related liabilities) by stakeholders, and a more complex operating environment. The responses from our international board members and commentators reinforced the resulting perception of increased engagement of the board in strategy, balanced against the need to retain distance in order to fulfil their oversight role effectively.

A previous NED of an African extractive company summarised the overall view of the board's role: "They approve the purpose which informs the strategy that the management produce. And they regularly review and modify in light with issues that might come up, for example, geopolitical, sustainability, governmental. And as a result they can send back to the executive to revise".

The extent of strategic engagement

There was also support for the general trend of increasing strategy engagement. The company secretary of a mining company in South America had noticed that “the dynamic of the boards have been more demanding in terms of strategy. I think that before, the board was more a surveillance body than a strategic body”.

In addition to external pressures, another driver for increased engagement was believed to be increased diversity, particularly of younger generations, and of skills, such as more NEDs with direct industry knowledge. The NED of a South East Asian bank, for example, said that pressure had come from the board itself to shift away from being presented with a ‘fait accompli’ strategy and instead: “to have a conversation with the [CEO] earlier in the strategy calendar”. This more engaged approach had also resulted in more ‘offsite’ strategy meetings including all board members and executives.

The role of the board in taking the longer view

A particular comment made in the initial survey for Phase 1 succinctly articulated other comments among the wider interviews, the literature review (Appendix 1) and the insights from food sector board members (Appendix 4). The respondent argued that there was a strong focus on the need for boards to look more ahead: “to focus more on long term strategy, optionality and digital opportunity, which means less rear-view compliance, and more future orientation.” However, several interviewees also recognised that this perspective was not widespread.

Strategic engagement in start-up boards

With respect to insights on the more complex situation facing start-ups and emerging companies, a venture capital company board member based in North East Europe reinforced the observation of a relatively high level of engagement from board members and other advisers in start-ups. He noted that particularly VC investors could in fact sometimes take the lead on overall strategy.

The integration of sustainability risks and opportunities into board-level strategic decision-making

Q2: Do you, and how do you, incorporate sustainability impacts, risks and opportunities into board-level strategic decision-making or oversight?

> **Summary of wider insights into how boards incorporate sustainability factors into their strategic responsibilities**
>
> Our wider interviews support the view that the board’s role in setting strategic direction, linked to purpose, can be a key driver of sustainability-related integration, and in some cases (such as accessing certain kinds of finance) is a necessity.
>
> However, there was also concern that for most boards there is still a long way to go, particularly because many companies are trying to survive, and/or see sustainability issues as primarily relating to compliance.

Those that were integrating sustainability factors were seeing benefits, such as creating a positive brand and market differentiation.

A specific role for the board was suggested to be in horizon scanning or 'strategic foresight', particularly because of the interconnected and long-term impacts of different sustainability challenges, and potential opportunities.

Sustainability-related advisory boards were seen as a useful way to support board discussions around integrated strategy.

And collaboration with other companies and stakeholders was also raised as a crucial part of any strategy to achieve sustainability-related goals.

Insights into the incorporation of sustainability impacts, risks and opportunities into overall strategic direction

Our wider interviews supported the view that the board's role in setting strategic direction, linked to purpose, can be a key driver of sustainability-related integration.

The board member of a South East Asian bank, for example, noted that for them, the drivers to the integration of sustainability factors into strategy included regulation and specific national banking requirements, as well as a younger and more diverse board. The board had itself pushed for this approach: "sustainability and all its components … whether it's risk, whether it's opportunities … all that must be embedded" into overall corporate strategy. Sustainability factors are therefore embedded into their risk profile and goals to enable their clients' sustainability transitions, as well as identifying specific activities which they exclude from receiving banking support.

Some of the most vanguard companies are adopting a multi-stakeholder value creation approach by: "working within planetary boundaries and being redistributive by design"; or seeing growth in value as being: "sustainable, regenerative and equitable not extractive … such that every bit of growth is in fact an increase in impact".[111]

According to the director of a UK subsidiary of a large French Group PLC involved with both food and facilities, this strategic integration has become a necessity: "There is no choice … sustainability and social impact … are just pre-requisites … if you don't have them and you can't demonstrate them, you can't play". It has to be "baked-in, not bolted on". He cited the example of accessing financial resources. "The cost we pay for debt is directly linked to our ability to reduce our food waste".

Our interviewees also noted the importance of making a clear distinction between short and long-term sustainability-related strategic decisions. A sustainability consultant from the Netherlands noted that: "There's the very immediate what we're going to do on net zero … and there's the much more long term, what does this really mean for our organisation, for the team in terms of the types of people, what education do we need, what training do we need?"

However, there was concern that for most boards there is still a long way to go. For example, opportunities were not being prioritised, either because, it was argued, sustainability factors are being seen more as an issue of "survival and compliance"; or, if they were being incorporated, there was a tendency towards only looking through a risk, not an opportunity, lens.

Those boards that were integrating sustainability factors were, however, seeing dividends. The subsidiary CEO of the large French multinational added that in addition to the necessity of sustainability integration: "That gives me a great opportunity because … I can differentiate myself by going to a hospital CEO and saying, 'I can help you meet your carbon target'."

Similarly to the comments made by the vanguard food companies, the need for more horizon scanning or 'strategic foresight' by the board was again raised, particularly because of the wide-ranging long-term impacts of different sustainability challenges and potential opportunities. One interviewee took these thoughts further arguing that boards were in effect taking on a long-term stewardship role, such as the approach advocated by Earth on Board.

> Earth on Board talks about the board being in effect stewards for the future. The organisation is an "ecosystem of sustainability actors dedicated to helping organisations achieve an Earth Competent Board". The aim is to support board members to upskill in sustainability in order to effectively engage with management. The organisation is also developing a peer exchange to bring people together to learn from each other.[112]

The addition of advisory boards was raised by several interviewees as a useful addition to support board discussions around strategy that integrates sustainability factors. These may involve executive and outside NGOs, for example, who discuss issues together, and which are then raised and reported to the board.

Finally, collaboration with other companies and stakeholders was also raised as a crucial part of any strategy to achieve sustainability-related goals. For example, the CEO of a group subsidiary of a French PLC said: "For many many years we have all talked about collaboration. And I think for the first time, net zero gives us a non-negotiable legal requirement that everybody, every stakeholder has to deliver on. But none of us can deliver it alone. It forces you as an ecosystem to genuinely come together."

The use of sustainability metrics and information

Q3: What kinds of sustainability metrics or information do you use to inform the board's strategic decision-making and oversight?

> **Summary of wider insights into how boards access and use sustainability-related impact data and wider information**
>
> The board members and advisers from wider sectors and geographies felt that overall the predominant focus was on sustainability reporting requirements and compliance, with little impact on overall strategic direction and plans.
>
> Similarly to the food sector companies, the interviewees stressed the importance of turning data into decision-useful information and insights, although they also noted that this was not being done to any great extent.
>
> They also raised the challenge of uncertain, or even contradictory data leading to board members potentially being distrustful of the data, and creating a new kind of risk for the board.

Some board advisers also reinforced the trend towards more digitalisation. They believed this created a greater understanding of stakeholder and shareholder needs, including the use of AI which, for example, was seen as being particularly useful in generating scenarios.

There was also a concerning insight that some companies may just divest negative sustainability impacts, such as a high carbon footprint, since this could affect their company's overall valuation, rather than find ways to mitigate the impact, and explaining the rationale for doing so.

For companies that are not vanguard there was some evidence that assurance had helped to increase board confidence in data, and with resultant culture change within companies. However, there was also concern that the social aspects of assurance do not have the same rigour as, say, carbon or GHG-equivalent emissions, and that many boards need training. One board member did, however, caution against boards and companies putting too much reliance on external auditing, rather than having trust and confidence in the company's own processes.

It was suggested that there was a need to reconsider and develop the role of the company secretary (or equivalent). They should ensure that boards have access to impact data and wider information in an accessible, understandable and useful way; and be strong and independent enough to filter, check and verify that information.

With regard to start-up businesses, there was an interesting example of a VC company requiring the use of sustainability KPIs right from the start, and enabling the new companies to make use of a collaborative data platform to track key metrics, and allow the fund to assess its overall impact. For wider information relating to market access or relevant sustainability trends and innovations, this group also tended to share information, enabling companies to make use of collective support and intelligence.

A focus on sustainability reporting requirements and compliance or on strategic opportunities

The board members and advisers we spoke to supported our findings from Phase 1 that reporting is seen mostly as compliance with little impact on overall strategic direction and plans, to the extent that it can sometimes just become an end in itself.

An Argentinian governance standards setter summarised the widespread view. "Reporting is seen as a compliance exercise. They're not really asking questions, and they're not sure what questions to ask. There's a heavy reliance that management has got the numbers right" to the extent that, as a participant in a CISL/DLA Piper workshop held in Phase 1 said: "clients are so preoccupied with the concept of disclosure as a compliance tool … they allow it to define their business strategy."

A particularly concerning insight was how the need to show reduced impact, for example, in relation to Scope 3 emissions for reasons of stakeholder perception and external reputation, could lead to divestment, rather than efforts to mitigate the impact of current operations or support a managed transition. A researcher from an international business school said: "It's very easy to outsource your carbon footprint". He gave the example of a company selling its Indian operations because the high level of its carbon footprint was affecting their company valuation.

Turning data into decision-useful information and insights

There was a general feeling that, partly as a result of reporting requirements, there is a great deal of data but it is not being incorporated into strategy because it is not meaningful. According to a global board recruiter: "There is tonnes of data, but what to do with it, how to contextualise it?" and the business school researcher added: "if that information isn't meaningful enough … they're not going to do anything with it … [and it is] also not meaningful to investors or markets".

An example was given about a metric on water use that means nothing in isolation by an ESG consultant based in Trinidad: "The question is, is your water consumption sustainable or not. And it will be different amounts in different places in different contexts."

Board advisers also noted that there seemed to be little scenario analysis in relation to future carbon levels and impacts, and this was even more the case for nature impacts.

Poorly measured, uncertain, or contradictory data

Some data is also seen as unreliable and difficult to trust. According to a UK board director: "I think there is a confidence and trust issue when it comes to this sort of data … to assess and evaluate climate risk, for example, or social value or social impact … it's still an emerging discipline."

Additionally, much forward-looking data is uncertain. It was noted that sustainability data is far more complex than financial, and that there is a need to be transparent about the completeness of data being used to make predictions five, ten or 20 years forward.

There was also concern that some of the data can be inconsistent and have contradictory implications. It was suggested that this uncertainty in the data requires a high level of sustainability-oriented risk taking, and understanding by the board. As a US leadership consultant noted: "There's always counter-data … that's a real struggle for boards …. Boards that are less anxious … gather perhaps contradictory data or questions, good questions about the data."

The use of digital data and digital boardrooms

Some board advisers noted a trend towards more digitalisation driving greater understanding of stakeholder and shareholder needs with a move towards 'digital boardrooms'. This also included the use of AI, particularly since "the amount of scenarios that you need to start projecting benefit tremendously" from its use.

Supporting sustainability-oriented start-ups

Challenges with accessing and using appropriate information is not just a large, or mature company issue. The venture capital board member who is setting up a VC fund focused primarily on businesses that address sustainability challenges in North East Europe, said that they are including relevant sustainability KPIs right from the start in the companies that they will be supporting. Initially this would reflect a narrow materiality focus, and not one looking at double materiality, which they felt would be a 'luxury'.

This interviewee also said that they were developing a data platform to be shared by all start-ups so that they could keep track of key metrics, and therefore enable the fund to assess its own impact. Collaboration would not be limited to enabling the collection of impact data, but also extended to wider information supporting future strategy development, through the sharing of information on market and technology trends between companies.

The pros and cons of external auditing

The company secretary of a mining company in South America noted that while there had been initial reluctance to adopt assurance, it was now being embraced because "it increased the level of confidence in our data" and provided greater clarity, to the extent that: "the auditor decreased our footprint because we were not measuring it properly". There had been, as a result, an overall change in culture within the board and company towards more strategic focus on the carbon footprint.

There was also concern from several commentators that the social aspects of assurance do not have the same rigour as, say, carbon or GHG-equivalent emissions.

Overall, a member of CISL's Board Advisory Group felt that there was a need for particular training on data assurance.

A board member of a UK utility company was, however, concerned that too much reliance on external auditing creates a culture "which is not the same as trust and confidence in your own structures and processes". Also there was concern about 'citizen's auditors', in other words groups of high-profile and concerned citizens who might highlight a problem which concerns or benefits them specifically, but to the detriment of other equally problematic challenges. The example was given of the cleanliness of a particular wild swimming area, balanced with the need to keep water affordable for those on lower incomes.

The role of the company secretary

There were also several mentions of the important role of the company secretary (or equivalent) in ensuring that data and information came to boards in an accessible, understandable and useful way. The company secretary of the South American mining company thought that: "A big challenge in my professional body … is ensuring that directors have the information that they need to make decisions … The problem is we are giving them too much information … we need to be more concise" but at the same time: "How can I give more life to the numbers?" to encourage discussion on the wider implications.

Another participant felt that the company secretary needed to be strong and independent in order to "filter the information" rather than it coming directly from the executive and to check it is verified and audited.

The impact of regulations and voluntary standards on data and information use

Q4: To what extent does the data and information you use depend on existing or upcoming disclosure regulation, voluntary standards or frameworks (including supply chains) – whether general or sector specific?

Summary of wider insights into the impact of regulations and standards on the collection and use of sustainability-related data and wider information

Our wider interviews with board members and board advisers noted that sustainability-related legislation and standards had led to some profound changes in how companies operate, both practically and culturally. They were observing, for example, changes in how sustainability data is being brought together and treated similarly to financial data.

However, our interviewees also pointed out some unanticipated negative effects of such regulation including:

- because of the speed of introduction, and the high level of new reporting regulations, the level of requirements can somewhat perversely encourage and reinforce box-ticking rather than its incorporation into integrated decision-making
- also it can therefore reduce time and space for more fundamental innovation and business transformation
- the early focus of much legislation on carbon-related disclosures may have reduced attention to other aspects of social and environmental sustainability.

Additionally, it was suggested that some supply chain-related legislation may make it harder for some companies to start, or continue on, a sustainability journey. This was suggested to be a particular problem if, for example, EU legislation affects how a company partners with, or supports, companies operating particularly in lower-income countries who may currently have poor sustainability metrics, but are looking to transition.

More generally, the requirements of newer legislation to encourage 'extended producer responsibility (EPR)' within supply chains has potentially, it was believed, created a new kind of board risk, since compliance is to some extent 'out of their hands'.

However, it was also noted that, at the same time, supply chain-related sustainability regulation, such as the CSRD, was encouraging more collaboration within supply or value chains.

Impacts of regulation and standards

Despite the concerns about sustainability-related disclosure requirements reducing available time for more strategic development and business transformation, many interviewees reported that this kind of legislation, or requirements by finance providers, or clients, has led to some profound changes in how many businesses operate. Examples were given of these changes being both practical and cultural.

It was argued that regulation such as CSRD has not only required wider impact data collection, but also reinforced 'extended producer responsibility', which was felt by some interviewees to have positively affected board discussions.

While regulation may be seen initially as compliance, there was a feeling from several board members and advisers that it can soon become the normal way of doing things, and lead to permanent change. For example, it was noted by an international board adviser that we are: "seeing a flurry of activity around transition plans … it becomes a bit more real for people … I think that in itself it is quite a trigger for action and towards the boardroom into strategy, because you have got to make some fundamental changes to have a credible transition plan".

Interestingly, according to some of our interviewees, the requirements for non-financial-related disclosure has meant that there has been an increasing shift away from just collecting and reporting this data in isolation, to bringing it together and treating it similarly to financial data. "That's a key change, and relatively recent, and really has helped us streamline data and make us more confident about the data we are using".[113]

Regulatory challenges

There were, however, some challenges raised, particularly arising from the cost and resource required to respond to such regulatory requirements: "I think there's a tipping point where reporting requirements and legislation become very onerous and at the end of the day it just adds costs to business".[114]

At the same time, it was suggested that there could also be some unintended consequences.

Firstly, there is the danger, as we have already seen, that the level of requirements can perversely encourage box-ticking. For example, one interviewee commented on the expectations in Singapore, that all directors of companies listed on the Singapore Stock Exchange have to train in ESG reporting. He was, concerned that ironically this could just reinforce and "exacerbate tick box" culture.

There was also a perception that regulatory overload can reduce innovation and hence slow business transition by companies and boards. For example, a UK consultant said that despite "compliance … doing a good job of getting it on the radar … regulation … constrains them innovating and looking at how to get collective advantage and competitive advantage".

Additionally, the early focus of much legislation on carbon-related disclosures may have reduced attention on other aspects of sustainability. According to a UK governance expert: "The TCFD metrics … are going to be linked to remuneration and that's at the expense of the social metrics and indices and other environmental issues".

There was some indication from the interviewees from wider sectors and geographies that legislation, or lending requirements that require impact reporting, do not necessarily enable transition, particularly in lower-income countries. In other words, they may only reward activities or companies that are already doing well, and reduce or prevent access to financial or other support for those who need or want to improve. For example, in South America, certain EU legislation was reported as disincentivising companies from working with small mining companies who may have more likelihood of, say, human rights abuses, thus undermining the opportunity for larger companies to support smaller ones to tackle these problems, as was argued by a company secretary of a mining company "I think the regulators have to have a wider context of the situation in the Global South … artisanal miners are a business opportunity for large companies – [and there is a need for] shared responsibility."

Similarly, in response to EU financial institutions apparently adopting criteria for who they will or will not work with, the board member of a South East Asian Bank said: "they will want the client or the project to be immediately compliant". She felt that other countries were more open to dialogue and flexibility because they understood the need for transition. "We need help and we need understanding and flexibility".

This challenge did not just, however, occur in lower-income countries but also for companies within the EU. The adviser to a UK board chair added: "There are potential contradictions within taxonomies. For example, if you actually invest in X to help them go from brown to green, then you might be penalised".

Supply chain challenges

With impending regulation requiring a wider scope of supply chain impacts, one of our interviewees, the CEO of the subsidiary of a French food and facilities PLC, argued that this created a new kind of risk. He said: "They are quite high risk discussions because you are not in control of the delivery." Their solution to this challenge was to have 'partners with purpose' – "If they can't evidence a clear strategy they can't be with us … We're having to take our suppliers on a journey so that they have their own sustainability and net zero strategy in place."

How boards are making complex decisions which integrate financial and sustainability-related factors

Q5: What kinds of methods, criteria, frameworks, or technology, do you use to process and integrate this information so that it is decision-useful for strategy? How do you determine the outcome of complex decision-making between tough options?

One particularly pertinent insight from this wider review was that, in order to encourage businesses to take up sustainability-related strategic approaches, there has been a tendency to talk predominantly about business benefits, without always recognising the hard choices that have to be made, whether that relates to the short and long term, or between different aspects of sustainability that might be in conflict. As one member of CISL's Board Advisory Group said: "Trade-offs are just not talked about. The only place perhaps is with M&A".

Summary of wider insights into board decision-making criteria or frameworks which involve sustainability-related factors

Systematic frameworks or specific criteria to enable complex decisions to be made seem to be embryonic. Only a couple of interesting examples were mentioned in our wider interviews, both of which used pillars or specific criteria to inform decision-making.

More broadly, and similarly to the food sector interviews and wider literature, many board members and advisers cited examples of non-negotiables or guardrails that arose out of purpose or mission, and spoke of ways of arbitrating between choices using, for example, dashboards.

It was also highlighted that trade-offs were often not talked about. However, where they were, frameworks such as the previous TCFD were useful, as was publicly providing a clear rationale for decisions, and talking to investors early.

Similarly to the vanguard food sector boards, the expectations and outlook of shareholders and other investors with respect to levels of return over the short and long term, were crucial aspects of the ability or not to be able to make some sustainability-related decisions. Again, some companies felt that they were able to accommodate long-term sustainability-related investments as well as fulfilling mainstream investor requirements. Others argued, however, that their ownership structure, such as being predominantly family owned, enabled them to take a longer view.

Particular issues for start-ups were also raised. For example, it was suggested that because of the difficulty of securing growth finance on appropriate terms, if companies are being set up from the start to be PDOs, they could benefit from financial brokers to identify and help negotiate appropriate finance and financial relationships.

Frameworks to support complex decision-making

One previous board member of an extractive company in Africa spoke about the five pillars that they used for decision-making. "Every capital allocation goes through 5 pillars, including: climate change, ethics, managing environmental impact, and delivering sustainable value. Additionally, the criteria for an issue to be dealt with at board level does not just relate to being above a certain financial level, but [additionally] if any element goes outside these pillars."

Another interesting example of a decision-making framework used by the Virgin Group came from an external meeting focused on how 'nature' reaches board-level discussions.[115]

The Virgin Group is a family company and changed their articles of association in 2021 to put 'people, communities and planet' first. They pledged to consider the wellbeing of all stakeholders, and not just shareholders in every business decision. They use a purpose decision filter which embeds 'Purpose Pillars' into decisions – including "flourishing people, thriving communities, a healthy planet for all and radical collaboration". This filter is not used as a checklist, but rather to create appropriate conversations at board level.[116]

Our wider conversations with board members and advisers also highlighted that although using a monetary approach to assess alternatives was useful, it was not enough by itself.

One previous executive of a UK energy utility company said that a key filter for their board related to relative risk, and impacts on reputation. She noted that reputation can be priced to some extent, but that there were also non-negotiables. "The key thing is to be able to explain a decision and have crucially a business sense ... so that it is credible".

Other examples were given of using redlines or non-negotiables which arose out of purpose and mission, as well as having ways of arbitrating between choices using sophisticated dashboards, and other criteria.

The issue of trade-offs

Some sectors may have more experience of dealing with trade-offs openly. The African company ex-board member felt that because of the clear trade-offs and difficulties the board faced, as well as the high public profile of the company's actions, the sector may perhaps be "more advanced in its thinking". An example could be if a facility had a very high Scope 3 carbon footprint which affects the company's overall valuation. Immediate divestment would have the effect of improving carbon metrics and hence, for example, access to financial resources and positive shareholder valuations. However, she argued that the negative impacts of doing so would have been significant, for example, on the national energy infrastructure, as well as the likelihood that another buyer might not take responsibility to try to reduce those emissions. Taking all these factors into account the board did not divest and spent time successfully talking to investors and others about why they had made this decision.

This board member also made the point, which was reinforced by other interviewees, that this kind of example shows that just using a monetary approach to assess alternatives, while useful, was not enough by itself.

Other board members and advisers articulated similar support for more clarity and transparency over why tough decisions were made, and early discussions held with investors to explain the situation. One institutional investor when asked about what she would do in the example outlined above, said that if a full explanation was given, this would not be a problem, but that without it, they would have to go forward on the basis of publicly available metrics, which may not be appropriate.

Balancing investor and sustainability investment needs

As with the food sector interviews, there were comments from wider board members and advisers that short-term focused shareholders (for example, distant institutional investors, venture capital or private equity) may create challenges for companies that wished to make sustainability-related investments with relatively less economic return in the short run, but wider stakeholder value return in the long term. For example, the board member of a water utility, within a strongly regulated and 'public interest' sector, noted that, as a result, "institutional investors can be in conflict with stewardship".

On the other hand, some board members of companies we spoke to said they had been able to accommodate sustainability-related investments, as well as fulfilling mainstream investor requirements. For example, the board member of the South East Asian bank argued that if such a trade-off existed, they would talk to their investors ahead of time, but would still do it. Another interviewee made the point that several sustainability-minded CEOs of large listed PLCs had very publicly announced the kind of investor that they were looking for as they embarked on their sustainability transitions, but that in these cases they were already in a strong market position.

Other board members and advisers suggested that they were able to operate for the long term because they were family owned. Family-ownership is not limited to private companies. As with the food company examples, a board member of a food and facilities supplier noted that 50 per cent of their shares were owned by the original family, which meant that: "when you talk about strategy and being capable of long term strategy and thinking and planning I think our ownership structure really helps with that".

There were also challenges for start-ups trying to access finance for growth on the right terms. The CEO of another vertical farming start-up in the UK, which is a social enterprise and not part of the main food sector sample, argued that there needed to be far more innovation in finance. For example, a funder in the UK operates a revenue share option, rather than taking equity in start-ups.[117] He suggested there could usefully be more brokers for purpose-driven start-ups to support the right kind of financing, to align with their values and trajectory.

Appendix 6: Results of the survey and roundtable with members of the UK's Institute of Directors (IoD)

Summary

A short survey with 486 UK IoD company board members (a mix of 79 per cent executives, 15 per cent NEDs and 5 per cent stakeholder representatives) found that:

- **A majority (61.5 per cent) of board members surveyed believed that the integration of sustainability risks and opportunities is essential to the delivery of their company's profitability.** The larger the company, the higher the percentage. This majority relationship seems to be reversed in several sectors such as finance.
- **60.1 per cent agreed that they incorporate sustainability/ESG risks into their overall corporate strategic decision-making.** Of those that do not, but are considering doing so in the future, the figure is 20.8 per cent, and for those that do not, and are not considering doing so in the future, 18.35 per cent. There is a greater tendency (84.6 per cent) for companies with over 250 employees to believe this.
- **58.2 per cent agreed that they incorporate sustainability opportunities into their overall corporate strategic decision-making.** 22 per cent do not, but are considering doing so in the future. 18.5 per cent do not and are not considering doing so in the future.
- **Most board members (63.8 per cent) have not heard of the Taskforce on Nature-related Financial Disclosures (TNFD).** 20 per cent of those people who had heard of the TNFD think it is irrelevant for them. 13.2 per cent are considering adopting it in the future, and 3.1 per cent are already adopting it.

Insights from the IoD brainstorming workshop and questionnaire comments

Many participants thought that most boards were operating with a fairly short-term outlook, and with a variety of constraints to taking a longer view – a lack of board awareness and sustainability mindset; economic pressures to survive; and investor needs for relatively short-term and high returns. There was also an overall impression that there was a tendency to predominantly talk about carbon and not the wider aspects of sustainability.

Participants summarised why they felt it was important to incorporate sustainability-related data and wider information into an integrated corporate strategy:

- to help create a viable long-run strategy
- because it is the 'right thing to do'
- to improve the reputation of the company to attract both customers and employees
- because of regulatory or client need

- to access appropriate finance.

They also offered practical suggestions to create a more integrated strategy. Some of these were similar to our other interview suggestions, and others additional. Similar approaches included:

- building in sustainability factors by revisiting the mission statement, purpose or vision to incorporate appropriate sustainability dimensions
- making greater use of advisory boards
- having more challenge on the board through, for example, more NEDs or young people
- engaging investors with similar time horizons and values.

Additional or more fully articulated points included ensuring that:

- the entire board has a sustainability mindset, shared values, and the capacity and capability to absorb and interrogate the information provided
- there is more training for board members in sustainability issues
- there is increased collaboration and peer learning between board members of different companies and organisations
- there is space in board meetings for more blue-sky thinking and thought experiments to support radical disruption and innovation
- a sustainability health check is created for boards.

It was also noted by several participants that differences in organisational governance and ownership can affect the ability to integrate sustainability impacts, risks and opportunities effectively on the board.

In order to best access and use sustainability impact data, some participants felt that:

- there is a need for greater standardisation and simplification of sustainability metrics and frameworks; as well as an increased ability to turn data into useful information through:
  - the use of data analytics and AI
  - making greater use of integrated accounting, dashboards and sustainability frameworks to bring financial and non-financial information together
  - being transparent about the approach adopted, and providing a narrative to make the figure meaningful, relative to context.

They also added several challenges:

- stakeholders can influence the type and flow of information to boards – for example, through changes in government policy and narrative; or the varying needs of external investors
- there is a lack of a clear and integrated framework to consider and compare environmental, social and financial value; and to link non-financial impacts to the Profit & Loss account (P&L).

Suggestions to the question of "How do you decide between different strategic options, or significant investments, that incorporate sustainability factors?" included:

- start with an open-ended discussion to capture all the dimensions before focusing on specific decision-making approaches or frameworks
- further explore and use decision-making frameworks which focus on multiple value creation, such as 'social value'
- test every decision against the mission and purpose
- make greater use of modelling and AI to support option and scenario analysis, as well as to sense-check decision-making
- bring more NEDs onto the board to provide wider perspectives in decision-making
- embed sustainability factors into ROIs.

Since the research with the IoD focused more extensively on smaller businesses, it was particularly pointed out that it is hard for them to find time or resource to integrate sustainability data and information, or focus on innovating new products and services, due to the need to focus primarily on survival, and also a lack of simple and trusted approaches to assess impact.

Additionally, several participants let that many SMEs are ill-resourced and unaware of sustainability risks and opportunities, and may not even have basic governance in place, such as a risk register. Further suggestions were to:

- include sustainability risks within risk registers
- create more guidance for SMEs on sustainability risks, opportunities and measuring impacts.

Specifically for start-ups, several people felt that it was important to incorporate sustainability factors and purpose right at the start of business formation, and ensure a supportive ecosystem.

There was also a range of concerns about SMES within large company supply chains:

- not having influence over the client, and therefore, for example, not being able to fully quantify their Scope 3 sustainability impact
- clients not paying for the extra costs of incorporating sustainability risks and opportunities
- clients limiting a company's 'strategic space' for sustainability innovation
- specific challenges noted with government procurement requirements, such as having different sustainability criteria across government departments.

Suggested solutions included:

- the need for the supply/value chain to work more in partnership to deliver, for example, net zero, or wider ESG impacts
- trying to only work with suppliers and clients who share the same values.

In terms of missing sustainability impact data and wider information, several areas were suggested:

- better understanding of future societal, client and finance sector needs, and how these can be converted into clear costings and value generation
- information on the community or economy within which a company operates to assess the company's impacts and/or opportunities to attract employees
- information on water risk
- clarity over government direction on sustainability-related policy
- specific sectoral measures
- what 'good looks like', with which to compare particular organisational impacts
- examples of successful long-term investments that have led to positive results for the company or organisation, as well as those that have failed
- stakeholder mappings done through a sustainability/ESG lens.

Participants also made several suggestions in relation to UK Government policy:

- the need for UK Government leadership to commit to clearer directions of travel with respect to sustainability issues, as well as to recommend preferred measurement approaches such as carbon calculators, otherwise, it is difficult for businesses to invest resources in strategic options such as energy transition
- since sustainability-related regulation was seen as too costly to comply with, too complex and too onerous (particularly in relation to Scope 3 GHG emissions), it was suggested that the government needs to ensure that regulation and frameworks are appropriate for different sectors and sizes of business
- more government support for SMEs taking on this agenda. Suggestions included tax incentives for sustainability innovation, or regulation which 'levels the playing field', particularly for those organisations already committed to 'doing the right thing'.

Introduction

As part of this research, CISL also collaborated with the UK's Institute of Directors (IoD) to explore the extent to which UK businesses are incorporating sustainability factors within their overall corporate strategic decision-making, and how they make use of different kinds of information to do so.

As Dr Roger Barker, Director of Policy and Corporate Governance at the IoD, said in his opening words at the CISL/IoD Roundtable on 2 July 2024: "We help improve the quality of directorship and directors in the UK and beyond. Key determinants are how well they can make decisions around sustainability, and incorporate and understand all the information they are receiving."

The UK Institute of Directors (IoD) is based in London, UK.[118] It is a membership organisation of organisational directors which offers training and opportunities to contribute views into collective policy and advocacy with the UK Government, as well as peer networking.

The majority of IoD members sit on company (or other) boards which cover businesses and organisations of all kinds, including those within the public sector and not-for-profits. Their members are active in organisations across all stages of the life cycle, including start-ups and emerging companies. They represent predominantly SMEs, reflecting the size distribution of all economies, including the UK.[119]

This research collaboration with the IoD therefore enabled us to explore how more diverse boards are responding, particularly by bringing in the SME voice. Firstly, a set of questions was included in the monthly IoD survey, the *IoD Policy Voice*, which is sent to 14,000 members.[120] Secondly, a brainstorming workshop was held in July 2024 with 24 IoD board members who were involved in sustainability-related activities and decision-making (Appendix 2). The participants considered the kinds of sustainability data and wider information their boards have access to; any information that might be missing; how they navigate complex decisions which involve sustainability factors; and brainstormed some solutions to any recognised challenges.

The results are presented below. First the results of the member survey are set out in detail, and then the responses from the roundtable

Member survey

The IoD sends out a monthly survey to its members on policy-related matters. We were able to incorporate several questions using similar formats to those usually used by the IoD – predominantly closed questions which are quick and easy to answer in order to maximise the response rate.

As a result, these simple questions can only indicate general tendencies. They cannot determine the relative extent of their engagement, in other words, the level of incorporation of sustainability risks and challenges; the companies' understanding of 'sustainability'; nor the exact nature of the sustainability issues covered. However, the overall results proved to be extremely insightful.

592 people responded to the questionnaire, and with 486 eligible respondents. (We excluded people who were on the boards of non-profits or government bodies through our first question.) Of these 486, 79.4 per cent are executive board members, 15.2 per cent are NEDs and the remaining 5.3 per cent are stakeholder board members. (For the full details of participant demographics, see Appendix 2).

Q2: When developing your overall business strategy, is the integration of sustainability risks and opportunities considered essential to the delivery of your company's profitability?

A majority (61.5 per cent) of board members surveyed believed that the integration of sustainability risks and opportunities is essential to the delivery of their company's profitability.

Q2 response	Percentage
Yes	61.5%
No	36.6%
Don't know	1.9%
Total	100.0%

There is some indication the positive response rate is relatively higher, the higher the number of employees. This relationship holds across most sectors but appears to be reversed in several. For example, in financial services, the proportion agreeing to this statement is 36 per cent, compared to 64 per cent saying no.

We looked at whether having different numbers of employees, or being part of different sectors, has any effect on these percentages. The number of employees relates to the IoD member's 'primary organisation'.

No of employees	Think essential	Percentage of total
0–1 employees/sole trader	24	52.2%
2–9 employees	90	58.0%
10–49 employees	65	56.0%
50–99 employees	34	64.2%
100–249 employees	31	60.8%
250+ employees	55	84.6%
Total	299	

The data suggests that there is a greater tendency for companies with over 250 employees to believe that the integration of sustainability risks and opportunities is essential for a company's profitability. For example, of those people sitting on the boards of organisations with 250+ employees, 84.6 per cent think it is essential compared with 56 per cent of those with 10–49 employees.

Because of the relatively low individual counts for companies in different sectors (Appendix 2), we cannot draw any firm conclusions. However, the data suggests that a similar relationship (in other words more people agree than disagree) holds across all sectors except three, where the relationship seems to be reversed.

Relatively more respondents said that they do not think that incorporating sustainability factors is essential to profitability in the following sectors:

- real estate (36 per cent yes to 64 per cent no)
- wholesale and retail (31 per cent yes to 62 per cent no)
- and financial services (36 per cent yes to 64 per cent no).

However, it is important to emphasise that the number of respondents is very low, so these results are not statistically significant. They are only indicative of patterns which are worth exploring further. In the information and technology sector, the relationship between the two responses is roughly evenly split 50:50, as it is in mining and quarrying (although there are only two respondents).

We also asked about whether risks, or opportunities, are incorporated into their overall strategic decision-making. The results are similar both to the previous answer, and to each other.

Q3: Do you incorporate sustainability/ESG risks into your overall corporate board strategic decision-making?

> 60.1 per cent of respondents agreed that they incorporate sustainability/ESG risks into their overall corporate strategic decision-making. Of those that do not, but are considering

doing so in the future, the figure is 20.8 per cent, and for those that do not, and are not considering doing so in the future, the number is 18.3 per cent.

Q3 response	Percentage
Yes	60.1%
No, and we are not considering doing so in the future	18.3%
No, but we are considering doing so in the future	20.8%
Don't know	0.8%
(blank)	0.0%
Total	100.0%

Q4: Do you incorporate sustainability/ESG risks into your overall corporate board strategic decision-making?

58.2 per cent of respondents agreed that they incorporate sustainability opportunities into their overall corporate strategic decision-making. 22 per cent do not, but are considering doing so in the future and 18.5 per cent do not and are not considering doing so in the future.

Q4 Response	Percentage
Yes	58.2%
No, and we are not considering doing so in the future	18.5%
No, but we are considering doing so in the future	22.0%
Don't know	1.2%
(blank)	0.0%
Total	100.0%

The similarity between the responses for both the risk and opportunity questions challenges the widely held assumption about board behaviour in relation to sustainability factors, namely, that businesses are more focused on sustainability-related risks, and do not have the same focus on opportunities and innovation for new products or services. Because these are only headline figures, this finding needs further exploration. However, it illustrates the importance of looking at a diversity of businesses. For example, one board member in the IoD Roundtable was part of an organisation promoting energy-related innovations. He put more emphasis on opportunities than risks. He said that they would keep track of information which might affect their growth strategy through opportunities for future services or products, but admitted that there was far less focus on risks.

Because of the recent increase in global interest in nature-related impacts and dependencies, the last question asked about the understanding and use of the guidelines of the Taskforce on Nature-related Financial Disclosures (TNFD).

Q5: Which of the following statements best applies to your organisation?

Most (63.8 per cent) board members surveyed had not heard of the TNFD. 20 per cent of those people who had heard of the TNFD think it is irrelevant for them, while 13.2 per cent are considering adopting it in the future. 3.1 per cent are already adopting the TNFD.

Q5 response	Percentage
I have heard of the TNFD but it is not relevant to our business	20.0%
I have not heard of the TNFD	63.8%
My business is already incorporating all or some aspects of the TNFD	3.1%
My business is aware of, and considering, the implications of the TNFD	13.2%
(blank)	0.0%
Total	100.0%

This response does not, however, mean that companies are not thinking about and addressing specific nature-related issues in other ways.

Of the 3.1 per cent that are already incorporating all or some aspects of the TNFD into their practice, a further analysis of those 15 companies suggests that they tend to be larger than the average for this sample (40 per cent as opposed to 13.4 per cent for the sample as a whole having more than 250 employees), and with no clear sectoral pattern. However, the low number of responses (15) is not high enough to determine any clear patterns with certainty.

Q6: Do you have any other comments on incorporating sustainability considerations into corporate strategic decision-making?

The final question was open ended to reflect any thoughts that may have arisen after answering the previous questions. Respondents were asked whether they had any further comments. The 72 responses were varied with no distinct themes or patterns. However, there was an overall tendency to predominantly only talk about the carbon aspects of sustainability. Several respondents indeed pointed out this bias in their own comments, arguing that the social aspects of sustainability considerations did not get as much attention as the environmental.

Several responses indicated that some company board members did not think that this agenda was relevant to them, either because of the sector or activity that they were involved in (for example, service provision), or because they felt it is not part of the purpose of business. One respondent noted that he felt that there was also a need to see the incorporation of sustainability factors as ‘the right thing to do’, and not just important for the bottom line.

There were also several comments relating to the ESG/sustainability agenda; concern that ‘greenwashing’ has increased scepticism; and also that the concept was primarily concerned with disclosure and ‘form filling’, hence does not enable sustainability issues to be seen as a guiding principle.

Most responses related to the challenges facing SME boards that are trying to incorporate sustainability risks and opportunities into their corporate strategic decision-making. These included:

- the difficulty of the need to focus primarily on survival
- lack of simple and trusted approaches to assess impact, such as green audits

- the need for more guidance overall for SMEs in this area
- sustainability-related reported requirements were also referred to as being too costly to comply with; too complex; and too onerous (particularly in relation to having to account for Scope 3 GHG emissions).

And in relation to UK Government activity:

- the lack of clear direction in government policies, which makes it hard to invest resources in strategic options, for example, around energy transition
- a lack of R&D incentives for sustainability innovation
- challenges with government procurement requirements, such as having different sustainability criteria across government departments, and being too inflexible

There was a particular focus on the implications for SMEs as part of large company supply chains:

- one respondent said: "You can't quantify your outcomes if you have no influence over the organisations to whom you supply." (In other words, implying that if you consider supply chains from the point of view of an SME in the supply chain of a large company, rather than the other way round, you may be less able to demand and access the data you need)
- and that "buyers won't pay for the extra costs of incorporating those sustainability risks and opportunities into your strategy".

In terms of missing information, two areas were suggested: the impact on local communities, and water risk.

Specifically with regard to the TNFD, there were several responses:

- this would be a waste of time and just more bureaucracy (from three respondents)
- there was a need for a more structured approach.

And finally, several policy ideas were suggested to overcome challenges:

- more government support for SMEs taking on this agenda, such as tax incentives for sustainability innovation
- ensuring that regulation and frameworks are appropriate to different sectors and sizes of businesses
- more regulation to balance the playing field, particularly for those organisations already committed to 'doing the right thing'
- increasing UK manufacturing capacity, such as in renewable energy, to reduce energy costs and speed transition.

The roundtable

In order to find out more about IoD members' experiences with incorporating sustainability impacts, risks and opportunities into their overall corporate strategy, and to enable people to come together and brainstorm solutions to some challenges, we held a roundtable specifically to look at two areas of interest:

- How can information about your sustainability impacts, risks and opportunities, best inform your overall corporate strategic decision-making and oversight?
- How can you best decide between different strategic options, or significant investments, that incorporate sustainability factors?

Because of pressures on people's time and availability, the meeting was held as a breakfast meeting lasting for 1.5 hours from 08:30 to 10.00 on 2 July 2024 (Appendix 2). We divided the 24 attendees into six small breakout groups of three to five with a facilitator.

Since the participants were identified as already being interested or engaged in considering sustainability issues, the questions were designed to elicit both good practice, as well as any challenges encountered.

Breakout session 1

How does information about your sustainability impacts, risks and opportunities inform your overall corporate strategic decision-making and oversight?

Subsidiary question: What information is missing? Are there any barriers or challenges?

Subsidiary question: How could those challenges be overcome?

Breakout session 2

How do you decide between different strategic options, or significant investments, that incorporate sustainability factors?

Subsidiary question: What practical changes might improve how you make these complex decisions?

About the participants

The 24 people who participated mostly sat on one or more organisational boards, covering executive and non-executive positions, multiple sectors, sizes and stages of company development, including start-ups. Over half the participants sat on company boards, and the rest were involved with not-for-profit boards and public sector boards (for example, in the National Health Service (NHS), educational and research bodies, an industry association and a publicly owned utility). Further details of the range of participant sectors and the size of companies (with a third large and two-thirds SMEs) can be found in Appendix 2. Several people sat on boards of listed companies (or the subsidiary of a listed company), and two people were involved with employee-owned organisations.

The inclusion of not -for-profits and government board members, while confounding any analysis based solely on for-profit businesses, can also enable wider perspectives to be added in the brainstorming to cross-fertilise ideas and create a more insightful learning environment.

This diversity was harnessed by ensuring that breakout groups included board members from a range of different companies and organisations, and with different sizes and stages of development. (For the full methodology, see Appendix 2.)

The resulting rich conversations raised many insights, which are set out below. Because of the short time available for discussion, these areas will require further consideration by CISL, the IoD and others. However, the results reinforce similar messages arising from the IoD questionnaire, particularly in relation to the challenges for SMEs, and from the in-depth interviews in the food sector.

Breakout Session 1: Improving board access to and use of appropriate sustainability information

The first breakout session began by discussing: How does information about your sustainability impacts, risks and opportunities inform your overall corporate strategic decision-making and oversight?

There was an overall feeling that integration of sustainability impacts, risks and opportunities into overall company strategy is happening more and more, and has accelerated in the past few years. However, the board members of companies and other organisations in the roundtable were at very different stages on their sustainability journey, from those who were still focusing on specific sustainability initiatives which were not driving overall strategy and felt that they were still very much BAU; to those just starting to incorporate sustainability dimensions within board decision-making; to those who had fully incorporated sustainability goals into their mission and purpose.

> Balmoral Tanks' purpose is: "storage tank solutions for a sustainable future", providing a range of products such as anaerobic digestion tanks to support the green transition.[121] They have integrated ESG sustainability criteria within their overall strategy plan alongside commercial pillars such as annual reductions in carbon emissions, minimising water usage, and employee health and wellbeing. To increase their effectiveness in scrutinising the strategy, the board is also upskilling in ESG.

> A property management company working for a local council uses 'forward growth' strategies such as investing in training and upskilling young people, including through apprenticeships, in order to build green homes. For them, finding people with the right skills is challenging. Therefore, they say that they need to train people themselves in order to further develop their own sustainability-related value proposition.

There was, however, a general perception that most boards were operating with a fairly short-term outlook and that there were a variety of constraints to taking a longer view. Reasons included: a lack of board awareness and sustainability mindset; economic pressures to survive; and investor needs for relatively short-term returns. One participant also raised a concern that strategic responses could be reactive, responding to media publicity, rather than part of a considered and evidenced strategic framework.

In addition to data generated internally from operations and impacts, there was a strong emphasis by many participants on board access to external information from stakeholders, and on wider societal and environmental trends and scientific understanding. Some of this information was initiated and fed to the board by executives, while other information came directly to the board. One board member, for example, said they used external advisers, as well as regular briefings from management on particular strategic sustainability topics.

It was also felt by several participants that stakeholders themselves influenced the type and flow of information to boards – for example, through changes in government policy and narrative over, say, the direction and incentives for energy transition, or the needs of external investors, especially when these require evidence of particular impacts in order to access credit.

The following subsections look at specific themes that emerged in greater detail:

The reasons for incorporating sustainability information into overall corporate strategic decision-making?

It was suggested by several participants that it was important to first consider why companies should incorporate sustainability information into their overall corporate strategic decision-making.

Some suggested rationales and drivers mentioned throughout the workshop included:

- to help create a viable long-run strategy as a result of current and emerging risks and opportunities. Examples were given of the effects of rising temperatures on people who work outside (particularly relevant if employees live in places like India, or parts of Africa), or of the risks arising from changing soil quality. Another stressed the need to keep innovating and meeting customers' changing needs to "move the muscle of innovation to be the leader in my market".
- because it is the 'right thing to do'.
- to improve the reputation of the company to attract both customers and employees. One participant on the board of a digital tech company noted, for example, that while they were currently operating within the Business As Usual (BAU) logic, they wanted to become purpose-led to attract future employees.
- because of regulatory or client need. In addition to the legislative imperatives highlighted in Phase 1, clients may require social and environmental credentials, or expect sustainability solutions, or demonstration of positive sustainability impacts.
- to access appropriate finance. Participants mentioned the increasing sustainability requirements of finance instruments, such as carbon bonds requiring specific KPIs, or sustainability criteria underpinning access to credit and loan facilities.

The need to ensure that sustainability factors are built into overall mission or purpose

Several representatives companies, non-profit and public sector board members talked about how relevant sustainability factors are built into their mission or purpose. They noted that this affects their overall strategic considerations and decisions, and by implication the data and information required to develop and assess that strategy and meet their purpose.

The need to ensure that the entire board has a sustainability mindset, shared values, and the capacity and capability to absorb and interrogate the information provided

In order to better challenge, test and prioritise strategic options which incorporate sustainability-related factors, it was mentioned by several people that there was a need for a sustainability-related mindset and knowledge across the board – seen by one participant as being about “shared values, behaviour and competencies”. Having the right people on the board, it was suggested, can help “challenge, test, focus and prioritise” and have “an open lens to what is evolving and changing”.

While there were some examples of how effective decision-making requires a skilled board, with the right attitude to risk, alignment of values and a sustainability mindset, there was also a belief among participants that this understanding is generally weak at board level. As a result, this deficit could be holding back organisational adaptation and change in the “right direction of travel vis-a-vis sustainability factors”.

It was also suggested by one participant that there needs to be a different kind of risk appetite which is able to address and manage all the different claims and counter claims that sometimes surround certain sustainability issues.

Several board members spoke about the need for having specific board training on relevant sustainability issues. There was also an example given of the benefits of peer-to-peer learning, through for example, Chapter Zero.[122] This collective networking was believed to enable people to practically learn across sectors about what worked, therefore enabling insights into approaches they may be able to adapt.

There was a majority view that expertise and understanding needs to be embedded throughout the board rather than residing in a specific sustainability champion, or subcommittee.

The difficulty for smaller companies and start-ups to find time or resource to integrate sustainability information, or focus on innovating new products and services

It was pointed out by several participants that the pressure of day-to-day business survival for SMEs makes it difficult for boards to focus on sustainability risks and opportunities, justify spend vis-à-vis other imperatives, or focus on product and service innovations that could be beneficial in the long run. There was a comment that sustainability/ESG could just become a “luxury of multinationals”.

Additionally, it was pointed out that many SMEs are ill-resourced and unaware of sustainability risks and opportunities, and may not even have basic governance in place, such as a risk register. It was also suggested that it is important to break down what was seen as an “ill-defined” concept like sustainability, to clearly identify what aspects are important to integrate.

Differences in ability to integrate sustainability impacts, risks and opportunities effectively on the board can be influenced by organisational governance and ownership structure

It was noticeable from a number of comments that there seemed to be relatively greater integration and use of sustainability-related information among the board members of not-for-profits and public sector organisations that attended the meeting, as well as a longer-term approach to strategic decision-making. However, they also acknowledged that they struggled with competing short-term financial constraints. For example, a university board representative pointed to the tension between their restricted finances and the pressure from students for faster action in relation to climate change, some of whom may sit on their boards or councils as student representatives. The presence of two to three young people was argued by one university board member to set a “beating drum for sustainability on the board, and hold the other members to account”.

There were also perceived to be governance and ownership differences within the for-profit private sector. For example, one participant had a single shareholder who enabled longer-term decision-making "for the right reasons".

The need for greater standardisation and simplification of sustainability metrics and frameworks

There was a general feeling among participants that sustainability frameworks and regulations are too confusing and are in flux. Moreover, there can be a wide variety of approaches to measuring, for example, carbon footprint using carbon calculators, or a more specific example of the need for a clear and agreed way to measure embodied carbon within buildings or other infrastructure. The concern was expressed that otherwise a company may lose out on a contract because they have adopted a different way of calculating their impact to a competitor who provides a lower figure. It was felt that there was a need to be transparent about the approach adopted, and provide a narrative to make the figure meaningful, relative to context.

Pressures for short-term financial returns from finance providers inhibit a longer-term strategic focus

Examples were given of where investors, particularly in smaller growth companies, may dictate strategy such that "smaller companies could not put their head above the parapet to take a wider strategic view". It was also suggested that there is a particular problem if there is a disconnect between the desires of a company to make long-term investments to fulfil their purpose and value propositions, for example in anaerobic digestion plants, and the needs of some venture capital and investment funds to see desired returns in four to five years, or even two to three.

It was also pointed out that for public companies, there was the added pressure of quarterly reporting leading to difficult discussions about the financial impacts of long-term capital-intensive projects in the short term.

Lack of an integrated framework to consider environmental, social and financial value, as well as improved methods to account for and compare financial and non-financial factors

A particular frustration felt by many participants was the difficulty of bringing financial and non-financial information together in a meaningful way to support strategic decision-making, and tackle the tension of reconciling long-term impacts, developing new products and services, and mitigating risk, with the pressure to deliver short-term returns.

It was generally felt that being able to present the long-term value of sustainability-related decisions in terms of financial implications, whether of cost or of future returns, was crucial both to engage board members, and also executives such as the Chief Financial Officer (CFO). An example was used of needing to use a clear business case to argue for the expansion in use of photovoltaic cells to generate electricity. This kind of analysis would also enable boards to understand the costs, savings and potential value creation implications more easily, and provide a way to provide a clearer rank assessment of options. Another example was given by a construction company representative that if say concrete was to be replaced by another material, there would need to be a "very intelligent matrix of value add for clients" over short, medium and long term which could be used as part of procurement tenders.

It was also suggested that it would be helpful if these wider impacts could be linked to the P&L through, for example, life cycle accounting, or methods for forward cost accounting, rather than using more traditional historical cost approaches. There was also a specific mention of the benefits of adopting full carbon accounting to see how carbon moves through a business, which has the benefit of also enabling greater clarity over how it can be managed.[123]

However, there was also concern from some participants that taking a purely financial approach does not, and cannot, adequately incorporate issues which are hard to quantify, such as reputation, community impact or other intangibles. It was also argued that it does not adequately acknowledge or represent the full range and scope of multiple values that can be created by an organisation.

Several companies and organisations at the roundtable said that they were adopting the concept of 'social value', which began in the UK as a way to recognise social, economic and environmental value creation in relation to government procurement requirements, but which is being increasingly used more widely.[124] One charity board member added that they were taking this approach at board level as a framework to guide their decision-making.

Supply chain challenges affecting the ability to have a clear forward sustainability-oriented strategy

It was commented by several participants that additional challenges face those companies that are at the end of a supply chain. It was felt by some participants that often responsibility is being passed down supply chains for action and disclosure, even if there were challenges to their ability to comply. At the same time, they suggested that it could be unclear that those setting the requirements were themselves 'walking the talk'. Some participants also mentioned the need for the supply value chain to work more in partnership to deliver, for example, net zero, or wider ESG impacts.

> An example was given in the roundtable of companies that make use of cloud computing facilities. They have found it difficult in the past to account for their carbon impact. However, providers such as Azure are providing relevant dashboards, so that companies are able to see, for example, their indirect energy use and account for their Scope 3 emissions.[125] As one roundtable participant said, "perhaps indicating that this is starting to be part of their DNA and not just a tick-box exercise".

It was also suggested that clients may additionally limit a company's strategic space: "We want to do more but the client holds us back". One board member made the point that as a small supplier, "our voice is very seldom heard in their long term strategy", implying that larger companies are not necessarily hearing from suppliers about what is possible. There was a resultant feeling expressed that it was better for businesses from a more purpose-driven strategic orientation to work with suppliers and clients who shared similar values.

With respect to government procurement it was also noted by one participant that different departments may have different criteria, or understandings of, 'social value', which can create challenges for companies providing products or services. However, it was also acknowledged that, at the same time, procurement is an area which can enable and encourage sustainability-related strategic decision-making. A board member of the Chartered Institute of Procurement and Supply[126] said, for example, that they are currently creating standards which embed social and environmental value.

A need to take into account the impact of different cultural contexts

While most companies and organisations who attended the roundtable were based primarily in the UK, those additionally operating in other countries, such as in Africa, noted that it was important to recognise differences arising from different cultural contexts. For example, the 'long run' may be perceived differently, and that, because of weaker regulation, 'box ticking' may be less of an issue since some companies are already needing to incorporate sustainability dimensions into strategy in order to survive. There can also be greater difficulties in accessing robust data.

What information is lacking?

It was suggested by participants that there was a lack of:

- **Clarity over government direction on sustainability-related policy** in order to make decisions on investments, for example, new energy-generation plants. Or in understanding how governments are understanding the implications of certain issues, for example, on the use of peat in composting.
- **Better understanding of future societal, client and finance sector needs** and how these can be converted into clear costings and value generation.
- **Specific sectoral measures, which take into account changes over time** such as standards on accounting for embodied carbon in construction. One participant noted that there is no clear and agreed way to measure embodied carbon, or to incorporate and show how the levels may decrease in the future.

> A participant in the roundtable noted that currently the ability to measure Scope 3 emissions accurately and comparably is difficult within, for example, construction industry guidelines on measuring embodied and operational carbon.[127] Additionally, a participant in the roundtable argued that there will need to be more work done by the industry in collaboration to be able to assess the trade-offs between cost, carbon and accuracy over time if appropriate and "intelligent matrices" of options can be presented to a client. Currently it is unclear how to assess the net present value of different sustainable products since the calculations are complex. For example while concrete has a high embodied carbon level it also absorbs carbon over time.

- **What 'good looks like', with which to compare particular organisational impacts.** The example was given of being able to assess the results of a carbon audit with comparators of what good practice looks like for similar organisations.
- **Accessing robust and consistent information.** It was argued that a challenge, particularly for companies operating outside the UK, is to get good and consistent information that can be compared with an acceptable benchmark. Often, it was suggested, data is collected in different ways across countries, so it is hard to synthesise and compare. There was an interesting counter example given from someone who advises boards, that you should at least use an imperfect measure to begin with, rather than wait for the perfect measure, since this can at least illustrate impact trends.
- **Examples of successful long-term investments that have led to positive results for the company or organisation, as well as those that have failed.**
- **Stakeholder mappings done through a sustainability/ESG lens, not just a commercial one.**
- **Information on the community or economy within which a company operates** to assess the company's impacts and/or opportunities to attract employees.

Suggested ways forward

Good practice examples, and ways forward to best incorporate sustainability-related data and information included:

- **Turn data into useful information through the use of data analytics and AI** The point, already made in this report, and reinforced in this roundtable, is that data by itself is unhelpful and there is a need to transform it into useful information which can inform discussion and decision-making. There were examples given by participants of the use of AI and other kinds of data analytic technologies to support the board in understanding and responding to the implications of internally generated and external data, and wider information flows. It was argued that such approaches can support the board in:
    - enabling more agile decision-making which is more responsive to a fast-changing world, enabling diverse streams of information to be brought together to enable improved decision-making
    - avoiding groupthink by bringing in different perspectives.
- **Include sustainability risks within risk registers and risk committee discussions** There were several comments made about the need for current and future sustainability risk to be seen as a key responsibility of the board, requiring adaptation over time in response to customer needs, or a changing climate. It was argued that focusing on risks can act as a strong frame and rationale to integrate sustainability-related information, which would be particularly useful for SMEs since it helps break down sustainability into specific areas which are relevant for their company (for example, by using materiality assessments).

  This focus on risk, and particularly the inclusion of sustainability risks into risk registers, it was argued, has also been a key driver in focusing more attention on sustainability-related factors within strategic decisions for both the for-profit and not-for-profit companies. One university said that including sustainability risks in their risk register had shifted what had been informal, to being formalised within regular discussions at council level.
- **Have clear non-financial KPIs for both internal decision-making and ability to access external resources** Developing clear non-financial KPIs was also seen as a way to integrate sustainability factors into decision-making. One participant added that this focus on the collection of clear and verifiable information linked to target setting (which could be tied to performance incentives), could also have external use, for example, to access carbon bonds.
- **Revisit the mission statement, purpose or vision** to embed appropriate sustainability dimensions, which can then guide strategic decision-making. "You can't do a good job if you are pointing in the wrong direction – the needle may have shifted". It was pointed out that often the mission statement and the purpose can themselves be just a 'tick-box' exercise with little link to strategy and outcomes.
- **Incorporate sustainability factors and purpose right at the start of business formation, and within board development, and ensure a supportive ecosystem**

- Make more use of integrated accounting, dashboards and sustainability frameworks to bring financial and non-financial information together
- Increase training for board members in sustainability issues
- Increase collaboration and peer learning between board members of different companies and organisations For small companies, it was noted that much information comes from outside the company. In order to better absorb and access this sustainability-related information for practical strategic purposes, it was felt that there could be more collaboration and peer networking between the board members of different companies.
- Make greater use of advisory boards
- Make space in board meetings for more blue-sky thinking and thought experiments to support radical disruption and innovation Some participants used blue-sky thinking, scenario planning and thought experiments regularly in order to horizon scan and think laterally about future risks and challenges, including the opportunities and consequences of radical disruption. An example of the latter was suggested to be: What if the North Atlantic current shuts down and the UK actually becomes colder and not hotter? Other examples included looking for opportunities for new innovations to scale and commercialise.
- Bring more challenge to the board It was suggested that, for example, boards could involve young people (as for example student governors on educational boards), take on more NEDs, or periodically bring in experts. This diversity, it was thought, can also help initiate new debates and discussions over strategic integration and future new opportunities.

  Several ideas related to the impact of other partners on enabling better and more consistent information flows to the board, as well as the role of the IoD.
- Work with suppliers and clients who share the same values
- Government leadership to commit to clear directions of travel with respect to sustainability issues, as well as leadership in adjudicating and preferring particular measurement approaches such as those relating to carbon calculators
- The IoD could create a sustainability health check for boards – to enable companies to establish a baseline, decide where and how to help boards form realistic goals and targets. Guidance could also be provided on how best to collect information and report it.

Question 2: How do you decide between different strategic options, or significant investments, that incorporate sustainability factors?

Since this question proved to be one of the most challenging in the food sector interviews, we decided to use the roundtable to see how participants managed any tensions, whether between comparing different strategic options with multiple, and potentially conflicting, non-financial and financial factors, or ones with longer or shorter pay-back periods.

The responses were varied, indicating that there is no simple good practice and that what is practically used often builds on examples of good practice strategic decision-making.

For example, one board member participant suggested that it is a good idea to start with a 'loose' discussion for complex decisions to involve a range of diverse opinions. After this, the executive management can devise strategic options which can then be considered in a structured decision-making framework incorporating the following parameters: what you are trying to solve for (suitability); feasibility (do we have the resources) and acceptability (does it give us the return we want), whilst factoring sustainability considerations into all three dimensions.

Other comments included the use of social and environmental impact assessments; ROI over different time periods; and just knowing what is the 'right thing to do', on the basis that it follows from a clearly defined mission and values. One board participant said that their company used impact assessments to assess the extent to which an investment contributes to net zero goals; social and economic impacts such as fuel poverty and risk of greater social inequality; as well as potential economic growth impacts and benefits for UK businesses and the wider economy. This kind of analysis has been used to decide between diversifying to achieve revenue growth, or staying within mission guidelines – in fact the position ultimately adopted.

In summary, the discussion generated several ways forward:

- Start with an open-ended discussion to capture all the dimensions before focusing on specific decision-making approaches or frameworks
- Further explore and use decision-making frameworks which focus on multiple value creation One start-up charity for example is using 'social value' as a framework to support integrated strategic decision-making, and is currently starting to collect the required data. One board member of a company with government clients noted that they have to report on and incorporate social value, including where it is within their strategy and leadership in order to maintain their Royal Warrant.[128]
- Test every decision against the mission
- Greater use of modelling and AI to support option and scenario analysis This suggestion was made by several participants who used sophisticated forms of modelling and data aggregation in order to help choose between sustainability-related options.
- Bring more NEDs onto the board to provide wider perspectives in decision-making An example was given of boards of growth companies often only having investors in addition to the executive, who may benefit by bringing in NEDs to enable a wider discussion on strategy and more ability to consider longer-term implications and outcomes of strategic decisions.
- Embed sustainability factors into ROIs
- Further consideration of how different ownership and financing models enable or disable the ability to make strategic decisions involving sustainability-related factors It was pointed out that in terms of propensity to think for the long term and make tough trade-offs it is useful to differentiate by corporate form and motivation. For example, not-for-profits, or employee-owned companies, may be able to do so more easily than those who have external shareholders requesting quarterly reporting, or more short-term ROI requirements. At the same time, it was also pointed out that on one employee ownership trust board, most members were still operating with a CSR mindset, and were not thinking strategically about sustainability issues. This illustrates

that organisations that may be mission-led or purpose-led on some sustainability dimensions are often on a sustainability journey themselves with respect to other dimensions.

- Engaging investors with similar time horizons It was felt by one attendee that it was important to work with investors who are 'fit for purpose' and able to support a long-term vision, particularly during the growth phase. If this does not happen, the initial purpose can be derailed and longer-term investments become harder to make, even if there are clear value creation implications for the future viability and success of the company.

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