



In collaboration with
Accenture

Climate Governance and the Circular Economy: A Primer for Boards

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Foreword



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Developed by the Climate Governance Initiative (CGI) in collaboration with the World Economic Forum and Accenture, this primer aims to equip board directors (“board directors” refers primarily to non-executive board directors) with a practical understanding of the circular economy and how it can be applied to help their organizations achieve climate and environmental commitments while generating new business value and resiliency.

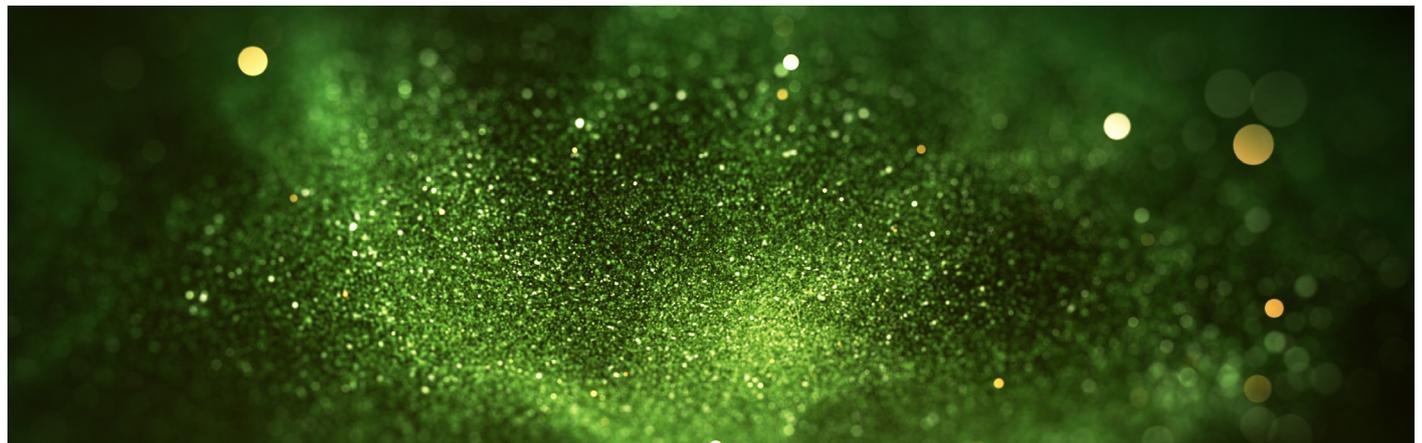
This guidance will provide board directors with a complete overview of the circular economy by answering the following questions:

- What is the circular economy and why does it matter to my organization?
- How can embracing circularity help my organization meet its net-zero and climate goals?
- What questions do I need to be asking my management about how to incorporate circular economy principles into the organization’s strategy and operating model?
- What specific steps can my board take to begin – and progress – the journey to embed circularity in our core strategy?
- How should my board oversee the effective measurement and reporting of progress on circularity to our shareholders and other stakeholders?

For over 18 years, Accenture and the World Economic Forum have strategically partnered and collaborated on many sustainability and circular economy initiatives, such as the Circularity Awards and Accelerator, the Circular Cars Initiative and the co-creation of the Platform for Accelerating the Circular Economy (PACE).

The Climate Governance Initiative, a project in partnership with the Forum, provides a platform for non-executive directors to engage and understand how their role in the boardroom can accelerate corporate climate action. With networks of board directors in over 50 countries globally, through content and events produced specifically for the board director audience, the CGI equips boards with the knowledge and skills to take climate action into the boardroom.

By understanding the circular economy, board directors can play an instrumental role in helping their companies leverage circular initiatives to maximize stakeholder value creation while advancing their climate transition strategy.



Executive summary

The transition to circular business models is a critical lever for organizations to achieve climate commitments and reach net-zero emissions. Almost half of the greenhouse gas (GHG) emissions reductions needed to meet the United Nations Climate Goal will be addressed by changing how goods are produced and consumed and circularity plays a critical role in this.¹ Since board directors² play a pivotal role in steering companies, they must be prepared to champion and drive the circular agenda.

The existing “take-make-waste” linear economic model is extractive and resource-intensive and thus has environmental consequences, such as the destruction of land and biodiversity and greenhouse gas emissions. A circular economy is an alternative systems transformation approach and a mechanism for the protection and restoration of the environment as it keeps materials in productive use and cycles them back into the system, for example by engaging consumers in take-back and recovery programmes. The key is to embed circularity in decision-making throughout the value chain.

In addition to driving environmental benefits, the circular economy can deliver financial value, operational efficiency and resiliency. At stake is an estimated \$4.5 trillion in value from the circular economy by 2030.³ Consumers further support the business case, with 40% of those surveyed by Accenture considering values-driven qualities as part of their decision-making process.⁴ Circularity also strengthens supply chains, minimizing exposure to resource scarcity. Nearly half of CEOs (49%) are transitioning to circular business models to build supply chain resilience.⁵ Circular business models also drive efficiency and reduce waste streams with an estimated opportunity by 2025 to save \$1 trillion in materials according to the United Nations Industrial Development Organization (UNIDO).⁶

Companies should start their circular transformation by setting an ambition, vision and achievable targets that address the entire value chain and existing climate targets. There are several business models to consider at each step in the supply

chain to activate circularity, and five key enablers can be used to accelerate adoption: consumer engagement, design, reverse logistics, disruptive technologies and systems-wide partnerships.⁷

Implementing circular models is complex and companies should collaborate and build broad partnerships to share in the risks and benefits, such as sharing the infrastructure for reverse logistics and recycling.

This systemic transition requires companies to embed circularity at all levels and functions throughout the organization. Starting from the top, there should be clear governance, leadership and accountability. This needs to be accompanied by incentives and key performance indicators (KPIs) tied to circular and climate targets and training to equip staff with the skills and knowledge they need to champion and deliver circular models. Every function has a vital role to play. For example, the chief financial officer reports on performance against circularity targets and the chief technology officer deploys tools that enable circular operations.

With the standardization of frameworks, emerging regulations and stakeholder demand for transparency, there is increased pressure to get ESG reporting right, including the link between circularity and emissions. For example, the European Commission’s adoption of the updated versions of the European Sustainability Reporting Standards (ESRS), applicable to some 50,000 companies in Europe from 2024 subject to the Corporate Sustainability Reporting Directive (CSRD), mandates disclosures on resource use and circular economy when material.⁸ To be ready, companies need to put ESG data and measurement infrastructure in place to respond to reporting requirements.

With a strong understanding of the toolkit, board directors can initiate and inspire their companies along their journey to circular transformation, enabling the realization of financial value, decarbonization of their supply chains and operational resiliency.

Introduction

“ The circular economy represents a \$4.5 trillion opportunity by 2030

The circular economy is an essential lever for companies to move more rapidly on their net-zero emissions commitments while unlocking new business value. The transition to renewable energy and the deployment of energy-efficiency measures only addresses 55% of the required reduction in greenhouse gas (GHG) emissions needed to meet the United Nations climate goal to limit global warming to 1.5°C, compared to pre-industrial levels.⁹ Changing how goods such as cars, clothes and food are produced and consumed is the key to tackling the remaining 45% of emissions.¹⁰ Circularity is a critical lever to drive this change.

Becoming a circular business means transforming full value chains and creating a system in which all types of waste are designed out. It also means

making sustainable options available to consumers and igniting their motivation to purchase them. The culmination of business efforts will help the world move to be net positive – meaning putting back more into the environment, society and the global economy than is taken out – and ensure the restoration of natural ecosystems and environmental sustainability outcomes.

The circular economy isn't just beneficial for the planet – it presents a substantial business opportunity, with an estimated \$4.5 trillion in value at stake by 2030.¹¹ Since the circular economy demands significant strategic transformation, the call to action must be sponsored at the top of the organization. Hence, it is a critical topic for board directors¹² to understand, champion and drive.



1

The circular economy

Question for board directors:

What is the circular economy and how can it help my company on its journey to net-zero emissions?



In the current “take-make-waste” linear economic model, raw materials are extracted and transformed into products; once used or consumed, they are typically thrown away as non-recycled waste.¹³

The linear economy is a heavily extractive, resource-intensive economic system with many

adverse environmental consequences, such as the destruction of land and biodiversity, the over-consumption of energy and water, and the release of toxic chemicals and greenhouse gases. The linear economy is, therefore, a major contributor to climate change. The waste associated with the linear economy can be categorized into **four types**.

FIGURE 1 Four types of waste



Wasted resources

Use of material and energy that cannot be effectively restored over time, such as fossil energy and non-recyclable material



Wasted capacity

Products and assets that are not fully used across their useful life



Wasted life cycles

Products reaching the end of life prematurely due to poor design or lack of second-life options



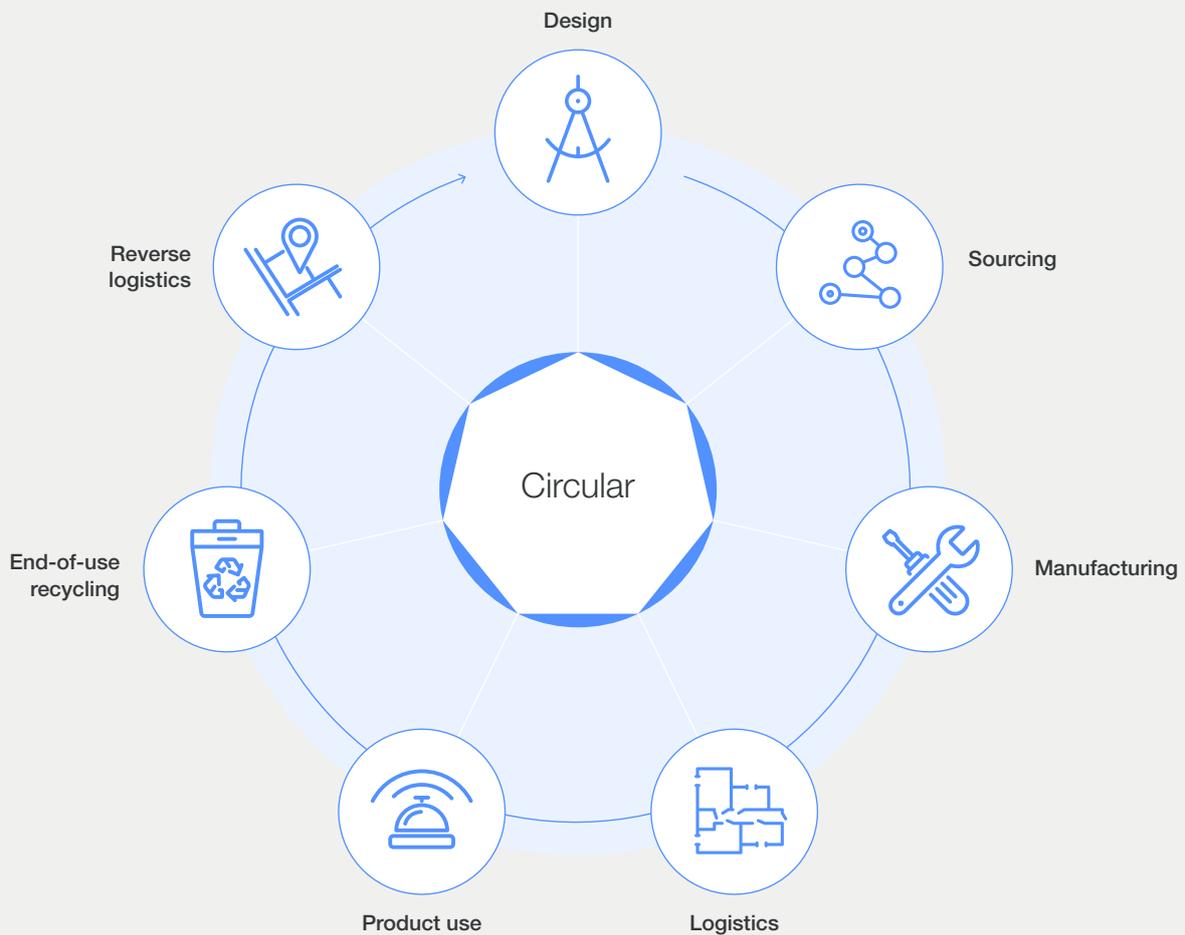
Wasted embedded value

Components, materials and energy not recovered from waste streams

By contrast, the objective of the circular economy is to decouple growth from the consumption of scarce or harmful resources. In a circular system, products are kept in productive use for as long as possible and, at the end of use, they are looped back into the system. The circular economy is a systemic transformation and a mechanism for the protection

and restoration of the environment, including land, biodiversity, oceans and climate. These benefits can be delivered at all stages of the value chain, be it through embedding circular criteria into design to use materials more efficiently or recovering and recirculating resources at end of life.

FIGURE 2 The circular value chain



Source: Lacy, P., Long, J. and Spindler, W., *The Circular Economy Handbook*, Palgrave Macmillan, 2020.

Benefits for my organization

Question for board directors:
How can embracing circularity help my organization reach its net-zero goals and deliver financial benefits?

“ Nearly half (49%) of CEOs are transitioning to circular business models to build supply chain resilience.

Embracing circularity offers multiple benefits for organizations. These include financial value realization, supply chain agility and resilience, and positive environmental impact.

There is a powerful business case for the circular economy; aside from the \$4.5 trillion in value at stake previously noted, there are notable efficiency savings that come with a transition to a circular economy with an estimated \$1 trillion that could be saved in materials by 2025, according to the United Nations Industrial Development Organization (UNIDO).¹⁴ Additionally, consumers have expressed a clear preference for circularity, with 40% strongly considering values-driven attributes in their decision-making.¹⁵ It is important that board directors recognize the financial imperative of the circular economy and encourage management to identify the areas of greatest business value.

The circular economy is also a key lever of supply chain resiliency. By transitioning away from procuring virgin materials, companies are less dependent on volatile supply chains due to resource scarcity. Nearly half of CEOs (49%) are transitioning to circular business models to build supply chain resilience.¹⁶ Indeed, while circular inputs are not immune to supply shortages – for example, demand for recycled PET has at times exceeded supply¹⁷ – many are in abundant supply and will be increasingly so as technologies develop – from lab-grown cotton to clean energy.

Additionally, the environmental benefits of the circular economy extend beyond reducing the extraction of scarce and harmful resources. As noted above, the circular economy is a key mechanism for reducing carbon emissions and enabling the net-zero agenda. The circular economy can reduce carbon emissions in multiple ways, including by reducing emissions resulting from the extraction and production of raw materials, preserving the embodied energy (the energy associated with producing a product or service) through extended use and resource recovery¹⁸ and through the restoration of natural systems leading to increased carbon sequestration.¹⁹

Circularity can be applied as a decarbonization lever across a range of industries, such as in fast-moving consumer goods by designing products that require fewer materials or include circular raw material inputs, in fashion by deploying new business models including re-commerce, rental and repair, or in information and communications technology through the refurbishment and reuse of existing devices and recovery of valuable and critical materials at end of use.²⁰

Therefore, the circular economy boosts value across financial, operational and environmental performance.

3

How to start

Question for board directors:
How can I begin or accelerate my organization's circular journey?

As with any strategic transformation, it is important to set an overarching ambition and vision for a successful circular transition. Clear, measurable KPIs enable companies to track the progress and effectiveness of circularity programmes and business models towards the achievement of net-zero emissions and climate goals.

Define your ambition

An organization's circular KPIs should be quantitative, ambitious and achievable, albeit with significant effort, transformation and investment – and should be based on a thorough analysis of what is viable and addressable. When setting targets, it is important to assess where your organization can have the most material impact, i.e. where the most waste occurs in the value chain and where your organization has the greatest ability to address it. For example, is the design phase of your business where most waste can be prevented? How much of your company's waste lies with the end-consumer or customer and can this be recovered?

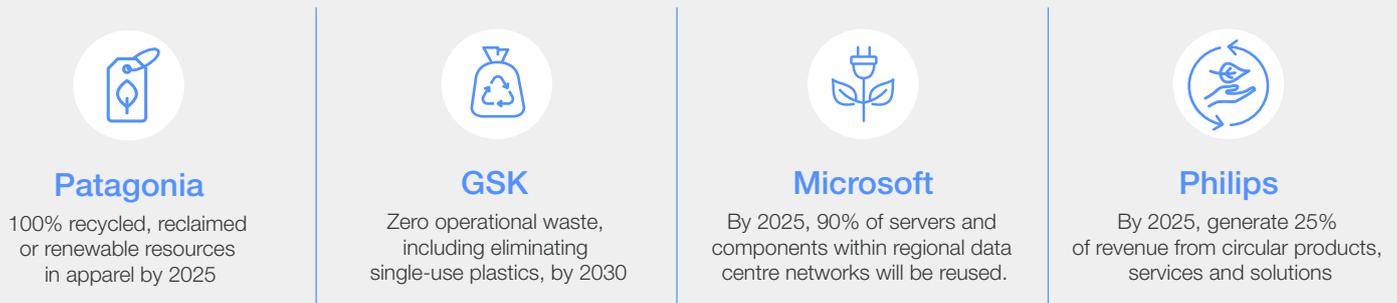
How can your company work with suppliers to be more circular? Or will you have more impact targeting consumer behaviour? It is important for board directors to encourage management to lead this analysis and to use the outputs to inform decision-making at the board level.

To help drive improved circular KPIs, the Circular Economy Indicators Coalition (CEIC), a partnership between the Platform for Accelerating the Circular Economy (PACE) and Circle Economy, supported by Accenture, has published the *Corporate Circular Target-Setting* guidance. The guidance seeks to harmonize the circular target-setting landscape and points companies to useful standards and measurement approaches across four outcome KPIs – Circular Inputs, Operational Waste, Circular Outputs, Circular Revenues.²¹

As the guidance suggests, it is important to prioritize activity across the entire value chain and system; however, a materiality analysis can also inform where to start in your roadmap to define and set your circular KPIs.



FIGURE 3 | Examples of outcome KPIs that span the value chain

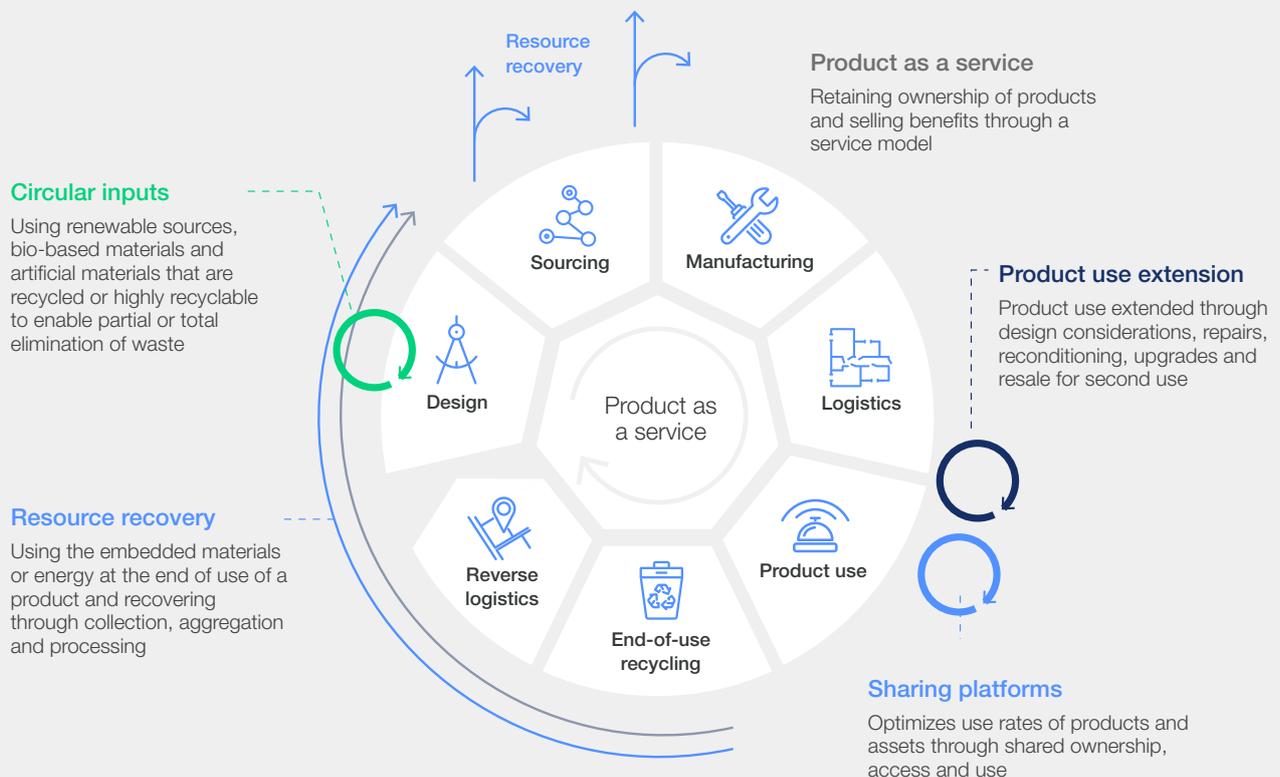


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Adopt circular business models

To activate your circular strategy, there are several crucial business models and enablers to leverage.

FIGURE 4 | Circular business models can be mapped across the value chain

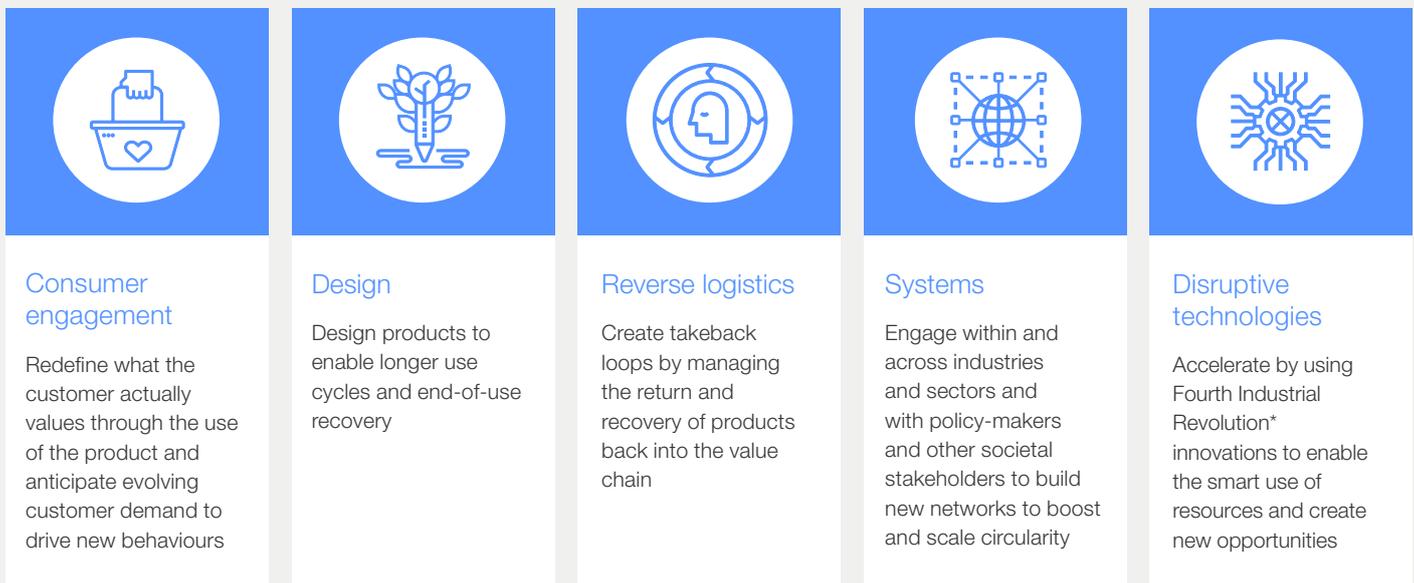


Source: Lacy, P., Long, J. and Spindler, W., *The Circular Economy Handbook*, Palgrave Macmillan, 2020.

Focus on five key enablers

Five key enablers come into play to capture the full potential of the business models and scale adoption.

FIGURE 5 Five key enablers



*The Fourth Industrial Revolution can be characterized by the merging of technologies that blur the boundaries between digital, physical and biological disciplines. (Source: Schwab, K., The Fourth Industrial Revolution: what it means, how to respond, World Economic Forum Agenda blog, 2016, <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>.)

Source: Lacy, P., Long, J. and Spindler, W., *The Circular Economy Handbook*, Palgrave Macmillan, 2020.

Leverage systems-wide partnerships

The circular economy is an agenda that companies cannot pursue alone. The complexities, interdependencies and technical challenges that the transition demands require broad collaboration and partnerships across industry sectors, value chains

and a variety of stakeholder groups. For example, together, companies can develop and share the infrastructure capabilities for reverse logistics and recycling, create secondary marketplaces for waste and industrial symbiosis, support the research required to inform policy that supports the circular transition, and finance the scaling of innovative solutions to key circular challenges – all while sharing the risks and benefits of these investments.

BOX 1

Catena-X: Automotive industry collaboration to drive the circular economy

Catena-X Automotive Network is a collaborative effort to build a scalable data ecosystem for the automotive industry. The focus of this European Union initiative is to develop a standardized and secure global data exchange with stakeholders throughout the end-to-end value chain, including partners, users and suppliers. The ultimate goal is to drive efficiency, sustainability and resiliency along the value chain.²²

On the circular agenda, Catena-X is looking to overcome transparency challenges in circularity data – such as that product life-cycle information tends to only be available locally – and, in response, is working with companies to collect the information required to create a digital product passport. With the availability of specific product data, companies can develop circularity use cases, e.g. in material sourcing, component reuse, remanufacturing or recycling. The initiative fosters collaboration and alignment throughout the value chain to reap trapped circularity value, which a company can hardly leverage alone.²³

4

A circular organization

Question for board directors:
What would embracing circularity look like in my organization?

In addition to having the right partnerships in place, the transition to circular systems depends on how well companies embed it in their DNA. Circular principles need to be part of a company’s vision and mission, accompanied by tangible incentives that motivate people to innovate and deliver on circularity. To optimize the conditions for success, boards need to ensure a well-functioning culture that embraces the circular transformation.

Clear governance and leadership prioritization are crucial to aligning the entire organization on circularity. Accountability for the circular agenda should be cross-organizational; all functions should have KPIs driving them towards the organization’s central circular economy ambition. Reporting lines and governance must reflect this shared mission rather than limiting responsibility to the sustainability function. What might that look like? Consider a chief marketing officer who communicates circular messaging to external stakeholders, a chief financial officer who, as the custodian of ESG data, reports on performance against targets that have been set to deliver circular outcomes (e.g. from installed capacity of renewable power generation, to sales figures from circular business models), and a chief technology officer who deploys the enabling tools that will accelerate circular operations, deliver circular products and enable traceability, transparency and measurement across the value chain.

Circular economy leadership needs to come from the top and extend company-wide. Every leader should understand the holistic nature of circular transformation, its impact on business, and the nuances and trade-offs it may present in decision-making. They must also champion circular transformation and make it a priority throughout the business. This goes hand-in-hand with promoting the agenda in the public realm, among business partners, suppliers and industry peers, to encourage collaboration that drives required systems-wide change. It may be necessary to explore the upskilling of leadership to champion the circular economy and navigate its complexities effectively.

While leaders guide the way forward, the entire workforce should be proficient in the circular economy. Employees should understand their company’s positioning and strategy and be clear on how it impacts their job, regardless of where they sit in the organization – be it strategy, product development and design or the shop floor. Board directors should consider how they can drive the cultural change required and engage with management to ensure effective measures are taken to achieve it through circular economy training programmes and other awareness-raising activities.

BOX 2 Danone: Adopting a circular roadmap

Danone has taken the following steps to embed circularity in the organization:

- Re-envisioned priority resources for the business as “cycles”, reflecting the intention to keep these resources in a looped system and instilling circular terminology;
- Adopted circular KPIs through which select long-term incentives have been established for top management based on delivery against circular economy targets;
- Formed a multilateral alliance with like-minded companies active across the full agricultural value chain to accelerate the adoption of regenerative agriculture practices;²⁴
- Developed partnerships and supported ecosystem investment to accelerate the agenda by strengthening circular infrastructure, particularly in countries without formal collection systems or with higher risk of waste leakage.²⁵

Measurement & reporting

Question for board directors:
What circular economy KPIs should my company be measuring and reporting to monitor progress and evaluate success on net-zero emissions and climate ambitions?

Organizations face mounting pressure from stakeholders for greater transparency on their environmental strategies and progress. At the same time, the regulatory landscape for disclosures is rapidly evolving. In June 2023, the International Sustainability Standards Board (ISSB), which was formed at the UN Climate Change Conference in 2021, issued its first set of global standards for sustainability-related disclosures, integrating sustainability and financial reporting.²⁶

To date, climate-related disclosures have been at the centre of sustainability reporting. Thousands of organizations around the world have adopted disclosure standards and guidelines from the Task Force on Climate-Related Financial Disclosures (TCFD), the International Organization for Standardization (ISO), CDP (formerly the Carbon Disclosure Project), the Global Reporting Initiative (GRI) and others. While there are some circular themes across these guidelines – including for sustainable inputs (e.g. what counts as a recycled input) or waste (e.g. what constitutes waste diverted from disposal) – in general, the imperative for circular measurement and reporting has been less prominent.

However, a notable circular economy measurement and disclosure development is the European Commission's adoption of the updated versions of the European Sustainability Reporting Standards (ESRS). This will make disclosures on resource use and circular economy, when material, mandatory for some 50,000 companies in Europe from 2024, subject to the Corporate Sustainability Reporting Directive (CSRD).²⁷

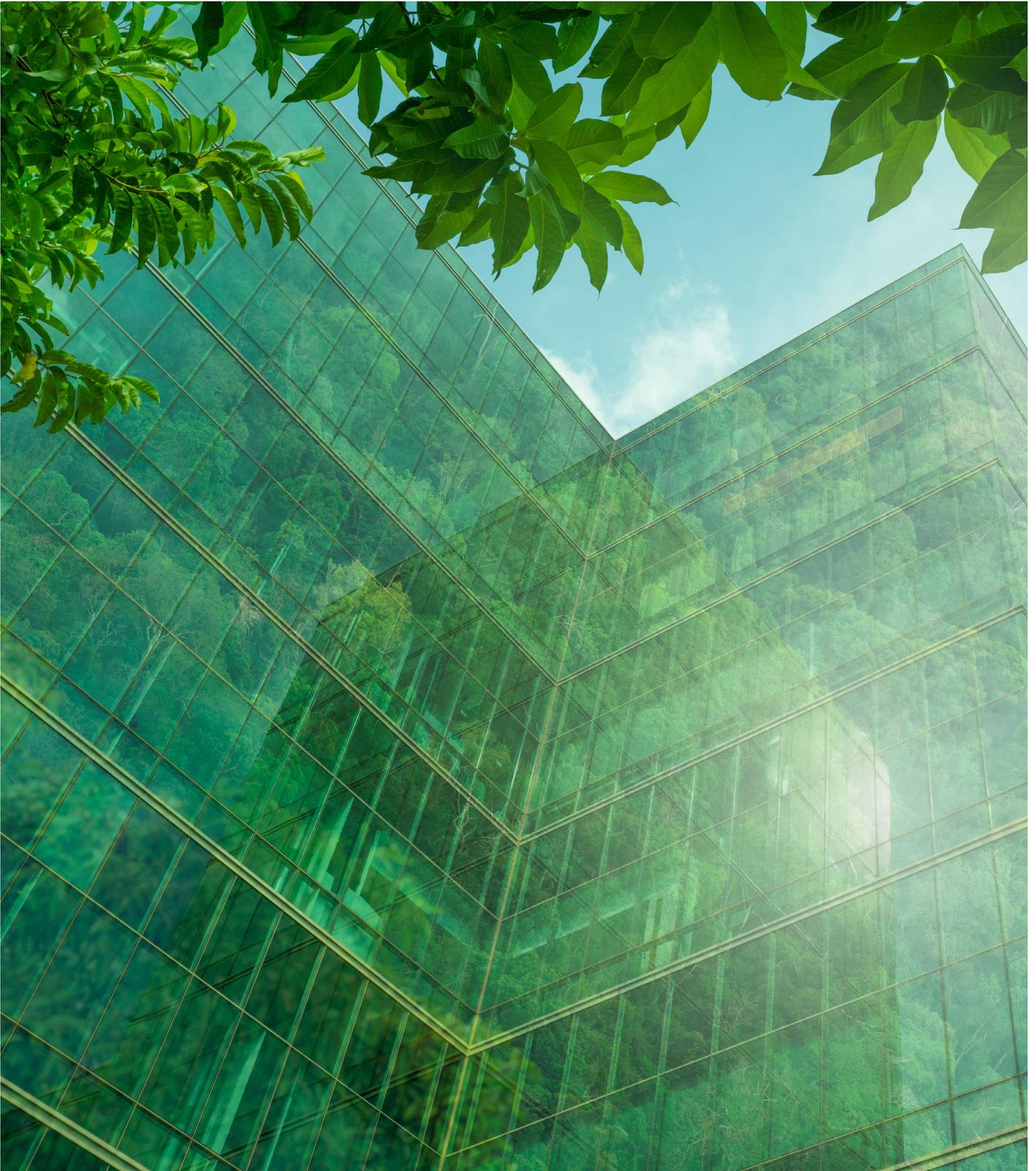
The aforementioned *Corporate Circular Target-Setting* guidance from the CEIC focuses on supporting companies in navigating the evolving circularity metrics and targets space. It includes a consolidated view of metrics and measurement approaches (e.g. the Circular Transition Indicators (CTI), Circulytics), standards (e.g. ISO, GRI, Climate Disclosure Standards Board (CDSB), Cradle to Cradle) and guidance on how to set and scale circular KPIs.

To adhere – and to truly understand and compare circular progress and impact – organizations must have the strategy, frameworks, data and measurement capabilities in place. It is imperative that board directors recognize the importance of these aspects and ensure the right people are positioned within their organization to lead.

Conclusion

Board directors have a critical role in steering their companies towards a circular future that restores natural ecosystems and accelerates the achievement of net-zero emissions. These are not changes that happen overnight; transitioning to a circular economy represents a systemic shift. However, by leveraging the complete circular

economy toolkit, boards can guide their companies to deliver on their strategic climate objectives, starting with setting ambitious circular KPIs and embracing transformation. This way, the circular economy will enable companies to build resiliency in the face of extreme impacts of a changing climate while driving business value.



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