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The right technology can empower data collection, management, and reporting, helping organizations navigate the complex journey toward a more sustainable future

# Integrating sustainability into business strategy

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**M**ultiple factors are driving organizations to prioritize sustainability. Regulations are requiring organizations to meet emissions disclosure requirements. Investors are increasingly incorporating sustainability into decision-making processes. Consumers are demanding environmentally and ethically sustainable products. Employees, particularly millennials and Generation Z, want to work for organizations whose morals and ethics reflect their own. According to the [Deloitte Global 2023 Gen Z and Millennial survey](#), about one in six respondents say they have changed jobs or industries due to climate concerns, with another one-quarter planning to do so.

“In response to stakeholder expectations, we are seeing a shift in businesses taking a more comprehensive view of enterprise value to create value for all stakeholders, including shareholders, customers, employees, society, and environment,” says Clare Nkweto Simmonds, director, global Oracle sustainability leader for Deloitte MCS Limited. Reporting rules and emerging regulations are evolving from boardroom mentions into C-suite priorities.

Discourse around climate change and social justice matters is hardly new: the UN-supported [Principles for Responsible Investment](#), an international network dedicated to incorporation of environmental, social, and governance (ESG) into investment decision-making, boasts nearly 5,000 participating financial institutions. In early 2022, the U.S. Securities and Exchange

## Key takeaways

- 1 ESG data gathering should be done with the same rigor and granularity as financial reporting, using an enterprise-wide system integrated with the business model and strategy.
- 2 Cloud, AI, and automation technologies can help accelerate sustainability, work toward ESG goals, and reach net-zero targets. Use technology infrastructure to source, manage, and report data.
- 3 ESG regulations and business are evolving together; future-proofing is invaluable. Move forward by maximizing existing architecture. Deriving value from sustainability initiatives will require technology, vision, and collaboration.

Commission (SEC) proposed [ground-breaking rules](#) to require public companies to disclose information about their carbon emissions data (Scope 1 and Scope 2), and carbon emissions data from supply chain networks and customers (Scope 3).

As U.S. regulators finalize national emission disclosure requirements, the European Union's [Corporate Sustainability Reporting Directive \(CSRD\)](#) is in effect, requiring nearly 50,000 companies to regularly report on sustainability. At the same time, the [International Sustainability Standards Board \(ISSB\)](#) has now launched global disclosure standards to help guide companies on sustainability disclosures they need to report for global investors and will allow companies

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Remy Bos, Global Sustainability Director, Oracle



and investors to standardize on a single global baseline. “We have to start acting, and we have to start acting now,” says Remy Bos, global sustainability director for Oracle. “New laws and regulations are on the rise, and some have already been implemented,” he says. This calls for careful collection and analysis of vast volumes of data.

“Climate and sustainability initiatives help the planet and drive business value, but not if they increase social inequities in the process. Organizations need to ensure they drive a decarbonization journey, but also ensure that the impact of that decarbonization journey is just and equitable – that it’s a just transition,” Simmonds says.

### Charting a new path

While most organizations agree on the importance of sustainability in businesses, there are plenty of challenges, from managing and reporting on ESG to introducing innovative technologies.

“Organizations need to treat sustainability with the same rigor as they do their finances,” says Bos. Data accessibility and transparency are most critical when it comes to gathering and analyzing ESG data. “In the case of sustainability, ESG data should be measured at a high level of granularity and managed in a centralized system like enterprise resource planning (ERP),” says Bos. As sustainability permeates businesses, he says, ESG principles must “be integrated into the business model and strategy as a whole.”

Integrating sustainability across the enterprise not only requires reimagining ERP systems, but leveraging technologies such as artificial intelligence (AI), cloud, and automation as part of a unified technology platform. Empowered by a combination of innovative tools and leading practices, organizations can tackle the complexities of decarbonization while tapping into competitive advantages and growth opportunities.

### Technology has a part to play

There are several ways cloud technology, AI, and automation technologies can help organizations accelerate sustainability, work toward ESG goals, and reach net-zero targets.

**Generate business value from ESG data:** Organizations require real-time insight and comprehensive visibility into climate data and the ESG impacts of products and operations. Carbon emissions data can guide

## Searching for accurate, useful ESG data

The International Sustainability Standards Board (ISSB) was established in 2021 to create a global standards baseline for sustainability reporting. The board was created by the non-profit International Financial Reporting Standards Foundation (IFRS), an industry group that distributes financial reporting standards.

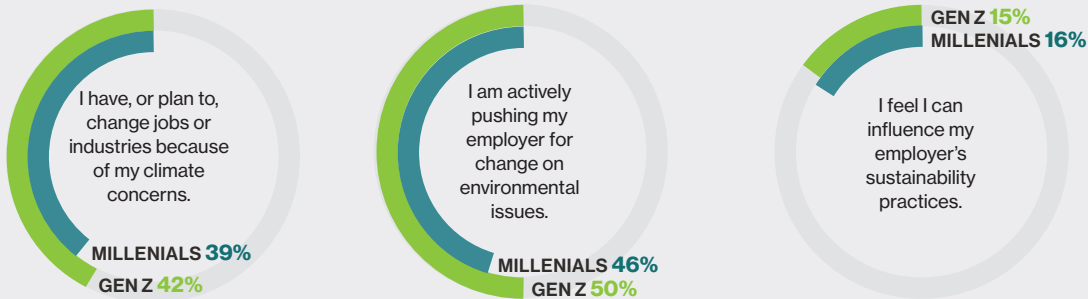
The ISSB was created for global investors and others seeking standardized, reliable, and accurate sustainability data from corporations that are transparent and accountable. ISSB is also creating standards for integrating sustainability reporting into general financial reporting. The standards consolidate various existing frameworks across several industries, geographies, and accounting principles.

These global baselines outlined by the ISSB, intended for investors and companies, may also be used by consumers and government decision-makers. Currently, most ESG data is likely documented in multiple frameworks, which can result in companies and investors using the most favorable versions to portray companies or processes in a more favorable light.

The inaugural ISSB standards were released in June 2023, outlined by the ISSB, intended for use starting in 2024. The standards are designed to be adopted by governments and made into law. Several nations (UK, Canada, Australia, New Zealand, China, Hong Kong, Singapore, Malaysia, Nigeria, and Japan) have expressed an intention to adopt the standards. It has the support of international policy-making bodies such as the International Organization of Securities Commissions (IOSCO), the industry group that regulates the world’s securities and futures markets, the G7, and the G20. The IFRS is also slated to take over monitoring companies for progress with climate-related disclosures from the G20’s Task Force on Climate-related Financial Disclosures (TCFD).



## Gen Z and millennials are factoring ESG into career decisions



Source: Compiled by MIT Technology Review Insights with data from Deloitte, 2023

how a manufacturer overhauls processes to help optimize energy consumption and reduce water consumption and waste disposal. Analyzing employee data can help human resources improve diversity and inclusion, while real-time monitoring of critical systems can enable swift responses to cyberthreats.

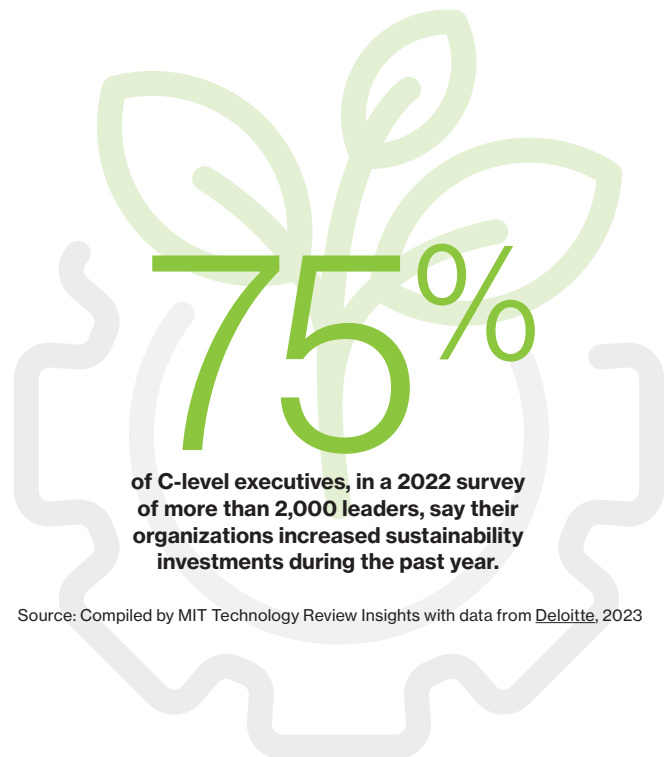
The challenge of sourcing and managing data will likely continue to be a primary focus area for organizations. A cloud application suite offers the capability to synthesize data from various functions of an organization. There are two emerging themes on how companies want to use the data and ESG-focused technology, either as a driver for business outcomes and value creation or to help drive compliance and risk mitigation.

Startups have been some of the first movers in ESG technology; however, the landscape appears to be shifting to larger technology cloud vendors developing tailored ESG solutions, carbon accounting functionality, and leveraging existing capabilities to help embed sustainability into their business models. These functionalities can allow organizations to manage ESG data sets and measure ESG performance, with embedded governance and controls.

**Stay ahead of regulatory standards:** Gathering and calculating emissions data will likely be more challenging as regulators require indirect emissions data from suppliers and downstream partners. Complicating matters is the complexity of ESG data – metrics such as carbon emissions, energy use, diversity, and executive compensation.

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Clare Nkweto Simmonds, Director,  
Global Oracle Sustainability Leader,  
Deloitte MCS Limited



Source: Compiled by MIT Technology Review Insights with data from Deloitte, 2023

Analytics can also help meet reporting requirements by managing data from operations, from corporate travel to information technology (IT) department procurement. “There is a lot of interest in what analytics can do to address data challenges. At the core of it, data remains the biggest problem,” says Simmonds. Companies must be able to source, manage, and report data in a consistent framework, she says. Bos agrees data is at the core: “It’s about the ability to translate what happens in your daily operations, including your upstream and downstream supply chain, into data. Analytics has a role to play in that it can help organizations compartmentalize and segment their CO2 emission calculations for easier accounting,” he says.

**Develop a circular supplier ecosystem:** Circular ecosystems are restorative and regenerative by design. In manufacturing, many organizations must track plastics and metals pulled from expired hardware and recycle and reuse them in new products. In the EU, some products must have a “**product passport**” that discloses its environmental impact. By sharing product information across the entire value chain, passports can help increase transparency across the value chain and encourage businesses to move toward a more circular supplier ecosystem.

“ERP systems are really good at managing this process in terms of what materials are taken out, reused, remanufactured, and put back into new products,” Bos says. Innovative technologies such as AI, blockchain, and Internet of Things (IoT) can offer a secure path to data transparency throughout the supply chain. From there, organizations can determine steps to reduce waste, keep raw materials in use, and ensure more effective resource management, he says.

**Garner investor interest:** Compliance with ESG frameworks is one of the fundamental expectations for organizations that want to attract and maintain investors. Savvy organizations leverage cloud application technology and analytics to help integrate carbon planning into financial planning, capturing emissions data for ESG reporting and decision-making. They also update technology systems to better help measure and track ESG performance, adopting a governance model that holds every function accountable and embeds sustainability into business models and overall strategy.

## Practices for sustainability success

Technology can be one step along the path to sustainability. Practices around people and processes are equally critical.

**Cross-functional collaboration:** Technology teams are critical to gathering, integrating, and analyzing ESG data, but teams can’t work in isolation. Collaboration across functions, with accountable leadership, will be critical. Leaders should find new business models that help emphasize environmental and social responsibility. Remy Bos, global sustainability director for Oracle, says, “IT and business have to work together to come up with ideas and determine how to measure ESG performance.”

**Establish an ESG culture:** “ESG touches the whole organization,” says Clare Nkewto Simmonds, director, global Oracle sustainability leader, Deloitte MCS Limited, “and establishing ownership and accountability is a challenge.” Research indicates that organizations so far are slow to hold the C-suite accountable for sustainability, and even slower to act: a [2023 Deloitte global research survey of CXOs](#) found that 33% are tying senior leaders’ compensation to environmental sustainability performance and 32% are incorporating climate considerations into lobbying and political decisions.

“The time has come for sustainability to have a seat at the table, just like finance,” Bos says. Responsibility should not fall solely to chief sustainability officers. ESG’s complexity means “every individual needs to understand what their responsibility is and must feed into that sustainability agenda,” he says.

**Future-proof ESG:** Today’s strategies may become obsolete. Businesses have the opportunity to “leverage their planning and forecasting systems and link financial performance with the emissions and biodiversity impact of relevant initiatives, to not only understand where they are today but where they want to be tomorrow, providing them with the flexibility to respond to what is coming,” Simmonds says. Predictive analytics can model these initiatives, she says, from migrating data to the cloud to reduce energy consumption, to the social consequences of a circular economy.

## Building toward future success

A large-scale cloud platform can be a powerful engine for a unified view of an organization, from emissions to workforce diversity. It can help gain product and process-level insights into ESG performance and chart progress toward net-zero. Obstacles around leadership, accountability, and regulatory requirements abound. However, the right technology can be a catalyst for enabling decision-making and transformative sustainability.

ESG regulations and business are evolving together; and future proofing is invaluable. Simmonds advises moving forward by maximizing existing architecture. “If you’ve recently invested in a transformation, it’s a great moment to think about how you can maximize the value of your investment and leverage those new tools to start to respond to sustainability requirements,” she says.

“Organizations can’t drive change solely on their own,” Simmonds says. There are costs, and businesses and society must cooperate to move forward, she says. Deriving value from sustainability initiatives will likely require technology, vision, and collaboration.

“The most exciting and fascinating thing about sustainability is the scale of collaboration that will be required within organizations, within industries, within nations, and across nations,” she says.

## Companies are integrating ESG into the whole enterprise

Analyst firm IDC, in its **2022 Future of Trust predictions**, sees ESG reporting gaining increasing importance across the enterprise. Among its top predictions:



By 2024, 30% of organizations will derive sustainably driven cost and competitive advantages from ESG data collection.

By 2026, 40% of organizations will use compliance-as-a-service tools to meet regulatory requirements.



By 2024, 75% of large enterprises firms will implement purpose-specific ESG data management and reporting software.

Source: Compiled by MIT Technology Review Insights with data from [IDC](#), 2023



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