

Beyond checking the box

How to create business value with embedded sustainability



How IBM can help

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Key takeaways

Organizations that embed sustainability are more exacting—53% say business benefits are essential for justifying sustainability investments.

Are we hitting targets but missing the point?

Spending on sustainability reporting exceeds spending on sustainability innovation by 43%. Many organizations are approaching sustainability as an accounting or reporting exercise rather than a transformation play.

"Doing sustainability" does not equate to being more sustainable.

But organizations that embed sustainability throughout their operations show better sustainability and financial outcomes. They are 52% more likely to outperform their peers on profitability, with a 16% higher rate of revenue growth.

Tying sustainability to business value is key.

53% of organizations that embed sustainability say that business benefits are essential for justifying sustainability investments. And only 17% say meeting sustainability objectives is in itself sufficient to justify investment.

Introduction

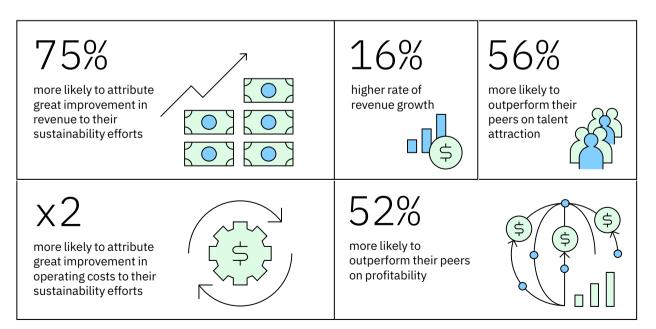
Why isn't sustainability generating more impact for organizations? After years "doing sustainability," most enterprises haven't produced the desired outcomes. Almost half of all organizations in a recent IBM Institute for Business Value (IBM IBV) survey still struggle to fund sustainability investments, and six in 10 executives say they have to make trade-offs between financial and sustainability outcomes.

The hard truth many C-suite executives are grappling with is that "doing sustainability"—as most enterprises have—does not equate to actually being more sustainable. It appears we have to end sustainability as we know it, to make way for a new model that delivers positive sustainable impacts and positive financial results.

Based on our survey of 5,000 C-suite executives across 22 industries and 22 countries, IBM's IBV analysis shows that if organizations flip the way they operationalize sustainability, they can significantly increase business value.¹ The key is to embed sustainability throughout the business—truly bake it into operations—rather than treat it as an add-on.

FIGURE 1

Embedders are seeing business value



The sustainability disconnect

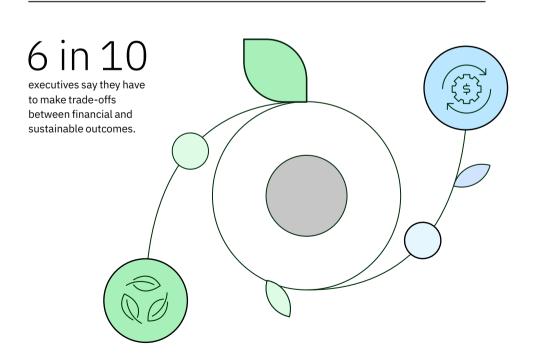
Executives in our study see the value in sustainability: 76% say that sustainability is central to their business strategy, 75% that it drives better business results, and 72% that it can be a revenue enabler rather than a cost center. Yet, despite these views, only 31% of organizations report they are incorporating sustainability data and insights into operational improvements to a great extent, and a mere 14% do so with innovation initiatives.

The disconnect is unfortunate, but it's also an opportunity. We've typically seen a significant gap between sustainability ambition and action. In contrast, now nearly one-third (30%) of executives say they have made significant progress in executing their sustainability strategy—up from just 10% a year ago.² While this is a dramatic jump, it is also a telling indication of how the remaining 70% are falling short.

In this report, we'll discuss what it takes to move from "doing sustainability" to unlocking sustainability's potential.

Part One will outline the advantages of embedding sustainability throughout an organization, and what "Embedders" are doing differently to distinguish themselves—including three things about Embedders that may surprise you. For these leading organizations, the idea of embedding or integrating sustainability into operations will not be new. Indeed, some of them have been pursuing this path for years and are successfully converting these efforts into business value. But our research shows that most organizations have a lot of ground to cover in moving toward an embedded approach to sustainability.

Part Two delves into three key sustainability business challenges that C-suite leaders tell us they're facing and how to address them, along with real-world examples of companies that have navigated the transition successfully.



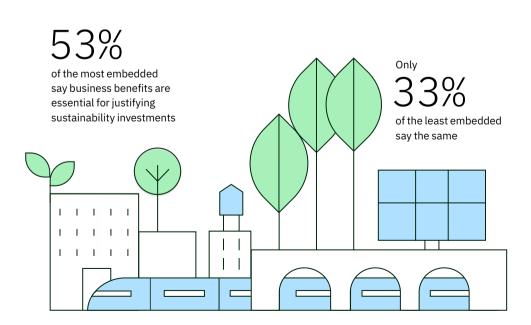
What embedding sustainability looks like

When you embed sustainability, it becomes a business transformation accelerant versus what it is in so many organizations—a reporting or accounting exercise.

Case in point: according to our research, spending on sustainability reporting exceeds spending on sustainability innovation by 43%. A majority of organizations approach sustainability as something they report on for government compliance or to appease consumers and shareholders. Many organizations are scrambling to handle so many varying, changing reporting requirements around the globe that compliance, rather than real business value and results, becomes their focus.

Becoming more sustainable—rather than merely doing sustainability—entails a shift toward embedding sustainability across the enterprise and making it a core part of all the activities that add up to long-term value creation. Interestingly, Embedders are actually more exacting than other organizations on tying sustainability to business value; 53% of these organizations say that business benefits are essential for justifying sustainability investments. And only 17% say meeting sustainability objectives is in itself sufficient to justify investment .

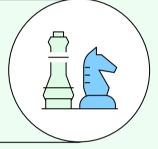
Embedded sustainability means breaking sustainability out of its functional silo and integrating it across every business unit, in particular the core functions and workflows. That will help make sustainability part of the corporate DNA and ways of working.

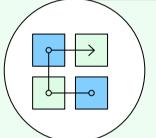


More specifically, C-suite teams can achieve embedded sustainability by driving it deeper into the enterprise through four levels, starting with strategy through to workflows and people in the organization down to decisions (see Figure). The deeper sustainability is embedded throughout the enterprise, the more sustainability becomes part of the core business and the greater the value achieved. Take procurement as an example. If sustainability metrics and criteria are embedded as part of how you make procurement decisions-whether it's the suppliers you choose to engage with or the products and services you purchase—you can couple greater sustainability with improved business outcomes in your supply chain. With more information and data from your suppliers on their sustainability performance and the challenges they face, you can collaborate on joint solutions for efficiency and reduced environmental impact.

Embedding sustainability deeper into the organization...

Strategy Align sustainability with business strategy





Workflows

Incorporate sustainability into core workflows and processes

Organization

Enable action through clearly defined roles and responsibilities



Decisions

Include sustainability considerations, data, and metrics in key business decisions

...drives greater impact

Three things about Embedders that may surprise you



1. They don't spend more "on sustainability."

Embedders aren't buoyed by big sustainability budgets. Instead, they incorporate sustainability data and insights broadly, into other spending and investment decisions. In fact, organizations that embed sustainability spend slightly less on dedicated sustainability efforts as a share of their revenue compared to organizations that don't embed. Yet they incorporate sustainability considerations, data, and insights in 22% more of their operational decisions.



2. They don't "do" more sustainability.

Embedded sustainability does not involve larger or more plentiful sustainabilityfocused efforts and programs. Rather, these organizations incorporate sustainability into their core operations and transformation efforts. In fact, they are 90% more likely to incorporate sustainability factors into their innovation activities and 60% more likely to include them in automation activities.



3. They don't approach sustainability as something special.

Organizations that embed sustainability are far more likely to follow the money, rather than treat sustainability as a special case with an elevated position that justifies itself. For these organizations, sustainability is about long-term business value.

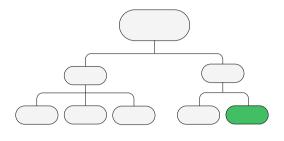
Organizations that embed sustainability more deeply into their operations perform better financially and on sustainability. And they are more likely to attribute a positive impact from their sustainability efforts to improved performance. For example, improving the lifetime of physical assets through better enterprise asset management and maintenance is key to improved business performance for asset-intensive organizations. But such operational improvements also translate into better sustainability outcomes. (See case study, "Keeping passenger trains running efficiently while reducing energy consumption" on page 8.)

FIGURE 2

From doing sustainability to being sustainable

Three ways to approach sustainability.

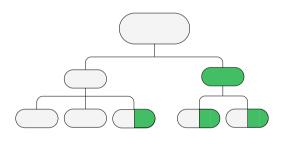
Only one works for real business value.



Compliance focus

Defensive and reactive to compliance requirements

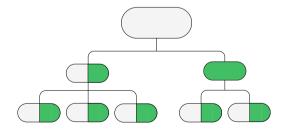
- Focus on reporting and avoiding reputational risks
- Capacity and competence bottlenecks inhibit real action



Sustainability as a "project"

Initiating sustainability improvements, minimizing reputational risks, and complying with legislation

- "Corporate Sustainability" department reports to the C-level, with a task force including members from business units and central functions
- Partial integration into the company



Embedded sustainability

Anchoring sustainability in the overall strategy, achieving business and sustainability outcomes

- Permanent integration of sustainability into the existing corporate governance framework
- Central management, standard setting and group-wide coordination, ensuring that group-wide perspectives are covered in the business units

Case study

Keeping passenger trains running efficiently while reducing energy consumption

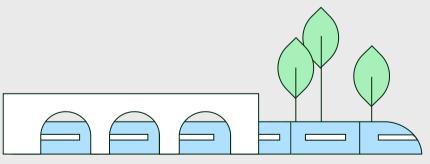
Millions of travelers in Australia choose light and heavy rail systems to get them where they need to go. For over 100 years, the Downer Group has focused on building those passenger trains and keeping them moving and in service. But now, they've added through-life support to their repertoire, which means conducting all the maintenance work for the trains across a span of usually 25–30 years. This has given them an opportunity to impact sustainability, particularly when it comes to energy consumption.³

Each day, Downer puts several hundred trains into service across every major city in Australia. Alongside ongoing management of the trains, there is an expectation to help create a more sustainable transportation network.

To help not only improve sustainability but also business performance, Downer created its TrainDNA rollingstock asset management platform. This platform harnesses complex analytics and near real-time data to support predictive maintenance efforts for more than 200 trains across Australia—providing not only a boost to business efficiency but also to sustainability. For example, they've seen a 51% increase in the reliability of the fleet.

Downer is enhancing the abilities of TrainDNA to focus on reducing energy consumption. Through a better understanding of which rail systems are using the most energy—how they need to respond throughout the day as the weather and passenger demands change— Downer can optimize use and get a better outcome for both the business and customers.

The company is figuring out how to better monitor and control equipment to ascertain if, for example, it should adjust the air conditioning or balance the energy load or the traction controls—major power draws—in real time based on the number of passengers. Even small incremental energy savings in these areas can have a huge impact on the carbon footprint for the whole network—and for the whole country.



increase in reliability of

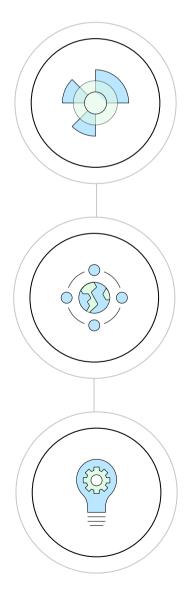
the train fleet due to predictive maintenance



3 key challenges to sustainable business value

While embedding sustainability into operations clearly yields improved results, that doesn't make it simple. As with any transformative opportunity, there are complications to manage. But by looking at those doing it right—and digging into what they do differently—a roadmap emerges for others to follow.

In this section we will explore three key challenges that organizations need to address to embed sustainability in a way that generates business value. With each challenge, we will unpack the obstacles, share how Embedders approach them distinctively, and provide an action guide for any organization to put the lessons to work.



1. The data usability challenge

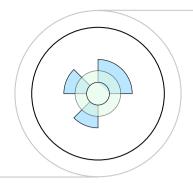
Ensuring sustainability data is sourced, used, and converted into actionable insights.

2. The business integration challenge

Integrating sustainability data and insights into processes, decisions, and ways of working. Extending integration of sustainability efforts beyond the organization and working with ecosystem partners.

3. The people, skills, and decision-making challenge

Creating appropriate governance and an organizational structure so that decisions are made at the right levels to drive sustainability across teams and functions.



Challenge 1

Data usability

Insights buried in disparate data dumps

Executives recognize the importance of data to achieving sustainability objectives; 82% agree that high-quality data and transparency are necessary to succeed. Yet, despite recognizing the link between data and sustainability success, only about four in 10 organizations can automatically source sustainability data from core systems such as ERP, enterprise asset management, CRM, energy management, and facilities management. And a similar share of organizations are able to integrate sustainability insights for decision-making when using these same core systems.

The adage "if you can't measure it, you can't manage it" applies here but taken a step further. Meaning, if you can't even access the data that paints the picture of sustainability throughout the organization, no course of action presents itself based on real-world operations and metrics.

The other main consideration is that it's not necessarily the volume of data that is helpful—it's how the data that organizations can collect is used. Developing sustainability data insights, incorporating them into operations, and continuous monitoring make a positive difference for business value. In short, it's what you do with it that matters.

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Perspective

Generative AI

Generative AI can be a game changer for data-driven sustainability, enabling organizations to turn trade-offs into win-wins, identify improvement opportunities, and drive innovation at speed and scale. And 64% of executives agree that generative AI will be important for their sustainability efforts, while 73% say they plan to increase their investment in generative AI for sustainability.

Embedders' top 5 most important areas when using generative AI for sustainability



Embedders are 191% more likely to have greatly aligned their data and sustainability strategies.

What do Embedders do differently with data?



Data foundations

Organizations that have embedded sustainability are 191% more likely to have greatly aligned their data and sustainability strategies. And they are 130% more likely to have sourced sustainability data from across the enterprise. For example, by sourcing relevant sustainability data from core systems such as ERP, CRM, enterprise asset management, and energy management systems, organizations can have greater and more timely visibility into where action is needed and improvements possible.



Data governance

Embedders are 72% more likely to have ensured the security of sustainability data. They're also 63% more likely to have established consistent definitions of sustainability metrics, which creates a common language for driving and communicating sustainability insights. These core governance capabilities underpin trust in the data—trust that is critical for the reliable use of that data in strategic and operational decisions.



Data catalysts

You've probably heard the analogy of data as fuel. Just like fuel, it requires powerful systems to optimize performance. Organizations that embed sustainability are 59% more likely to be using hybrid cloud for sustainability to a great extent, enabling them to integrate data and facilitate interoperability and collaboration from across their enterprise, whether the data resides in public clouds, private clouds, or on premises. Indeed, many of them explicitly make sustainability a part of their overall cloud and digital strategies. They are also 80% more likely to be tapping the potential of AI to convert data into actionable insights and are 36% more likely to strongly agree that they have developed generative AI use cases for sustainability. In fact, AI can be critical for embedding sustainability. For example, in food production, AI-driven weather technology is already assisting some farmers in making environmentally conscious decisions that increase yields while reducing the use of fertilizers. More broadly, AI also has vast potential for resource, land, and water management.

Embedders are better at converting data into sustainability benefits

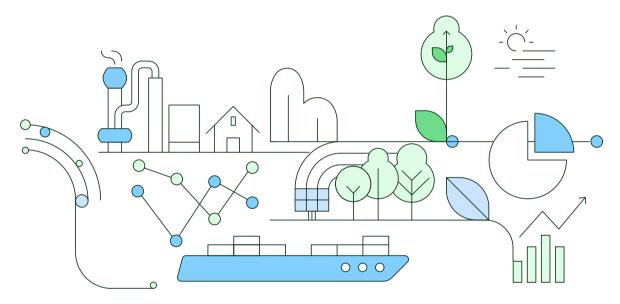
83%

more likely to achieve great benefits to sustainable innovation and product/services development from their data capabilities

44%

more likely to achieve great benefits to reduced energy consumption from their data capabilities 40%

more likely to achieve great benefits to sustainable supply chains from their data capabilities



Case in point: Wintershall Dea—one of Europe's leading independent gas and oil companies headquartered in Germany—has already started to expand their business mode and invest in CCS and hydrogen projects, which is central to reduce GHG emission. In their transformation from an oil producer to a carbon management company, they've created Generative AI-based tools for better and faster (30%–40%) evaluation of whether certain areas can be used for Carbon Capture & Storage (CCS) projects safely and profitably, and to expedite 'License to Operate' approvals.⁴

Case study

Data management helps create sustainability at scale

Steve Ford, Head of Sustainability at GPT Group, a diversified property group listed on the Australian Securities Exchange (ASX), has been surprised to see the broad range of environmental, social, and governance (ESG) data management processes where many companies continue to manage data through, "a bunch of spreadsheets, PDFs, and unlinked documents."⁵

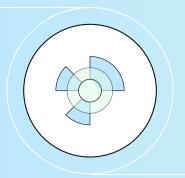
This is in stark contrast to the highly automated mechanisms Ford and his team have deployed for ESG data management for over a decade now. But it wasn't always this way. Roughly a decade ago, GPT teams' use of spreadsheets and manual tools to manage data related to energy, water, waste and emissions was becoming untenable. Standalone legacy systems stonewalled the reconciliation of non-financial sustainability data. ESG reporting was becoming onerous.

Since employing an ESG suite to streamline ESG data management, things have changed for the better. Ford explains: "I have 120 assets to deal with and not enough time to go looking for things that are wrong. Most people might only know they have a gap in their data when something goes wrong, whereas with [IBM] Envizi,™ I run a missing data report and I know exactly where the gaps are...."

In 2021, GPT delivered an 82% reduction in emissions on its 2005 baseline. For GPT, finance-grade data hasn't just enabled smarter decisions in emissions reductions and energy efficiency, but also across related disciplines such as procurement. "If I was chasing data all the time, I would not have time to be strategic in my procurement. A number of my counterparts have massive cost exposure because of that," Ford says.

In a bid to quantify these flow-on effects, Ford's team recently crunched some numbers. "We found that if you took away our efficiency improvements and our procurement savings, it would amount to a nearly \$50 million increase annually in our energy cost. This means we would be spending around three times as much for our energy, and energy is the second biggest cost to our business," says Ford.

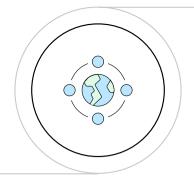
In 2021, GPT delivered an 82% reduction in emissions on its 2005 baseline.



Action guide Data usability

Navigating the data usability challenge

- Start with the data you have. Ascertain what sustainability data exists within your enterprise, where it resides, and how it can be used to inform decision-making. Don't make inadequate data an excuse for inaction.
- Align your sustainability and enterprise data strategies with a view to put in place the required data sourcing, integration, governance, and catalysts to enable progress.
- Work toward a sustainability data fabric across the enterprise to enable data to flow where needed for insight and action. It can enable you to optimize the potential of your sustainability data, foster data sharing, and accelerate data initiatives.
- Establish data governance principles with ecosystem partners to allow for shared data and co-creation of innovative initiatives.
- Tap hybrid cloud, AI, and generative AI to scale the value and impact of your data, accelerate innovation, and enable insightdriven decision-making.



Challenge 2

Business integration

Focusing on workflows with greatest impact

Integrating sustainability data and insights into core operations creates a foundation for better business sustainability outcomes. While some organizations are taking rudimentary or partial steps to integrate sustainability into various parts of their organization, full integration of sustainability into core business functions and operations is limited. Interestingly, though, executives expect a rapid increase in the level of integration over the next three years.



Sustainability integration in the organization

○ Today ○ 2026

+73% +132% +31% +34% +105%+55%+82% +115%50% \cap 45% 40% 30% 25% 15% 10% 5% 0% Operations Enterprise Procurement Customer Finance Supply chain Information Energy and engagement technology asset management manufacturing management

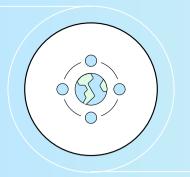
Embedders are 93% more likely to be cocreating generative AI sustainability capabilities with their partners.

IT is one of the functions with the highest level of sustainability integration today. This is perhaps unsurprising since "greening IT" offers many win-win opportunities for achieving cost efficiencies and reduced environmental impact. For example, with a hybrid cloud platform, it is possible to reduce energy use and costs through optimized workloads and data across an organization's multiple cloud environments—whether it be public clouds, private clouds, or on premises. This can drive reduced costs and lower energy and resource consumption.

Each organization must understand where it can have the biggest material impact for the business and the environment. And organizations that embed sustainability excel at this. In fact, they are three times more likely to strongly agree that they are targeting sustainability efforts at the functions, entities, and activities with greatest impact.

More specifically, sustainability must be embedded across the enterprise in the workflows that have the greatest impact. Organizations that successfully embed sustainability do just that: they're 79% more likely to create sustainable workflows across traditional process silos. Take the order-to-cash workflow as an example. This cuts across several functions and processes, such as sales, distribution, inventory management, and customer engagement. To make the workflow more sustainable and efficient, organizations can leverage AI-infused process mining to discover, analyze, and pinpoint hot spots for improvement across business processes based on event logs and IT data. Through task mining—the analysis of human actions and "clicks" to identify the most frequent tasks—they can obtain a comprehensive set of insights to strategically transform operations and drive automation strategies. These insights can, in turn, drive sustainability improvements, business efficiencies, and increased ROI.

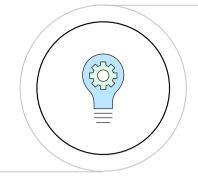
But Embedders don't stop at their own walls. Rather than worry about weakening their competitive position as a result of being a first-mover on sustainability, they enhance business value through shared sustainability efforts with their ecosystem. They create common open sustainability standards and definitions to help ensure a shared language for cooperation. Based on these standards, they can create a set of common sustainability capabilities with partners and tap the latest innovations and technologies. For example, Embedders are 93% more likely to be cocreating generative AI sustainability capabilities with their partners.



Action guide Business integration

Navigating the business integration challenge

- Extend sustainability beyond the sustainability function and play offense on sustainability across the enterprise.
- Identify workflows, functions, and assets with the biggest sustainability impact as well as potential quick wins. Create a roadmap of improvement opportunities for short, medium, and longer term.
- Drive changes to core processes and functions that yield real impact.
 Don't limit action to tinkering at the edges.
- Find the money, get the money, keep the money. Use quick wins to unlock rapid value. Reinvest savings in the next phase of initiatives and unlock larger value pools. This makes sustainability a self-financing transformation initiative.
- Incorporate sustainability as part of key operational improvement and transformation initiatives that drive top- and bottom-line growth.



Challenge 3

People, skills, and decision-making

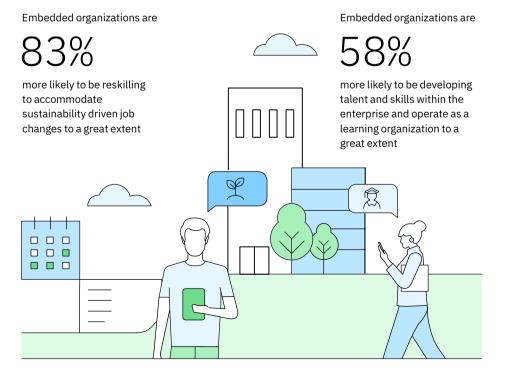
People and skills

Successful large-scale transformations have empowered, engaged people at the center. Leaders can't "make" a transformation happen—that takes teams who want to see it so. A major part of team empowerment and transformation is skill building; the C-suite executives in our survey cited a lack of sustainability skills as the top barrier to sustainability progress.

As with the first two challenges, embedders are proving up to the task. They ensure their sustainability efforts are supported by reskilling and talent development.

Decision-making

With the right skills, people then need to be empowered with the required data and insights to incorporate sustainability in their decisions. And they need to have the decision rights to act where it matters. Sustainability should have clear guardrails and direction from the top but be activated throughout the organization from the bottom-up. In fact, to embed sustainability, people across the enterprise should be encouraged to integrate sustainability into their day-to-day tasks and decisions.



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Case study

Integrated SAP helps enable lower carbon footprint

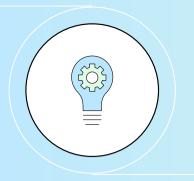
Neste is a market leader in renewable diesel, sustainable aviation fuel, and renewable polymers and chemicals, based in Finland. As a downstream operator, Neste's biggest impact on sustainability comes from its sourcing strategy; that is, where it gets the resource inputs that go into its refining operations. Under the conventional refining model, operators make their finished fuel products from the crude oil and gas extracted through traditional upstream operations: namely drilling. Apart from technical issues, where those supply chain inputs—or feedstocks—come from doesn't matter much to refiners. It all turns into the fuel for cars, planes and many, many more things that burn it, thereby adding net-new carbon to the global environment in the process.

What sets Neste apart is its focus on renewable fuels, which are created from renewable feedstocks, a broad range of waste residues such as used restaurant cooking oil and animal fat. The fact that renewable fuels are derived from renewable sources means they don't add anywhere near the carbon as traditionally sourced fuels. And that makes them increasingly attractive to fleet-owning customers such as airlines and transport companies that see renewable fuels which perform just as well as standard fuels—as a way to quickly and sharply shrink their carbon footprint.

When it decided to focus on renewables, it was a sea change for the company: "The supply chain for renewable products is quite different from that of the traditional oil business. It was in many ways a new kind of business, and we needed a new foundation to build it on," explains Marko Mäki-Ullakko, Head of Integrated ERP, Neste.⁶

The company decided to do this with an integrated SAP S/4HANA® solution. The end-to-end visibility provided by integrated SAP has helped improve the company's agility in terms of finding and incorporating new feedstock sources into its refining process. And that, in turn, has helped Neste increase its renewables production capacity, which is expected to reach 6.8 million tons by the end of 2026.⁷ At present, more than 90% of Neste's total renewable raw material inputs come from waste and residue products, and all of its renewables refineries are capable of running on 100% waste and residue raw materials.⁸

More than 90% of Neste's total renewable raw material inputs come from waste and residue products, and all of its renewables refineries are capable of running on 100% waste and residue raw materials.



Action guide People, skills, and decision-making

Navigating the people, skills, and decision-making challenge

- Make skills and talent development a central part of your sustainability journey, not an afterthought.
- Identify skills needs and bridge any existing and anticipated future skills gaps either through internal efforts or by tapping your ecosystem of partners.
- Allocate decision rights on sustainability to the appropriate levels of the organization to drive maximum impact. Don't centralize all decision-making at the top.
- Democratize access to sustainability insights across the organization and make relevant data accessible where needed.
- Embed sustainability considerations and metrics in key strategic and operational decisions.
- Ensure sustainability is addressed within your ecosystem by making it a topic of discussion when other strategic ecosystem elements are decided.



Bringing it all together: The Chief Sustainability Officer as change agent

Sustainability responsibilities often were dispersed across the C-suite or led by the CEO. Now, though, the Chief Sustainability Officer (CSO) is emerging as a more prominent and clearly defined leader in many organizations.

Increasingly responsible for sustainability strategy, execution, and performance, the successful CSO must become an orchestrator of change across the enterprise rather than run a specific sustainability function/ program. This operational approach is key to embedding sustainability into the business.

No longer a one-off or an island, sustainability run by CSO-as-orchestrator brings its own implication—the ability to influence spend across the organization will be more important than the actual sustainability budget. To do so, the CSO needs to be able to engage effectively with other C-suite members, understand how sustainability can become part of their agenda, and speak their language, whether it's the CFO, CIO, COO, CPO, CSCO, or the CEO.

Sustainability run by CSO-as-orchestrator brings its own implication—the ability to influence spend across the organization will be more important than the actual sustainability budget.

The CSO comes of age

The redefined role of the CSO is happening as enterprises are at a critical inflection point on their sustainability journey. In the increasingly disruptive, complex world C-suites must navigate, one crisis seems to follow the next and sustainability can easily be sidetracked as other priorities take precedence. But while each disruption may appear as its own discrete challenge, they share common threads. To successfully navigate one challenge, you must understand how it connects to others. Sustainability is thus part of a greater evolving fabric of elevated risk and uncertainty. The route to future business value can't circumnavigate or sideline sustainability. It has to be embedded.

FIGURE 4

The CSO is now the go-to in all major sustainability areas



It's time to move from "doing" sustainability to embedding sustainability as a core part of the business. It's good for the world and for business value.

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Notes and sources

- 1 All data in this paper is from a recent survey conducted by IBM Institute for Business Value in collaboration with Oxford Economics of 5,000 executives across 22 industries and 22 countries conducted in the second half of 2023. In addition to descriptive analysis, the data from the respondents was analyzed to allow for a segmentation of the sample according to how embedded sustainability is in the enterprise. Based on this segmentation, analysis was conducted on differences in sustainability and business outcomes, operational practices and approaches to enabling progress on sustainability.
- 2 Biswas, Arun, Elisabeth Goos, and Jacob Dencik. *The ESG data conundrum*. IBM Institute for Business Value. April, 2023. https://ibm.co/esg-data-conundrum
- 3 "Predictive maintenance. Predictable trains." IBM. Accessed on February 21, 2024. https://www.ibm. com/case-studies/downer
- 4 "Drilling into data to transform the oil and gas industry." IBM. Accessed on February 21, 2024. https://www.ibm.com/case-studies/wintershall-dea
- 5 "Sustainability at scale, accelerated by data." IBM. Accessed on February 21, 2024. https://www.ibm. com/case-studies/gpt-group
- 6 "A flexible supply chain produces more renewable fuels." IBM. Accessed on February 21, 2024. https:// www.ibm.com/case-studies/neste
- 7 Ibid.
- 8 Ibid.

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