

ESG Data Insights:

How your ERP accelerates purpose and profit



This information is for you if you:

- Need guidance on how to collect, manage, and report ESG data effectively.
- Are a CFO, COO, or CSCO responsible for making sustainability-related decisions.
- Want to hear examples of companies successfully implementing sustainable practices and technologies.



Introduction

Business leaders are under increasing pressure to track and report on their progress toward meeting sustainability and social responsibility goals, which fall under environmental, social, and governance (ESG) priorities.

However, there is currently no consensus on how to proceed. While new regulations may eventually clarify, decision-makers must navigate this landscape independently.

What does ESG mean?

ESG stands for Environmental, Social, and Governance. It's a set of criteria to evaluate a company's impact on the environment, society, and business management practices. Meeting high ESG standards is a crucial indicator of sustainability and social responsibility.

Effectively using data is crucial for success. By optimizing your ERP systems and data analysis, you can gain valuable insights to refine your ESG strategy, identify impactful actions, and track and communicate progress.

In Europe: Proposed sustainability reporting requirements will affect at least 50,000 entities—potentially including U.S. subsidiaries.¹

In the United States: Newly proposed SEC rules may require publicly traded companies to disclose:

- **Greenhouse gas emissions.**
- **Climate-related risks material to their businesses, including drought, wildfire, and market shifts.**
- **Climate goals and transition plans.**²

U.S. Environmental disclosures more than **doubled** from 2021 to 2022.³

73% of investors say sustainability reporting affects their investment decisions.

Decarbonization has the potential to drive growth, income, and job creation across the world. A report by Deloitte forecasted that climate action could deliver \$43 trillion to the global economy by 2070.⁴



Tackling the ESG data challenge

ESG performance has become vital for a company's long-term success due to increasing demands from investors, regulators, and customers. Robust data and analytics are necessary for companies to track progress, drive change, and communicate with stakeholders. However, improving your data landscape to meet these needs can be time-consuming in this rapidly evolving field.

This e-book explores some of the challenges around ESG data and how to begin solving them, including examples from the experiences of Microsoft and other organizations. With the right approach, you can use data to build trust, manage risks, and capture sustainability and social responsibility opportunities.

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4 challenges of ESG reporting for the C Suite

Chief Financial Officers (CFOs), Chief Operating Officers (COOs), and Chief Supply Chain Officers (CSCOs) face complex challenges when it comes to managing and reporting on ESG impacts.

To navigate this landscape successfully, executives in these roles must consider changing regulations, evolving consumer preferences, and heightened public scrutiny. They must also manage intricate supply chain dynamics, including raw material sourcing, production processes, transportation, and waste management. Balancing financial performance with social and environmental responsibilities further complicates these efforts.

1. Balancing financial and ESG impact

Financial outcomes are no longer the only thing that matters when making strategic decisions, investments, and vendor selections. Other factors, like carbon emissions, water usage, and labor concerns, are also important.

CFOs should seek to provide ESG data of the same quality as financial reports to help make these decisions. All executives must consider economic and ESG factors to optimize their outcomes.



2. Adapting to regulatory change

As ESG regulations continue to evolve, organizations will need flexible and scalable tools to collect and analyze data. Reporting frameworks such as the Sustainability Accounting Standards Board (SASB) or the Global Reporting Initiative (GRI) can serve as starting points in regions where regulations are not well-defined.

In the EU, the Corporate Sustainability Reporting Directive (CSRD) mandates that companies provide non-financial public disclosures on ESG topics. The CSRD applies to non-EU parent companies with significant business in the EU and is currently the world's most extensive mandatory ESG reporting regime. The CSRD is part of the European Green Deal, which aims for climate neutrality by 2050 through energy efficiency targets, circular economy measures, increased corporate transparency, supply chain scrutiny, and consumer information.

Companies under the CSRD must report on their scope 1, 2, and 3 Green House Gas (GHG) emissions, environmental and social impacts, and corporate governance practices and performance. (For more information on scopes, see "Complex Impacts" below.) This reporting aims to promote a more responsible approach to business.

3. Responding to double materiality

ESG reporting is about more than just measuring the immediate impact on shareholder value. It also involves considering the social and environmental effects on stakeholders and how this may affect long-term value. Due to growing financial and reputation risks, this "double materiality" concept is now central to ESG analysis.

Therefore, companies must consider ESG factors when reporting on their performance and developing strategies to manage their impacts and risks.



4. Measuring complex impacts

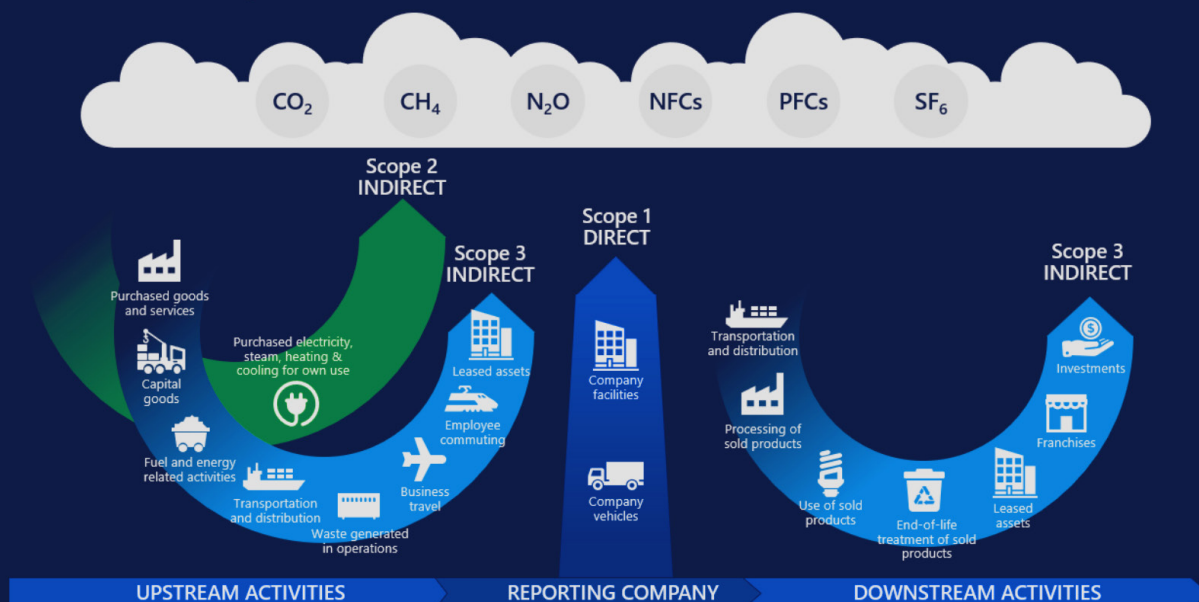
Measuring ESG impact can be challenging. For instance, regarding emissions, the Greenhouse Gas (GHG) Protocol is a widely recognized standard that defines carbon accounting best practices. It offers guidance, tools, and training to help businesses and governments measure and manage carbon.⁵

It classifies carbon emissions into three scopes:

- **Scope 1:** Emissions directly resulting from business activities, such as stationary combustion of fuels for backup power generation in cloud datacenters.
- **Scope 2:** Emissions that indirectly result from producing energy, such as carbon dioxide from an electric power plant.
- **Scope 3:** Emissions that indirectly result from all other business activities, such as those associated with the upstream raw materials extraction, manufacturing, and IT services.

According to some estimates, 80 to 90 percent of emissions come from scope 3.⁶ It is also the most complex and challenging for most organizations to measure.

Scopes and emissions across the value chain



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How ERP data and insights drive ESG

Core business data, like financial, HR, and supplier data stored in ERP systems, is essential to achieving ESG goals. ERP data can help reduce carbon emissions, offer sustainable fulfillment, implement circular economy practices, and more. Companies that embrace the digital transformation of ERP will be better positioned to track and analyze ESG metrics and make data-driven decisions.



However, traditional ERP systems may lack the flexibility and scalability needed to drive ESG goals, and extracting and combining data across functions can be challenging. Running ERP systems on-premises can also make it difficult to scale up new capabilities and obtain a holistic view of an organization's sustainability performance.

The right data for the job

Companies use data stored in their ERP systems, such as purchase orders, invoices, and energy usage, to calculate environmental impacts. Different data types are essential for various ESG factors, such as HR data for measuring diversity and supply chain data for emissions. Customer profiles stored in CRM systems can also provide insight.

Managing this data requires sophisticated systems and analysis to aggregate it into appropriate categories and scopes. Effective ERP systems can help collect, analyze, and report on ESG impacts, but this requires overcoming significant data management challenges.

ESG data maturity is a journey

Moving toward ESG data maturity is a journey that Microsoft started early and continues to travel today. The following section breaks that journey into three phases.

Ingredion Harnesses Sustainability Data to Achieve Ambitious Goals for a Better World

Ingredion, a major supplier of plant-based ingredients, has set ambitious sustainability goals as part of its All Life 2030 plan. The company wanted to replace its manual data collection methods across its global facilities to achieve these goals. They chose to work with Microsoft Cloud for Sustainability after successful initial testing in the US.

Using Cloud for Sustainability, Ingredion can make informed business decisions to meet emissions, plastics, energy sources, biodiversity, and human rights targets.

[Read the full story >](#)

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The 3 phases of ESG data maturity

This chapter offers practical guidance on typical phases of ESG data maturity based on Microsoft's experience. The journey is not always linear and can vary depending on the organization's commitment to specific ESG goals, incentives provided, and leadership.

Phase 1: Emerging

The emerging stage of ESG maturity involves ad hoc efforts using existing data siloed in different systems. Reports lack granularity, and calculating complex ESG realities may be difficult. Significant manual effort is required to collate and manage data; analysis and reporting are reactive.

This phase allows organizations to learn what they need, have, and lack. However, remaining in firefighting mode without reflecting on opportunities for improvement can prolong this phase. To achieve ESG data maturity, emerging organizations should prioritize standardizing and unifying their data, investing in technology and tools to streamline the data management process, and establishing clear and consistent data collection protocols. Continuous improvement is vital to a sustainable and manageable approach to ESG data management.

Phase 2: Hybrid

The organization has integrated ESG data into its enterprise-wide data strategy at this stage, but legacy systems hold it back. ESG reporting and decision-making are still labor-intensive, and cloud ERP may be on

the horizon. Adopting flexible, enterprise-grade tools for visualizing sustainability data and AI and machine learning capabilities can help overcome data challenges. Data-agnostic storage solutions like data lakes can also be helpful.

Migrating data to a cloud-based data lake enables organizations to achieve greater security, scalability, and flexibility in ESG data management. Incorporating third-party, cloud-based data can allow a more comprehensive understanding of ESG risks, compliance issues, and performance compared to peers and industry benchmarks.

Robust data governance and security protocols are necessary to manage sensitive ESG data responsibly and competently.

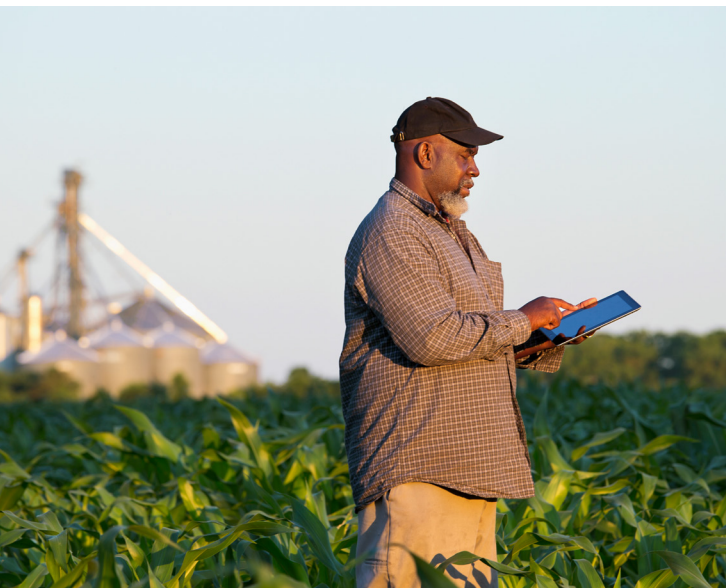


Phase 3: Advanced

At this phase, actionable ESG insights are readily available to decision-makers and stakeholders. The organization has digitally transformed its data strategy and governance, centralizing ERP data in the cloud using an agile, composable platform.

There is a strong focus on staging, filtering, and cleansing data lake services to enable in-depth business intelligence reporting against the enterprise data estate. AI and machine learning models can help identify and prioritize ESG risks and opportunities, and NLP can analyze unstructured ESG data to deepen understanding of public sentiment around ESG performance.

These capabilities enable organizations to develop a comprehensive ESG strategy, demonstrate authentic leadership, and exceed stakeholder expectations.



Export Development Canada helps Canadian businesses create a sustainable future

EDC, a Canadian organization aiding businesses in global markets, uses Microsoft Azure's digital infrastructure to integrate ESG principles into its core business and reduce its carbon footprint.

EDC's push to transform infrastructure started by moving most of its internal datacenter capacity to the Azure cloud platform. Victor Diamond, Vice President of Technology Operations and Services at EDC, says, "This was a critical step that generates a big impact, as our datacenters consume the lion's share of EDC's power requirements at our head office. By implementing a digital transformation strategy, EDC aims to improve business effectiveness and competitiveness while promoting sustainability. Azure Cloud Services are vital to EDC's transformation to provide new digital capabilities and execute its sustainability strategy."

[Read the full story >](#)

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4 tips for getting started

This section shares some practical tips from the experiences of Microsoft and others in successfully getting ESG data initiatives off the ground.



1. Focus your efforts

To progress with ESG data initiatives, organizations should focus on the most significant initiatives, building capacity over time. The appropriate focus will depend on stakeholder expectations, regulatory commitments, and industry needs. For instance, manufacturers might prioritize sustainable packaging and supply chain emissions, while financial services firms prioritize ESG risk mitigation.

2. Start with simple methods

When adopting new analytics and reporting tools, Microsoft suggests that companies start with more straightforward methods to get a baseline understanding of their impact. Microsoft recommends a spend-based method for calculating emissions, which involves collecting spending data from sources such as invoices and procurement records and using conversion factors to estimate emissions. While it may not provide the most accurate estimate, this method is relatively simple and cost-effective, making it a good starting point for many organizations. Companies can add more detail and sophistication over time.



3. Plan for ERP transformation

If an organization has not yet started adopting a more modern and flexible ERP solution, ESG requirements can provide a solid motivation to begin. Microsoft suggests using a composable, cloud-based ERP system that unifies data across business lines, supports modern analytics, enables the rapid addition of new functionality, and scales to meet changing requirements over time without complex infrastructure planning.

4. Take advantage of cloud solutions

Solutions such as [Microsoft Sustainability Manager](#) enable organizations to record, report, and reduce their environmental impact more easily through automated data connections that deliver actionable insights.


Grupo Bimbo drives ESG transformation with Microsoft Cloud for Sustainability

Grupo Bimbo, an international producer of baked goods and snack foods, has always made sustainability a crucial part of its operations. Grupo Bimbo's comprehensive strategy includes nutrition, social impact, waste, and water. To help achieve its ambitious goals, the company is deploying Microsoft Cloud for Sustainability, which enables businesses to collect, track, and analyze their metrics.

The company initially focuses on tracking emissions in Canada, Mexico, and the United States. With plans to roll out the platform globally, Grupo Bimbo appreciates the platform's ease of use and ability to connect to multiple data sources, including external repositories and Internet of Things sensors for automated data collection.

[Read the story >](#)



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05

4 ways Microsoft drives ESG performance

Microsoft's long-standing commitment to ESG leadership can offer valuable lessons to those at different stages of their own ESG journeys.

1. Scale strategy to achieve ambitions by using the “whole of the business”

Microsoft takes a holistic approach to ESG by examining its operations and roles as a customer, supplier, investor, employer, policy advocate, and partner. It assesses its impact on carbon footprint, water usage, waste, and ecosystems. It also provides technology to help customers and partners with their sustainability efforts, invests in research and partnerships, and advocates for policies that can drive positive change.

2. Set the tone from the top

Make sustainability a core part of a brand's commitment and embraced by all leaders. Microsoft believes that to do well, it must prioritize the well-being of people and the planet: the CEO, CFO, President, and the company share this belief.

Microsoft has a Climate Council comprising senior business leaders from every business group to provide sustainability advice, collaborate, align priorities and resources, and review progress. Additionally, carbon reduction goals determine a portion of its executive incentive plan.



3. Make it central to the business while making it relevant at business group levels

Corporate commitments at the strategic level come to life at the business-group level. Microsoft recognized this and created roadmaps for each focus area (carbon, water, waste, and ecosystems) with commitments for every business group.

To ensure sustainability across its supply chain, it offers capacity-building tools and resources, along with sustainable supply chain financing, to its suppliers. It also holds its business groups accountable for their carbon emissions via an internal carbon fee that extends to Scope 3 emissions. Microsoft sets measurements and scorecards for each business group's sustainability commitments, and reviews progress twice a year. By following these practices, your business can drive meaningful change and create a more sustainable future.

4. Report on everything, not just progress

Environmental sustainability requires a commitment to transparency and make a specific commitment to it. Microsoft recognizes this and shares its sustainability insights through various channels, such as white papers and speaking engagements. When it succeeds in its sustainability efforts, it also shares its methods to help others achieve similar results.

Beyond delivering innovative technology and services, Microsoft invests heavily in policy, partnerships, and research to advance environmental sustainability. It also openly shares challenges to foster collective learning and improvement.



Making the ESG data journey together

Embracing sustainability as a strategic imperative and digitally transforming ERP systems can help create a better world for future generations. As an ERP migration expert, we can work with your business to integrate ESG performance into core systems and processes to help your business make a positive impact. As ESG regulations evolve, we work with your business so that your ERP systems drive ESG impacts and advance sustainability, paving the way for a more sustainable future.

Learn more about Microsoft solutions for the ESG data journey at [Microsoft Dynamics 365](#).

Discover [Microsoft Cloud for Sustainability](#) >

¹ Make no mistake – global ESG regulations will impact US companies, PwC, 2022

² SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors, U.S. Securities and Exchange Commission, 2022

³ ESG Disclosure Trends in SEC Filings, Harvard Law School Forum on Corporate Governance, 2022

⁴ The turning point: A Global Summary, Deloitte, 2022

⁵ Greenhouse Gas Protocol, 2023

⁶ The Net-Zero Standard, Science Based Target Initiative, 2022



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