Deloitte.

Navigating global ESG regulations and tools

May 2025

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Executive summary

Environmental and social sustainability are now central themes in corporate strategy and reporting, driven by stakeholder demand and regulatory pressure. We can no longer continue our day-to-day operations, including business activities, without considering the impact we have on our society and environment.

This whitepaper analyses the current Environmental, Social and Governance (ESG) reporting landscape, highlighting challenges and opportunities. It examines the complexities surrounding ESG reporting, the weight of various regulations, the challenges companies face with existing solutions and the potential for an Operate partner to leverage expertise to streamline ESG compliance, enhance strategic alignment and unlock measurable value for stakeholders.

This paper explores how the right Operate partner can transform organisations' ESG journeys. By using expertise, technology and a strategic approach, an effective Operate partner can help clients navigate the fragmented regulatory landscape, harmonise data collection, streamline compliance and unlock the full potential of ESG initiatives. Through tailored solutions and proactive support, the right partner ensures clients meet regulatory requirements and embed ESG seamlessly into their operational DNA, driving long-term sustainability and growth.

This paper explores how globally experienced Operate partners leverage deep ESG expertise, advanced tools and proactive guidance to ensure compliance and deliver long-term sustainability outcomes.


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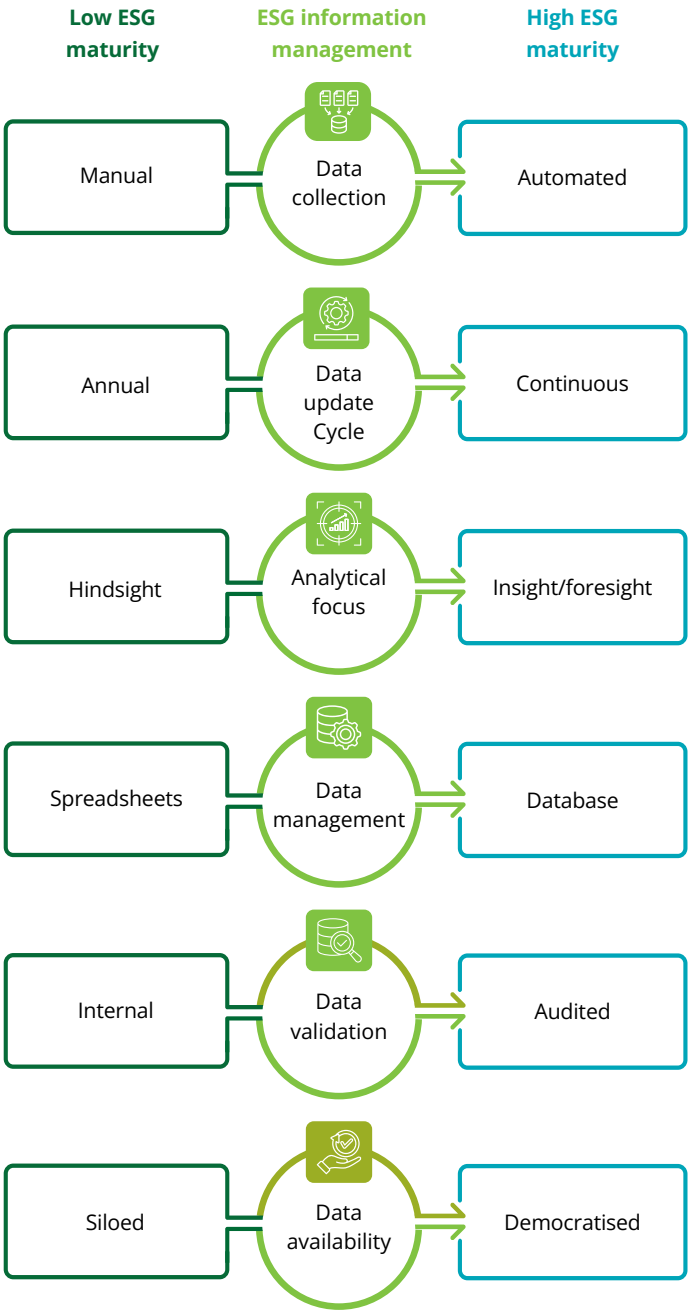
Introduction

ESG considerations are now integral to corporate strategy. With growing pressure from stakeholders for more transparency and accountability, companies are required to collect, analyse and report substantial amounts of ESG-related data.

International frameworks such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and Task Force on Climate-Related Financial Disclosures (TCFD), alongside India's Business Responsibility and Sustainability Reporting BRSR standard, are making significant progress in establishing structured approaches for recording, analysing and monitoring data. This data is crucial for assessing its impact on the environment, socio-economic factors and overall governance.

The International Sustainability Standards Board (ISSB) has tried to establish a global baseline that bridges the consistency among the currently available standards. Although the ISSB framework shows promise, as of 2024, only six jurisdictions have adopted it, either on a mandatory or voluntary basis.[1]

ESG market direction



Source: Gartner report number: 799168_C

Navigating ESG compliance demands more than internal efforts in a fragmented global regulatory landscape. It requires the strategic collaboration of Operate partners with global ESG capabilities. These experts simplify processes, mitigate risks and deliver measurable outcomes, ensuring seamless compliance and unlocking value across geographies.

Building on this context, the following section explores the specific challenges and opportunities businesses encounter in ESG reporting.

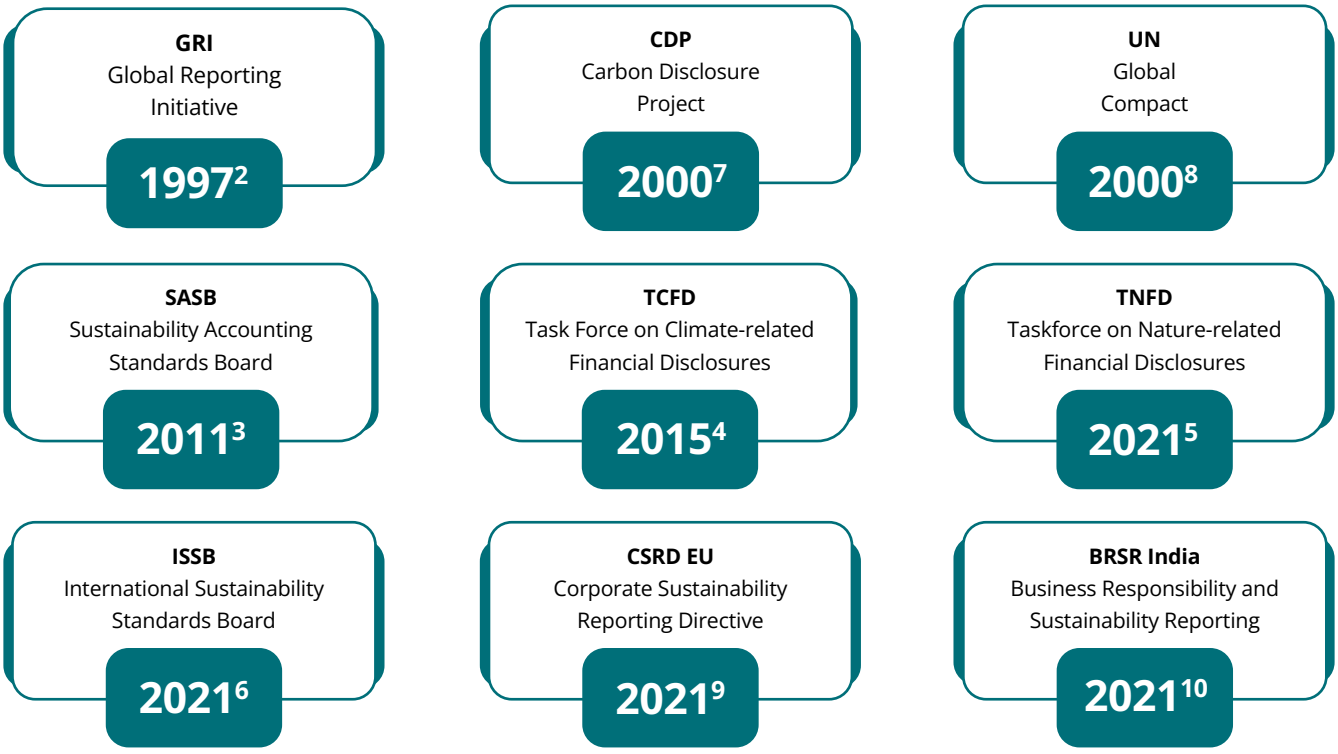
ESG reporting challenges and opportunities

Achieving comprehensive ESG reporting involves challenges such as regulatory complexity, data standardisation and scalability. However, these challenges also present opportunities for businesses to drive innovation, enhance transparency and align with stakeholder expectations. As organisations strive to meet these demands, understanding the evolution of reporting frameworks becomes paramount in navigating this dynamic landscape.

Timeline of ESG framework evolution

The evolution of ESG frameworks reflects the growing emphasis on sustainability across industries and regions. From early initiatives to recent advancements, these frameworks outline critical milestones in global sustainability reporting. The following table highlights the introduction years of various sustainability frameworks and standards across different geographies, offering insights into their progression and the increasing complexity of reporting standards.

As evident, many of these initiatives, such as the GRI (1997) and CDP (2000), were introduced in the late 20th and early 21st centuries, reflecting the increasing global emphasis on measuring and managing CO_2e emissions and addressing broader sustainability goals. More recent standards, such as the TNFD and ISSB (introduced in 2021), underline the continued evolution and growing urgency of sustainability reporting in the modern era.



Comparing ESG data standards

Over the past two decades, ESG frameworks have evolved to shape corporate sustainability reporting. While all frameworks aim to drive responsible business practices, they vary in scope, focus and data coverage.

This analysis compares major ESG frameworks by their year of introduction and the key data dimensions they address.

The following table highlights the growing scope and complexity of ESG requirements, reinforcing the need for businesses to adopt integrated solutions to meet these evolving standards.

ESG framework year introduces	Environmental data	Social data	Governance data	Climate risks/ opportunities	Supply data	Carb emission (Scope 1, 2 and 3)	Human rights	Waste management	Water usage
GRI - 1997[11] Global Reporting Initiative	✓	✓	✓	✓	✓	✓	✓	✓	✓
SASB - 2011[12] Sustainability Accounting Standards Board	✓	✓	✓	✓	✓	✓	✓	✓	✓
TCFD - 2015[13] Task Force Climate Financial Disclosures	✓		✓	✓	✓	✓			
TNFD - 2021[14] Taskforce on Nature Financial Disclosures	✓			✓	✓				✓
ISSB - 2021[15] International Sustainability Standards Board	✓	✓	✓	✓	✓	✓			
CDP - 2000[16] Carbon Disclosure Project	✓		✓	✓	✓	✓		✓	✓
UN Global Compact – 2000	✓		✓				✓	✓	
EU CSRD - 2021[17] Corporate Sustainability Reporting Directive	✓	✓	✓	✓	✓	✓	✓	✓	✓
INDIA BRSR - 2021[18] Business Resp. and Sustainability Reporting	✓	✓	✓	✓	✓	✓	✓	✓	✓

Environmental data

Information about energy use, resource conservation, pollution levels, biodiversity impacts and more.

Social data

Includes workforce diversity, labour practices, community engagement, health and safety metrics.

Governance data

Data on board structure, executive-level compensation, anti-corruption measures and transparency.

Climate-related risks/opportunities

Information related to how the company assesses and manages climate-related risks and opportunities.

Supply chain data

Insights into the environmental and social impacts across the company's entire supply chain.

Carbon emissions (Scope 1, 2 and 3)

Data on direct (Scope 1), indirect (Scope 2) and value chain (Scope 3) emissions.

Human rights

Data on the company's efforts to protect human rights throughout its operations and supply chain.

Waste management

Information on the company's waste generation, reduction, recycling and disposal practices.

Water usage

Data on water consumption, conservation efforts and the impact on local water resources.

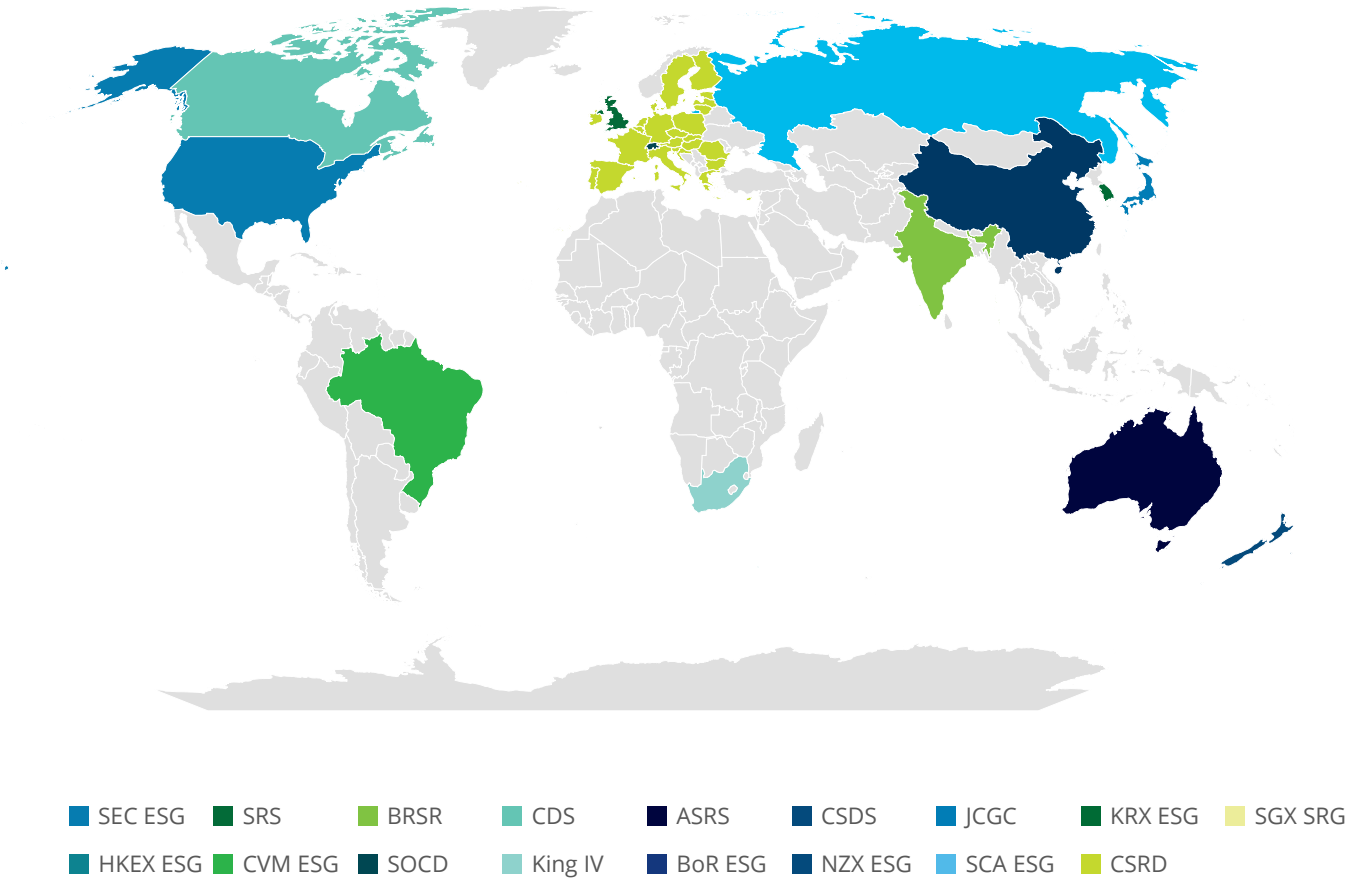
Global ESG landscape: Regional frameworks

The varying timelines of ESG frameworks reflect the diverse regulatory landscapes worldwide, as detailed below. The global ESG landscape is fragmented, with each region adopting its own frameworks. This diversity complicates compliance for global businesses. Given the diverse regulatory norms, we have categorised the most important regional frameworks across various countries.

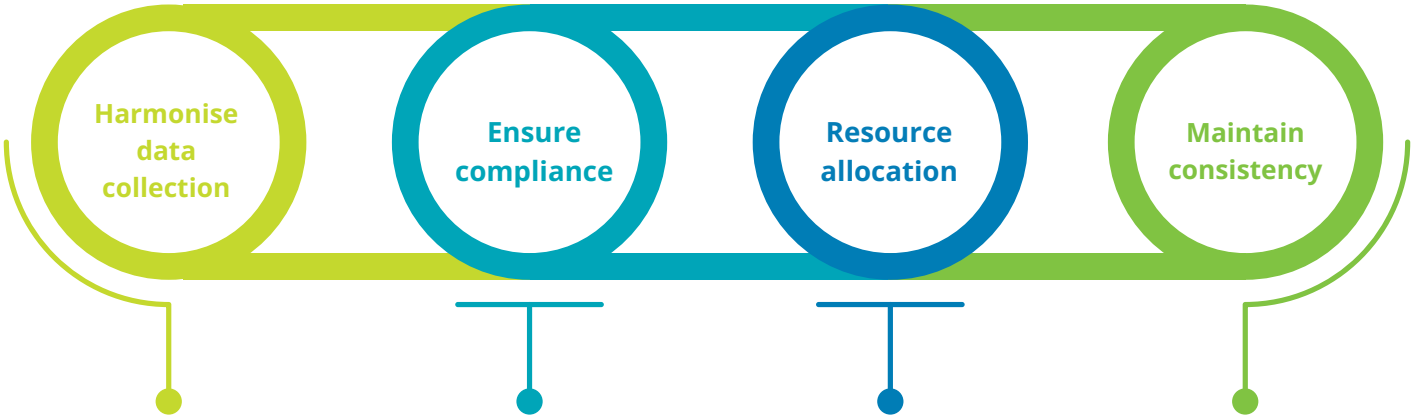
Each region adopts its own frameworks and standards, such as CSRD in Europe, SEC climate disclosures in the US, BRSR in India and other region-specific frameworks. These frameworks require data collection, reporting formats and timelines.

Country	Framework
US	SEC ESG
UK	SRS
India	BRSR
Canada	CSA ESG
Australia	ASRS
China	SSE ESG
Japan	JCGC
South Korea	KRX ESG
Singapore	SGX SRG

Country	Framework
Hong Kong	HKEX ESG
Brazil	B3 SG
Switzerland	SCBP
South Africa	King IV
Russia	RSPP ESG
New Zealand	XRB CRD
UAE	ADX ESG
EU	CSRD



This fragmented landscape makes it difficult for businesses operating across multiple jurisdictions to:



Aligning ESG data across fragmented, region-specific standards creates inefficiencies for businesses.

Customising reporting for each market due to disparate frameworks increases the risk of non-compliance.

Implementing systems to address multiple frameworks increases costs and efforts for businesses.

Reporting ESG metrics consistently across regions becomes complex, as definitions and benchmarks (e.g., Scope 3 emissions or social KPIs) may differ significantly.

Navigating these global scenarios requires overcoming significant data challenges, which are explored in the next segment.

Tackling ESG data challenges: Balancing scale and complexity[19]

The first CSRD reports are expected to significantly increase the quantity and quality of ESG performance data by 2030. This will generate many new reference points presented in standardised formats with shared definitions. These insights will empower stakeholders to make investment decisions and evaluate ESG performance, with automation being crucial for data filing and usage.

ESG performance data, such as Greenhouse Gas (GHG) emissions and climate risk, will soon be included in audited financial statements filed with the US SEC, with similar disclosures expected in the UK. Other regions mandating climate disclosures include Brazil, Canada, Hong Kong, New Zealand, Singapore and Switzerland.

Data complexity

The complexity of ESG frameworks is driven not just by the volume of data but by the granularity, scope and interpretation of reporting requirements. Each framework introduces its unique expectations regarding metrics, methodologies and compliance timelines, creating challenges for businesses in aligning processes, resources and systems.

The factors contributing to this complexity include

Granularity of disclosures

Frameworks that require detailed quantitative reporting, such as Scope 3 emissions or supply chain impact data, introduce higher complexity.

Framework-specific variations

Variations in the required level of detail can differ across industries, geographic regions and reporting frameworks.

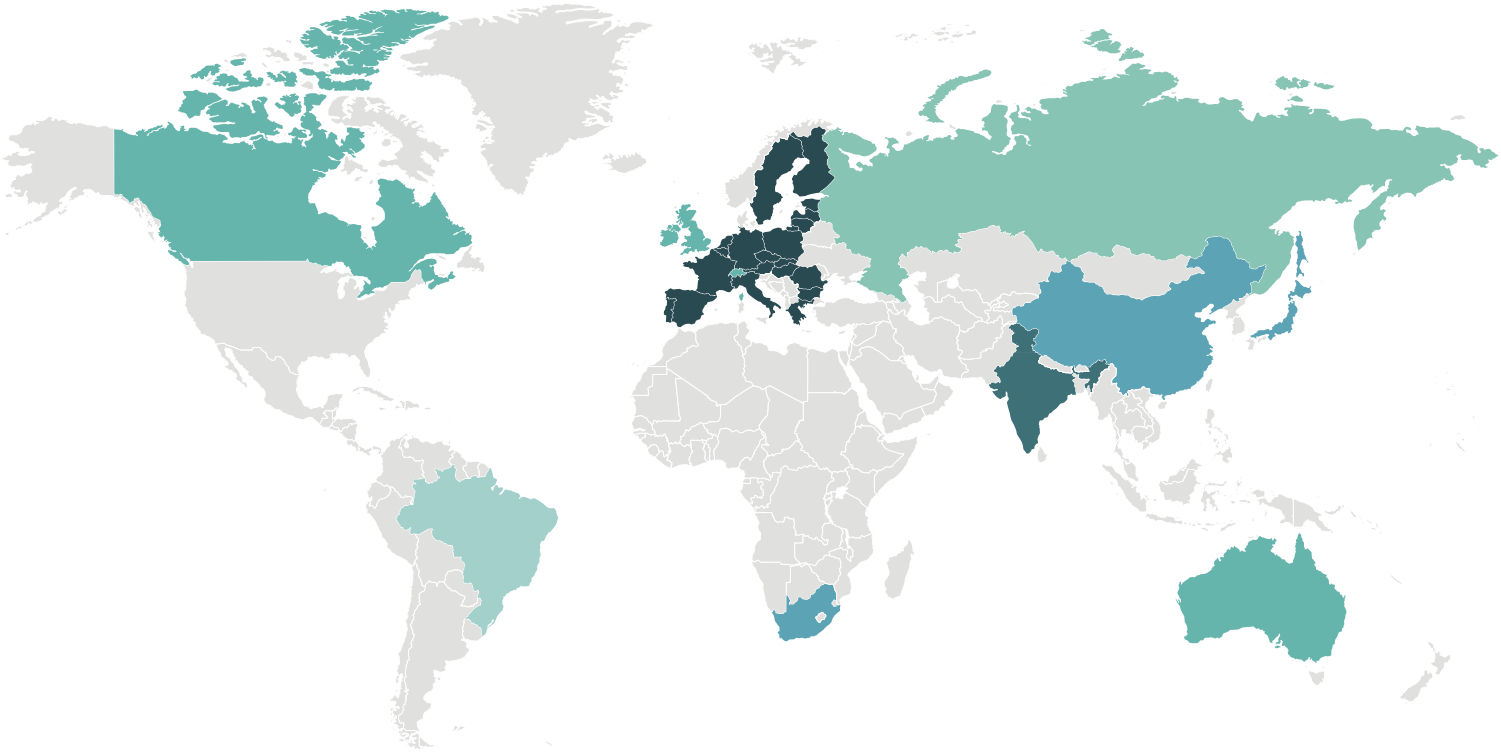
Double materiality requirements

Frameworks such as CSRD demand that businesses assess their financial impact on the broader ecosystem.

Integration with other systems

Complex frameworks often require integration with financial data, ERP systems and sustainability tools for accurate reporting.

The following map presents a comparative analysis of the complexity of major ESG frameworks, measured on a scale of 1 to 10. This assessment is based on several factors, including the number of fields and level of acceptance as primary weighting criteria. The map highlights the degree of effort and sophistication required for compliance across different countries and regions.



ESG Data Requirement
Rating complexity(1-10) 1-Least-10 Most

10 04

Data scale

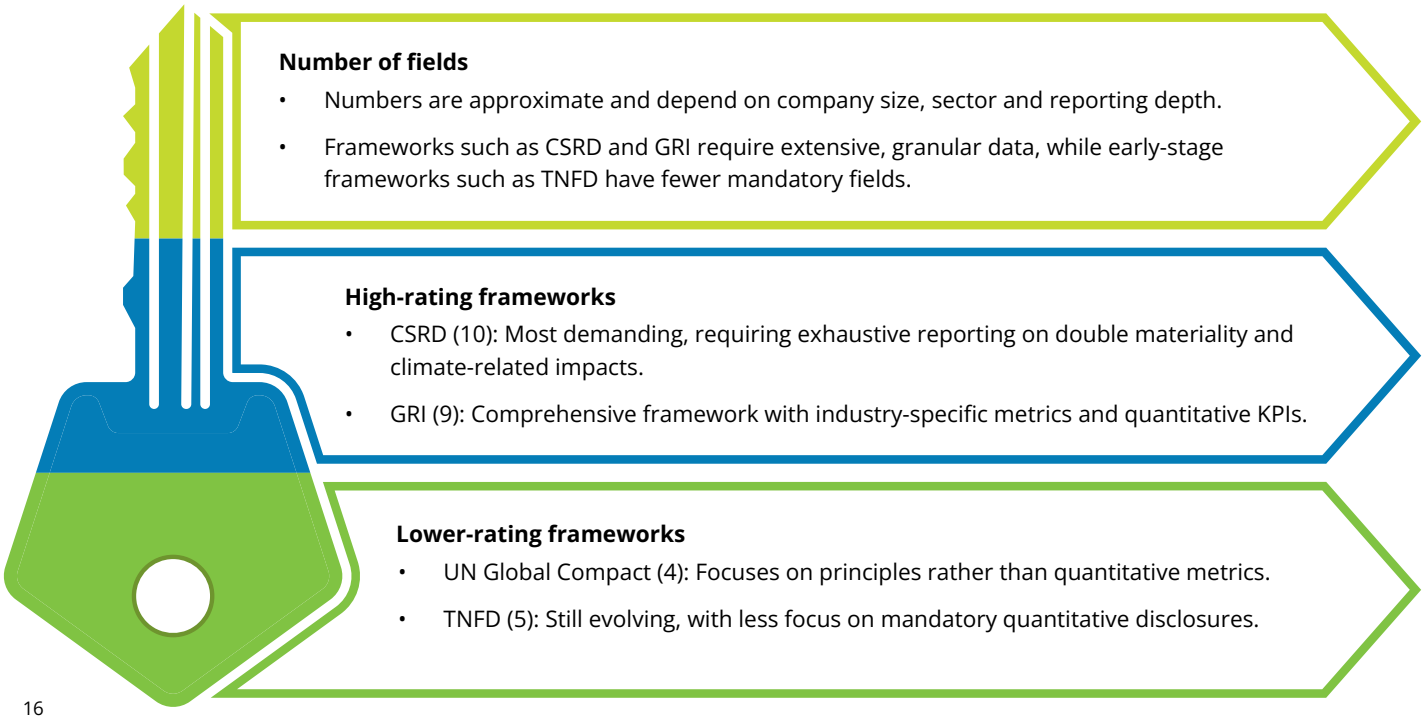
The scale of ESG data: Fields, frameworks and reporting demands.

The rapid proliferation of ESG regulations and reporting standards across the globe has led to an unprecedented explosion of data requirements. Organisations are now expected to comply with a diverse set of frameworks, each demanding varying levels of granularity, complexity and scope.

This increasing data intensity stems from the need to align with evolving regulatory mandates, industry-specific metrics and stakeholder expectations for transparency. However, the complexity of managing ESG reporting arises from differences in framework applicability, the number of reporting fields and the depth of disclosure required by each standard.

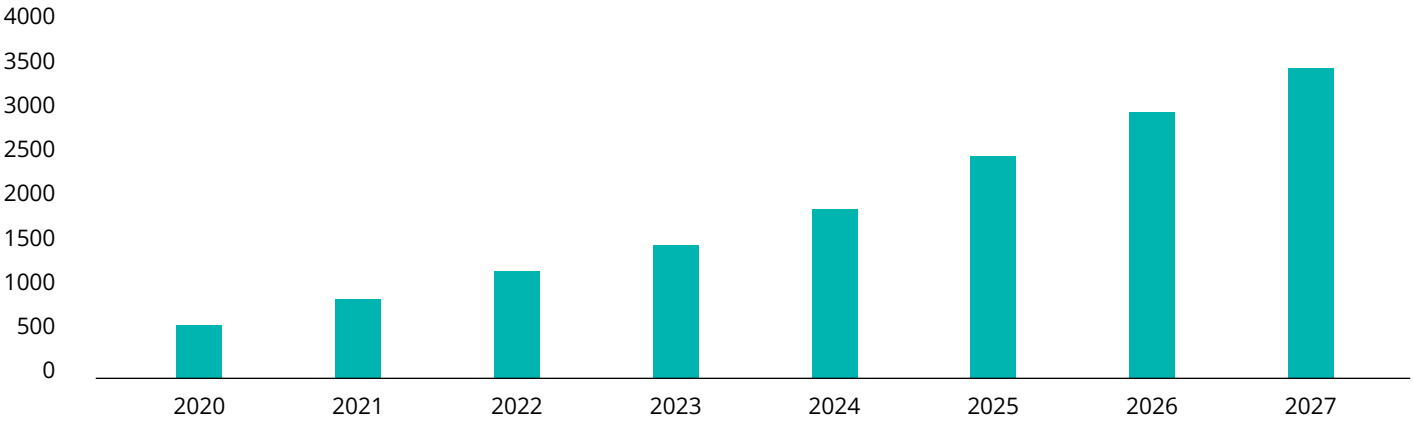
The following section provides a comparative view of major ESG frameworks, highlighting their relative complexity on a scale of 1 to 10, alongside the approximate number of fields organisations must address. This analysis underscores the growing burden on businesses and the need for robust, technology-driven solutions to streamline compliance and reporting.

Framework	Rating (1–10)	# Fields	Notes
CSRD (EU	10	1,000+	Mandatory reporting with double materiality (financial + impact).
GRI (Global)	9	150–200	Extensive ESG reporting with industry-specific standards.
TCFD	8	75–100	Focus on climate risks, scenario analysis and governance disclosures.
ISSB	8	~150+	Global baseline for sustainability reporting with an emphasis on climate.
BRSR (India)	6	~140	Mandatory for Indian top 1,000 companies; focuses on E, S and G disclosures.
SASB (US)	7	75–100 (industry-specific)	Industry-specific standards across 77+ industries; metrics vary by sector.
TNFD	5	50–75	The early-stage framework focused on nature-related financial disclosures.
SEC Climate Rule (US)	6	50–100	Requires GHG disclosures and climate risk reporting for public companies.
UN Global Compact	4	~75+	Voluntary, principles-based reporting; primarily qualitative.

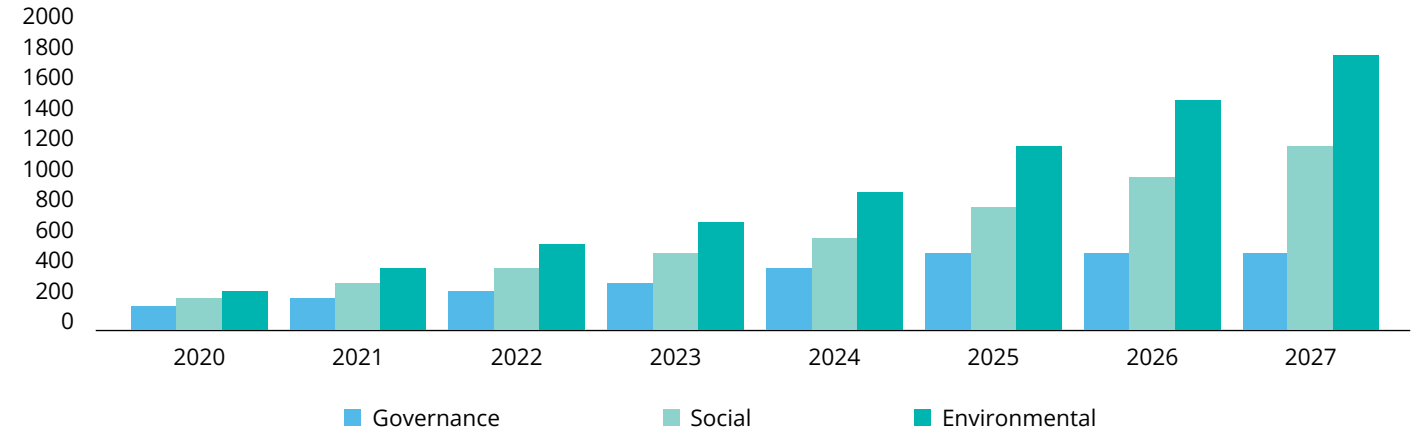


As global ESG frameworks continue to evolve, the volume of data required for compliance has grown exponentially. This chart highlights the dramatic increase in total ESG data points from 2020 to 2027, driven by expanding regulatory mandates such as CSRD, BRSR and ISSB. The trend underscores the urgency for businesses to adopt Operate-led frameworks and expert-enabled technologies to manage this data explosion effectively.[20]

Total data points over time



Data growth by category



The growing complexity of ESG reporting is not uniform across categories. This chart breaks down the data growth into ESG components, illustrating how each category contributes to the overall increase. The steep rise in Environmental data reflects the global emphasis on climate-related risks and carbon emissions, while the Social and Governance fields also see significant expansion.

Given the current linear trajectory of ESG data requirements, the number of data fields is expected to reach approximately 3,500 by 2027.

Future trends in ESG reporting

While ESG reporting requirements are rapidly advancing across several regions, not all countries currently mandate disclosures. The global ESG landscape remains uneven, with developed markets such as Europe, the US and parts of Asia leading the way through established frameworks such as CSRD, SEC Climate Rule and BRSR. In contrast, many developing economies still rely on voluntary adoption driven by investor expectations and trade pressures.

The ESG reporting landscape is anticipated to undergo significant transformation in the next five years:

Global convergence of standards

- Frameworks such as the ISSB will act as a global baseline for sustainability reporting, encouraging adoption across emerging and developed markets.
- Jurisdictions currently lacking mandates may gradually adopt ISSB or similar standards to align with international trade and investor expectations.

Mandatory reporting expansion

- Countries currently piloting ESG regulations, such as Brazil, South Korea and South Africa, are likely to introduce mandatory reporting requirements for large corporations.
- Supply chain pressures from regions such as the European Union (EU) (via CBAM) will compel exporters in developing nations to disclose carbon emissions and climate risks.

Sector-specific regulations

- Industries with high environmental impact (e.g., energy, manufacturing, agriculture) will face sector-specific mandates for Scope 3 emissions, supply chain data and social accountability.

Digital transformation and technology adoption

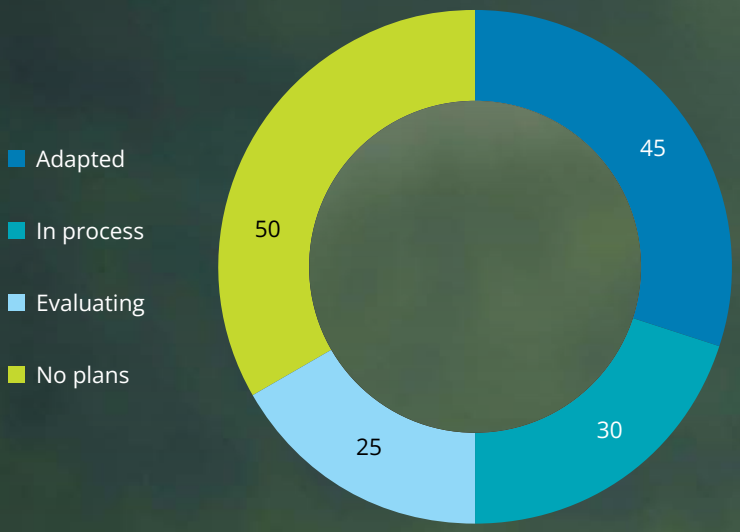
- Emerging markets will drive the adoption of technology-driven integrated solutions to address the complexities of ESG data collection, reporting and verification.
- The role of AI/ML will evolve in automating data validation and predictive insights for compliance.

Investor and stakeholder pressures

- Institutional investors will continue to push for standardised ESG disclosures, leading to voluntary adoption of frameworks such as GRI and SASB in regions lagging behind regulatory mandates.

ESG reporting is currently concentrated in developed markets, but over the next five years, these requirements will rapidly globalise. Regulatory convergence, investor demand and supply chain pressures will push more countries to adopt mandatory ESG frameworks.

Number of countries by ESG reporting readiness



Businesses operating globally will need agile, scalable solutions to adapt to this evolving landscape, ensuring they remain competitive and compliant across multiple jurisdictions.

ESG compliance challenges and opportunities

The increasing adoption of ESG standards reflects a global push for sustainability, but it also leads to a fragmented set of compliance requirements that differ greatly between regions. From differing definitions of materiality to varying reporting timelines and metrics, organisations operating across borders must resolve these discrepancies to maintain compliance, transparency and competitiveness.

An Operate partner can help mitigate resource allocation challenges by managing end-to-end ESG processes. This allows companies to focus on core operations while ensuring compliance and performance excellence.

Building on the discussion in breaking the ESG data bottleneck, which addresses the intersection of complexity and scale, this chapter delves into the unique challenges of cross-border ESG reporting. It explores how multinational organisations can use global expertise to standardise compliance and reduce regulatory risks, harmonise data collection and use technology to streamline compliance in an interconnected yet fragmented global framework.

ESG regulatory compliance for exporters

Exporters across industries face increasing regulatory scrutiny as global markets implement stringent ESG compliance standards. These regulations mandate companies to track, disclose and improve their environmental and social practices to maintain access to international markets.

One of the most significant developments in ESG compliance is the Carbon Border Adjustment Mechanism (CBAM), introduced by the EU. CBAM requires exporters to the EU to measure, report and verify their GHG emissions, particularly in carbon-intensive industries such as steel, cement, aluminium, fertilisers and electricity. Non-compliance can result in financial penalties or restrictions on market access. Similarly, the Corporate Sustainability Reporting Directive (CSRD) in Europe and the SEC Climate Disclosure Rule in the US push for detailed ESG disclosures, making sustainability reporting an essential requirement for companies trading in these regions.[21]

Beyond carbon transparency, exporters must also ensure compliance with broader ESG frameworks. The German Supply Chain Due Diligence Act (LkSG)[22] and the Modern Slavery Acts in the UK and Australia[23] require companies to monitor their supply chains for ethical labour and human rights practices. Additionally, sector-specific regulations such as the EU Renewable Energy Directive (RED II) impose sustainability criteria on biofuels, while Canada's Environmental Protection Act (CEPA) enforces strict environmental protection policies.

For businesses operating in regions with less stringent ESG regulations, these global frameworks create an urgent need to adopt technology-driven solutions for emissions tracking, supply chain transparency and compliance reporting. However, many global ESG solutions lack localised data processing capabilities, creating challenges for companies needing to comply with domestic regulations, such as those set by the Reserve Bank of India (RBI).

As ESG compliance becomes a prerequisite for global trade, exporters must proactively integrate carbon accounting systems, ESG reporting frameworks and sustainable business practices to remain competitive in an evolving regulatory landscape.

The rise of carbon markets

Carbon market trading, while still in its infancy, is gaining significant momentum as it allows organisations to offset carbon emissions through the purchase of carbon credits in the compliance markets (such as the European Union's Emissions Trading System (EU), California Global Warming Solutions Act (US), Chinese National Emission Trading System (China)) or in voluntary markets (which operate outside the compliance purview).

A quick estimate (provided by carboncredits.com) shows that to prevent the global temperature from rising more than 1.5°C–2°C, annual emissions must be reduced by 7.6 percent each year before 2030 to stay on track. Globally, only one-fifth of the world's 2,000 largest companies have committed to achieving "net zero" by 2050.[24]

The CDP Group surveyed 800 companies worldwide, and their data reveals that the average reported corporate internal carbon price is about **US$25 per tonne**. The International Monetary Fund (IMF) has stated that, to meet the Paris Agreement targets, most nations will need to implement a minimum price of US$75 per tonne. **(source carboncredits.com).**[25]

Although some refinement is still needed to accurately price a carbon credit, we believe that over time, this instrument will become a key revenue generator for carbon sinks and create new employment opportunities for everyone. Given the international scale at which voluntary carbon markets can source credits (as opposed to compliance markets, which are regional), they can act as the perfect vehicle for global companies to source credits and reduce emissions.

We believe the carbon trading market represents significant room for expansion. As corporate net-zero commitments continue to rise, coupled with increased transparency and more liquid exchange markets, international companies will have greater access to purchase credits and offset their emissions on a global scale. This will drive further expansion of the market, enabling companies to meet their sustainability goals more efficiently and effectively.

Navigating reporting and compliance ESG challenges

Technological considerations

Building on this context, we identify key technological advancement opportunities, including strategic and business-oriented considerations for tool development.

Siloed financial and sustainability planning

Clients struggle to align capital planning decisions due to fragmented data and processes. Operate partners enable integration and alignment to drive better outcomes.

Limited visibility and independent insights

Decision-making in capital planning lacks a holistic view of financial and sustainability implications. Clients need independent, data-driven insights to assess trade-offs and strategically allocate resources.

Manual data management and inefficient processes

Aggregating and analysing data from various sources is highly manual, time-consuming and prone to errors. This limits clients' ability to track performance, identify risks and make timely, informed decisions.

Difficulty quantifying and communicating impact

Clients struggle to quantify the financial implications of sustainability initiatives and effectively communicate their value to stakeholders. This includes demonstrating the return on investment for decarbonisation efforts and showcasing progress toward net-zero goals.

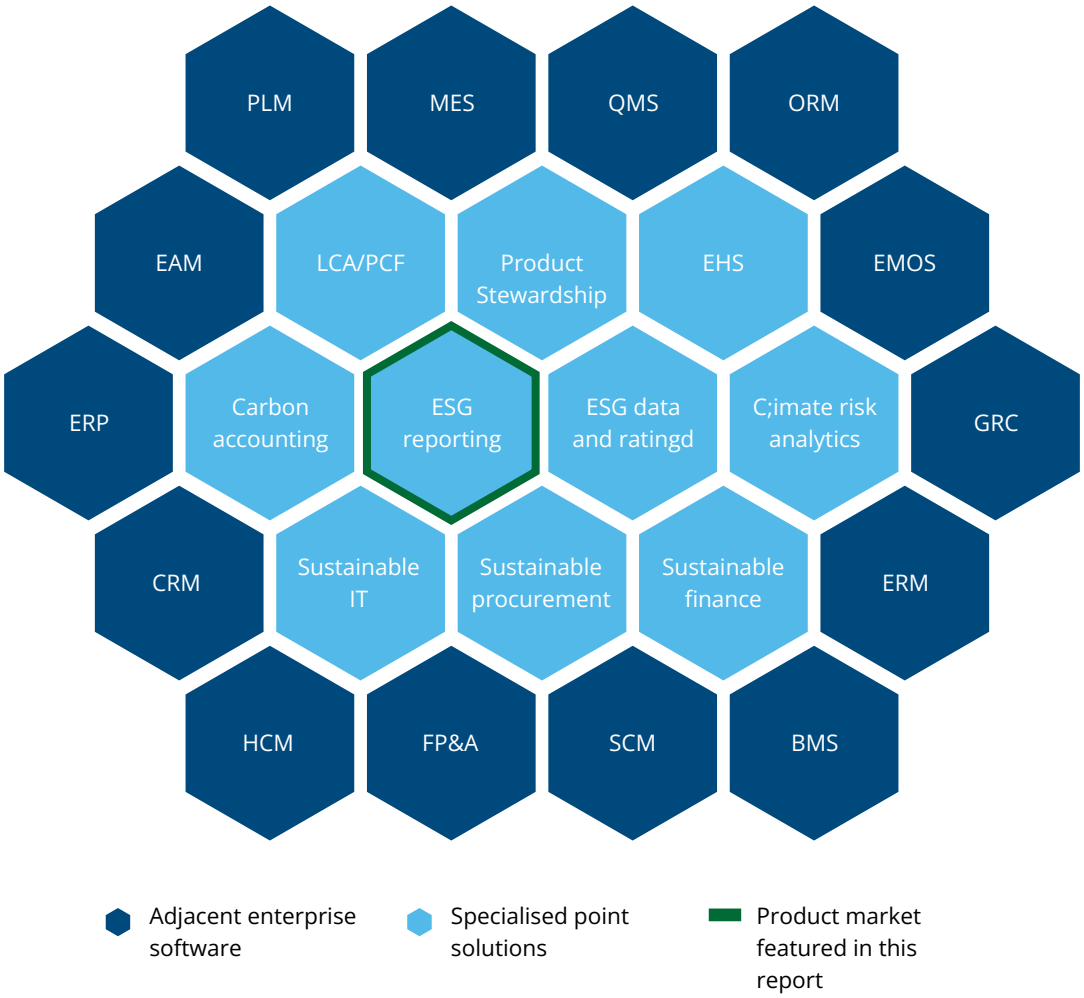
Lack of agility and scalability in existing systems

Current systems and processes are not flexible or scalable enough to support clients' growth, evolving sustainability needs and changing business contexts. Operate partners enable businesses to adapt dynamically to shifting ESG requirements by integrating advanced analytics and predictive insights and integrate seamlessly with existing enterprise systems.

Deloitte provides a range of solutions in the ESG space, offering end-to-end support for data collection, reporting and compliance. With advanced AI, it simplifies complex frameworks such as BRSR, CSRD and SASB, ensuring scalability and regional adaptability.

These initiatives will cater to the growing need for scalable and efficient ESG compliance tools, presenting a prime opportunity for market leadership.

Sustainability and ESG software classification



Source: Gartner

PLM = Product Life Cycle Management; MES = Manufacturing Execution System; QMS = Quality Management System; ORM = Operational Risk Management; EMOS = Energy Management And Optimisation System; GRO = Governance Risk And Compliance; ERM = Enterprise Risk Management; BMS - Building Management System; SCM - Supply Chain Management; FP&A - Financial Planning And Analysis; HCM = Human Capital Management; CRM = Customer Relationship Management; ERP = Enterprise Resource Planning; EAM = Enterprise Asset Management; LCA = Life Cycle Assessment; PCF = Product Carbon Footprint; EHS = Environment Health And Safety
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Reference: Gartner report 799168_C

To effectively navigate ESG challenges, businesses need a robust platform with specific capabilities, as detailed below.

AI for sustainability: Opportunities and innovations

Advancements in AI are a significant technological development that could transform environmental conservation initiatives worldwide. Retrieval-Augmented Generation (RAG) combined with Large Language Models (LLMs) can analyse vast datasets and predict outcomes that can help address environmental, social and economic concerns, enhance decision-making and resource allocation for sustainable development. This technology enables the creation of new content in various forms, such as text, code, voice, images and videos, revolutionising how organisations can innovate and operate. While still in its early stages, the adoption and advancement of AI, GenAI and RAG are progressing swiftly. Organisations are exploring diverse use cases, from public service applications to transforming business functions. Operate partners use AI-powered tools to predict ESG risks, optimise reporting and provide actionable insights for sustainability leadership.

Enhance supply chain efficiency

GenAI can model and simulate supply chain processes, identify inefficiencies and suggest improvements, optimise logistics, reduce Scope 3 (Category 1) emissions and minimise environmental impact.

Reduce waste

GenAI can predict waste generation and recommend recycling and reuse methods, enabling enterprises to implement effective waste reduction strategies and support a circular economy.

Product design and manufacturing

Enterprises can use GenAI to design more sustainable products by generating design alternatives and identifying materials and manufacturing processes with a lower environmental footprint, promoting sustainable development.

Energy conservation

GenAI can predict and analyse energy consumption patterns, enabling enterprises to optimise usage, manage high-demand periods, reduce waste and transition to renewable energy sources.

Climate adaptation

AI can analyse large datasets in real time, creating early warning systems for extreme weather events and long-term projections of localised events such as sea-level rise.

Sustainable business models

GenAI helps enterprises build sustainable business models by analysing trends and preferences. It identifies opportunities for products that meet sustainability criteria, ensuring viability and compliance.

Advancements in AI and sustainability tools demonstrate the urgent necessity for businesses to evolve, offering a pivotal perspective.

Key components for streamlining ESG operations

Operate partners bring expertise in streamlining ESG processes and aligning them with a company's specific needs, ensuring smooth integration with existing systems while providing proactive compliance monitoring.

Below are key functional requirements and components essential for an effective ESG platform.

Data collection and validation

Automation of data collection from various sources across an organisation, reducing time and effort.

Emission factor database

Implement a robust and certifiable emission factor database to calculate GHG emissions for various components.

Data compilation and analysis

Streamlined data flows and accurate data enable Operate partners to simplify analysis and enhance understanding. The platform should also provide trend analysis, compare performance against benchmarks and identify areas for improvement.

Reporting

Advanced reporting solutions aid Operate partners in producing accurate and actionable ESG insights, enabling companies to develop standardised ESG reports aligned with various reporting frameworks.

Risk management and benchmarking

Identify risks and opportunities related to ESG factors, supporting strategic decision-making and goal setting.

Integration with other systems

Seamless integration with other business systems, such as ERP or HRIS, streamlines data collection and enhances overall sustainability management.

Supply chain management and transparency

Provide robust traceability analysis to track the carbon footprint of the entire value chain, both upstream and downstream.

AI/ML-based generative RAG solution

Platforms with AI/ML solutions aid Operate partners in streamlining compliance, enhancing decision-making and anticipating future regulatory shifts. By continuously evaluating commercially available LLMs and incorporating ESG regulations, these models facilitate ESG programme planning and design, support compliance activities and drive the rapid evolution of ESG initiatives.

The role of Operate partners in ESG compliance

Navigating the complexities of ESG compliance requires more than just awareness of regulatory standards. It demands an expert with deep expertise, strong ESG advisory services, strategic execution, a solid understanding of robust systems and the ability to adapt to evolving global requirements. This is where an Operate partner plays a transformative role. Acting as a trusted advisor and execution expert, the right Operate partner provides end-to-end solutions to simplify the ESG journey for organisations. Operate partners use global expertise to align cross-border ESG reporting requirements, providing a unified approach that ensures compliance while building stakeholder trust across markets.

Key components for effective ESG operations

1. Streamlining ESG processes

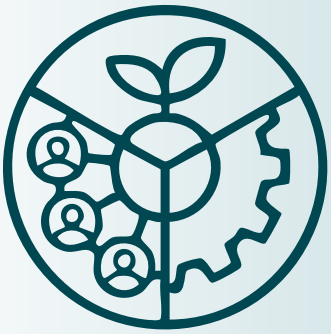
- An Operate partner ensures seamless integration of ESG initiatives with existing business processes, minimising disruption while maximising efficiency.
- By automating workflows, from data collection to reporting, they eliminate redundancies and reduce the manual effort required, allowing companies to focus on strategic goals.

2. Harmonising data across standards

- With global operations subject to diverse frameworks (e.g., CSRD, BRSR, SEC), businesses face challenges in harmonising data to meet multiple compliance standards.
- Operate partners deploy globally standardised processes and advanced data management integrated solutions to aggregate, standardise and validate ESG data, ensuring accuracy and consistency across geographies.

3. Enhancing reporting and transparency

- ESG reporting demands transparency and precision. Operate partners use technology to produce real-time dashboards and tailored reports aligned with global frameworks such as GRI, TCFD and ISSB.
- These reports provide actionable insights, helping organisations communicate effectively with stakeholders and regulators.



4. Mitigating regulatory risks

- Non-compliance with ESG mandates can result in significant penalties and reputational damage.
- Operate partners should stay informed about global regulatory developments and proactively guide clients to ensure compliance, reducing risks associated with non-adherence.

5. Driving innovation with technology

- Advanced technologies such as AI, ML and predictive analytics form the backbone of ESG solutions provided by Operate partners.
- These tools help organisations meet current standards and anticipate future trends, enabling strategic planning and sustainable growth.

6. Enabling scalability and agility

- As ESG regulations evolve, businesses require scalable solutions that can adapt to changing needs. Operate partners provide flexible, modular and integrated solutions that grow with the organisation's ESG ambitions.

7. Fostering collaboration across value chains

- Many ESG challenges, such as managing Scope 3 emissions, require collaboration across supply chains.
- Operate partners facilitate this collaboration by creating transparent, traceable systems that unite all stakeholders, ensuring accountability and collective progress towards sustainability goals.

Case in point: How Operate partners add value

Consider a multinational corporation grappling with disparate ESG reporting standards across its global operations. An Operate partner steps in to:

Establish globally aligned ESG reporting frameworks tailored to meet jurisdictional needs that harmonise reporting requirements for multiple jurisdictions.

Automate compliance workflows, reducing the burden on internal teams.

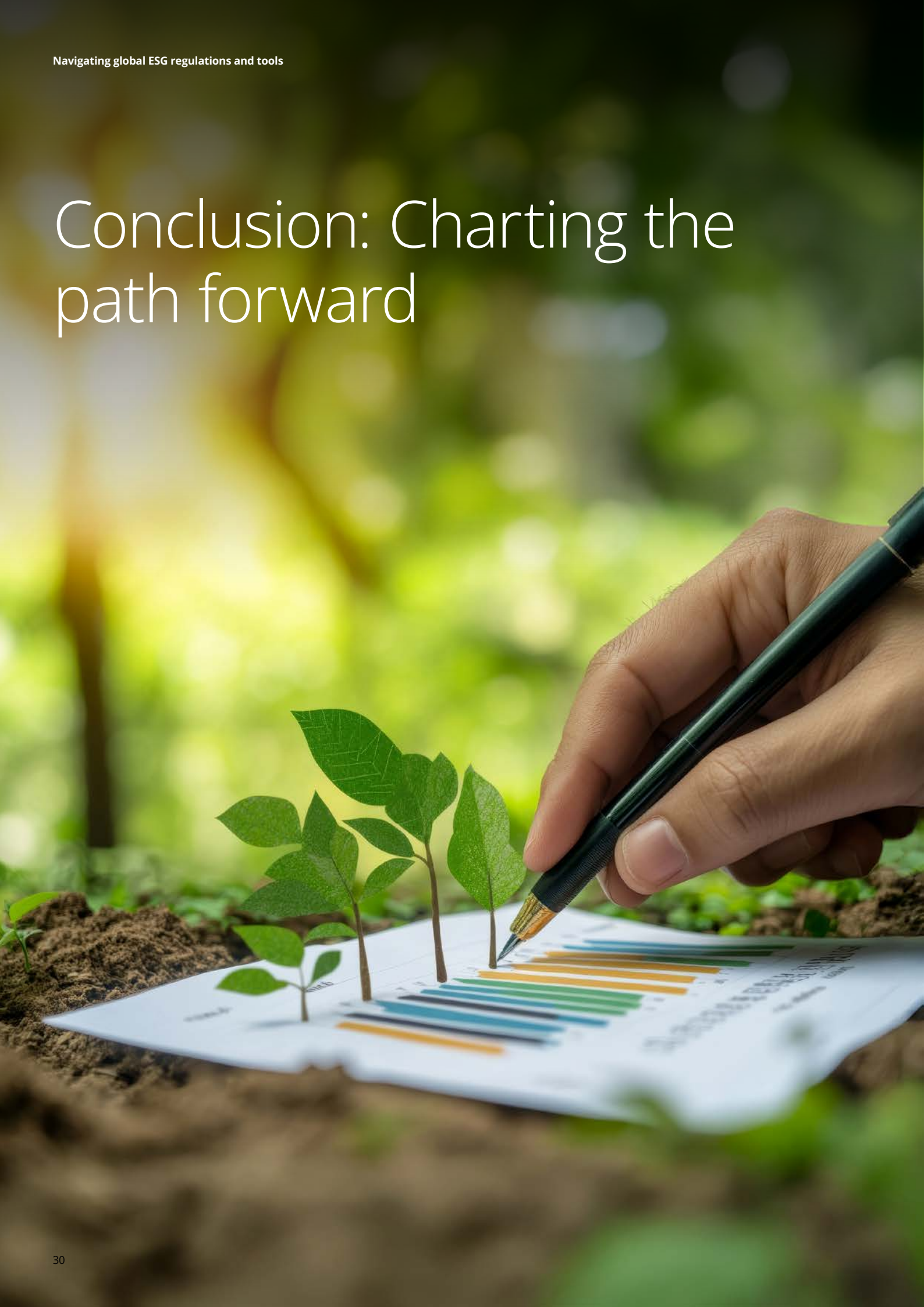
Provide continuous monitoring and insights, ensuring readiness for regulatory audits.

This collaboration ensures compliance and positions the organisation as a leader in sustainability, enhancing its reputation and stakeholder trust.

From compliance to strategic advantage

The right Operate partners transform ESG from a compliance necessity into a strategic advantage. By simplifying complexities, ensuring transparency and driving innovation, they empower businesses to achieve their sustainability goals while staying competitive in an evolving global market.

Conclusion: Charting the path forward



The evolution of ESG represents a profound transformation, reshaping the very definition of business success. With global ESG assets expected to exceed US$50 trillion by 2030, this movement has evolved from a compliance initiative to a fundamental component of corporate strategy. The coming years will see the convergence of sustainability and operational strategy, driven by real-time intelligence, predictive analytics and AI. Organisations that collaborate with the right Operate partner will streamline ESG compliance, effectively anticipate and mitigate sustainability risks and redefine resilience in an interconnected world.

The importance of adopting an ecosystem approach cannot be overstated. With Scope 3 emissions accounting for up to 95 percent of many companies' carbon footprints, collaboration across entire value chains is now crucial.

By using advanced data analytics in an industry projected to reach US$37.9 billion by 2029, organisations can move beyond isolated sustainability efforts. They can build networks that amplify impact, drive innovation and unlock new growth opportunities.

This transformation is further underscored by the shifting metrics of corporate leadership, where ESG performance is scrutinised as rigorously as financial metrics. Companies with strong ESG practices consistently outperform peers, achieving up to 20 percent higher profitability and better returns on equity. The question businesses face is no longer whether to prioritise ESG but how to embed it at the core of their strategies to remain competitive, innovative and resilient.

As ESG moves from the periphery to the forefront of business priorities, the future belongs to those who not only recognise its transformative potential but also act decisively to integrate sustainability into their operational DNA. This is not just a shift in business practices; it is a redefinition of value creation in a world where economic, social and environmental imperatives are inseparably linked.

By collaborating with an experienced Operate partner, businesses can transition ESG from a compliance challenge to a strategic opportunity, achieving resilience and sustainable growth in an interconnected global landscape.

Key components for effective ESG operations

1. ESG is fast becoming a core element of business strategy, shaping resilience, innovation and competitive positioning.
2. Today, ESG performance is evaluated with the same rigour as financial results. It plays a growing role in building investor confidence and strengthening stakeholder trust.
3. Addressing Scope 3 emissions, often comprising the largest share of an organisation’s carbon footprint, calls for close collaboration across the supply chain and partner ecosystems.
4. Technologies such as data analytics, AI and predictive modelling are critical for embedding ESG into everyday decision-making and future growth planning.
5. Collaborating with an experienced Operate team can help accelerate ESG maturity, offering scalable solutions that are both technology-enabled and outcome-focused.

Action items

1. Connect with a Deloitte Operate specialist to explore how a tailored ESG platform can help streamline compliance and unlock long-term value for your organisation.
2. Schedule a discovery workshop to assess where your ESG efforts stand today and how Deloitte can help you turn sustainability into a source of competitive advantage.

End notes

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