International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 10 Issue: 11 | Nov - 2026 SJIF Rating: 8.659 ISSN: 2582-3930

Sustainable Business Management: A Review of Emerging Practices and Research Trends

Dr.G.Indhumathi
Assistant Professor
Department of commerce with Information Technology
Pollachi college of Arts and Science, Poosaripatti
Pollachi
Email id indhumathi.mib@gmail.com

Dr. D. Premaselvaraji
Associate Professor
Department of Commerce with Computer Applications
Pollachi College of Arts and Science
Poosaripatti, Tamil Nadu, India.

Abstract
Abstract
Sustainable business management has moved from a voluntary corporate responsibility concern to a strategic approach that shapes how organisations create value, allocate resources, manage risk and engage with society. This review examines the evolution of sustainable business management and synthesises emerging practices and research trends across environmental, social and governance (ESG) management, circular economy, sustainable supply chains, climate strategy, responsible innovation, stakeholder engagement and sustainability reporting. The article adopts a structured narrative review approach, drawing on foundational scholarship, influential conceptual frameworks and widely used institutional standards. It organises the literature around the integration of sustainability into corporate purpose, operations, governance, finance and performance measurement. The review finds that leading practice is shifting from isolated environmental projects towards organisation-wide transformation supported by materiality assessment, lifecycle thinking, science-informed targets, supplier collaboration, data systems and board oversight. Digital technologies can improve traceability and resource efficiency, but they also create energy, privacy, labour and equity concerns that require governance. The review also identifies persistent barriers, including short-term financial pressures, inconsistent metrics, limited capabilities among smaller firms, fragmented regulation and the risk of symbolic or misleading sustainability claims. It concludes that sustainable business management is most credible when commitments are translated into measurable operational decisions, transparent disclosures and accountable incentives. Future research should strengthen evidence on causal impacts, transition pathways for small and medium-sized enterprises, just transition outcomes, biodiversity, digital sustainability and the relationship between sustainability performance and long-term resilience.

Keywords
Sustainable business management; corporate sustainability; ESG; circular economy; sustainable supply chain; stakeholder theory; climate strategy; sustainability reporting; responsible innovation.

Article structure
The article is organised into nine substantive sections covering the conceptual foundations, review approach, emerging practices, enabling technologies, governance and measurement, implementation barriers, research agenda and conclusion.

1 INTRODUCTION

1.1 Background and context

Businesses operate within interconnected economic, social and ecological systems. Their activities depend on natural resources, infrastructure, human capabilities and stable institutions, while also influencing emissions, land use, working conditions, community wellbeing and patterns of consumption. As climate risks, resource constraints, social expectations and regulatory requirements intensify, sustainability has become a central management issue rather than a peripheral philanthropic activity. Organisations are increasingly expected to demonstrate not only financial

performance but also how they create value without undermining the environmental and social systems on which that value depends.

The concept of sustainable development is commonly associated with meeting present needs without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). In business, this idea has been interpreted through corporate sustainability, the triple bottom line, stakeholder management, shared value and ESG approaches. Although these concepts differ in emphasis, they share an underlying proposition: business success should be assessed over a longer horizon and in relation to a wider set of impacts and dependencies.

1.2 Problem statement

Despite the growing visibility of sustainability commitments, implementation remains uneven. Some organisations have embedded climate and social considerations in capital allocation, product design and procurement, while others rely on isolated projects or broad public statements. The gap between commitments and operational change raises questions about the quality of governance, the reliability of reported data and the extent to which sustainability initiatives generate measurable outcomes. Firms also face uncertainty about which frameworks, indicators and technologies are most appropriate for their sector and scale.

1.3 Aim and objectives

The aim of this article is to review emerging practices and research trends in sustainable business management. It has five objectives: (i) explain the conceptual foundations of the field; (ii) identify practices gaining prominence across strategy and operations; (iii) examine the role of governance, technology and measurement; (iv) discuss implementation barriers and limitations; and (v) propose priorities for future research and managerial action.

1.4 Research questions

The review is guided by three questions. First, how is sustainability being integrated into business strategy and day-to-day management? Second, which organisational practices and enabling mechanisms are emerging as influential? Third, what gaps in evidence and implementation should guide future research?

1.5 Significance

The review is relevant to managers, researchers, policymakers and students because it connects broad sustainability principles with practical management choices. It emphasises that sustainability is not a single department's responsibility: it requires coordination across finance, operations, human resources, marketing, procurement, technology and corporate governance. It also highlights the importance of context. A practice that is suitable for a multinational manufacturer may need substantial adaptation before it can be adopted by a small service business or a resource-constrained enterprise.

2 CONCEPTUAL FOUNDATIONS

2.1 Sustainable development and corporate sustainability

Sustainable development provides the broad normative foundation for balancing economic opportunity with social inclusion and ecological integrity. At the organisational level, corporate sustainability concerns the management of a firm's direct and indirect effects on people and the environment, alongside its long-term economic viability. Dyllick and Hockerts (2002) argue that corporate sustainability requires firms to meet the needs of direct and indirect stakeholders without compromising their ability to meet the needs of future stakeholders. This framing makes time, stakeholder relationships and system-level effects central to management.

2.2 Triple bottom line

The triple bottom line popularised by Elkington (1997) encourages organisations to consider people, planet and profit. It challenged the assumption that financial results alone provide a complete account of corporate performance. In practice, however, the three dimensions are not always easily combined. Social and environmental outcomes may be difficult to quantify, and trade-offs can arise between short-term returns and long-term resilience. The framework is therefore most useful as a strategic lens rather than a simple scorecard.

2.3 Stakeholder theory

Stakeholder theory holds that organisations should consider groups that affect or are affected by corporate activity, including employees, customers, suppliers, communities, investors and public institutions (Freeman, 1984). This perspective supports more inclusive decision-making and helps managers identify material impacts that conventional

financial analysis may overlook. Stakeholder engagement is meaningful when it can influence decisions, rather than functioning only as a communication exercise.

2.4 Natural-resource-based view and competitive advantage

The natural-resource-based view extends resource-based thinking by examining how capabilities related to pollution prevention, product stewardship and sustainable development can contribute to competitive advantage (Hart, 1995). It suggests that environmental capabilities may support cost reduction, innovation, reputation and access to markets. Porter and van der Linde (1995) similarly argue that well-designed environmental improvements can stimulate innovation and productivity, although outcomes depend on industry conditions, regulation and managerial capability.

2.5 ESG and materiality

ESG is commonly used by investors and organisations to organise information about environmental, social and governance factors. It is not a single theory or a complete substitute for sustainability analysis. Materiality assessment helps organisations identify issues that are significant to enterprise value, stakeholder impacts or both. The double-materiality concept, used in some reporting regimes, broadens the analysis by considering both how sustainability issues affect the organisation and how the organisation affects society and the environment.

2.6 Integrative perspective

No single framework captures every dimension of sustainable business management. A robust approach combines stakeholder analysis, lifecycle thinking, resource efficiency, long-term value creation, ethical governance and transparent performance measurement. The appropriate combination depends on sector, geography, organisational size, value-chain structure and exposure to sustainability risks.

3 REVIEW APPROACH

3.1 Review design

This article uses a structured narrative literature review. A narrative approach is appropriate for a multidisciplinary field in which research spans management, economics, operations, environmental studies, accounting, public policy and information systems. The purpose is to synthesise major concepts and recurring themes rather than calculate a pooled effect size. The review is conceptual and interpretive; it should not be read as a registered systematic review or a statistically exhaustive bibliometric analysis.

3.2 Scope of the literature

The review focuses on research and institutional frameworks relevant to sustainable business management, including corporate sustainability, stakeholder engagement, circular economy, sustainable supply-chain management, climate strategy, ESG reporting, responsible innovation and digital sustainability. Foundational works are included to explain the intellectual development of the field, while more recent standards and policy frameworks are used to reflect the changing management and reporting environment.

3.3 Analytical themes

Sources were considered through six analytical themes: (1) strategic integration and corporate purpose; (2) operational practices and circularity; (3) value-chain and supply-chain responsibility; (4) governance, disclosure and accountability; (5) technology, data and innovation; and (6) organisational barriers and future research. These themes provide a consistent structure for comparing perspectives from different disciplines.

3.4 Synthesis procedure

The synthesis followed three broad steps. First, key concepts and frameworks were identified from foundational academic publications. Second, emerging managerial practices were grouped according to the organisational function or value-chain stage in which they operate. Third, recurring tensions and research gaps were identified by comparing intended benefits with implementation challenges. Attention was given to differences between aspirational frameworks, management processes and evidence of realised outcomes.

3.5 Limitations

The review has limitations. It does not report a reproducible database search string, screening flow diagram or formal quality appraisal, and it does not claim exhaustive coverage of all publications. The field is changing rapidly, particularly in sustainability disclosure regulation, climate standards and digital tools. Consequently, readers should verify the latest jurisdiction-specific requirements before using this article for compliance decisions. The review also recognises that evidence from large listed firms and developed economies is more visible in published research than evidence from smaller enterprises and emerging markets.

3.6 Research integrity

The article is a secondary review and does not present original survey, interview or experimental data. No primary human-participant research was conducted. The discussion is based on cited academic and institutional sources, and recommendations are framed as synthesis and interpretation rather than as new empirical findings.

3.7 Expanded research methodology

The study follows a structured narrative review design. The unit of analysis is the published concept, framework or documented management practice relevant to sustainable business management. The review does not collect primary survey or interview data and does not estimate statistical effect sizes. Instead, it compares the conceptual contribution and practical implications of academic works and institutional frameworks identified in the paper's reference base.

The review process is organised into five stages: (i) define the review questions and scope; (ii) identify relevant foundational scholarship and institutional frameworks; (iii) organise the material into analytical themes; (iv) compare practices, enabling mechanisms and implementation barriers; and (v) synthesise the findings into research trends and managerial implications. The thematic categories are strategic integration, operational circularity, supply-chain responsibility, governance and disclosure, digital innovation, and implementation barriers.

For consistency, each source or practice is interpreted against four review dimensions: its sustainability focus, the organisational process through which it is applied, the type of evidence or indicator used to monitor it, and the limitations or trade-offs identified. This approach supports qualitative comparison while avoiding unsupported numerical scoring.

The source paper does not provide a reproducible database search string, exact search dates, screening counts or a formal quality-appraisal score. Accordingly, this enhanced methodology describes the review logic and synthesis procedure without claiming a systematic database search or inventing the number of studies screened.

3.8 Research synthesis algorithm

The following algorithm represents the logical procedure used to organise and synthesise the literature. It is a conceptual review algorithm rather than a predictive or computational model.

INPUT: Review questions, scope of sustainable business management, and identified academic or institutional sources.

STEP 1: Define the review scope and the three research questions.

STEP 2: Identify relevant concepts, theories, standards and documented business practices from the available source set.

STEP 3: Exclude material that does not address sustainability strategy, operations, governance, value chains, technology or research trends.

STEP 4: Classify each relevant source or practice under the six analytical themes.

STEP 5: Extract the stated sustainability focus, implementation mechanism, indicators and reported limitations.

STEP 6: Compare themes to identify recurring practices, enabling conditions, barriers and trade-offs.

STEP 7: Synthesise the evidence into emerging trends, managerial implications and future research priorities.

OUTPUT: A structured narrative review with thematic findings, comparative analysis and research agenda.

3.9 Implementation framework

Figure 1 presents an implementation framework derived from the themes discussed in this review. It links leadership and governance with materiality assessment, target setting, operational implementation, and performance measurement. Data systems, organisational capabilities and stakeholder collaboration act as enabling mechanisms. The feedback loop indicates that measured outcomes should inform revised priorities and continuous improvement.



Figure 1. Sustainable business management implementation framework.

4 EMERGING PRACTICES

4.1 Sustainability-led strategy and materiality

A prominent practice is the integration of sustainability into corporate strategy. Rather than treating sustainability as a separate programme, organisations increasingly connect material issues to market positioning, investment decisions, product portfolios and risk management. Materiality assessments can help prioritise issues by considering stakeholder concerns, business dependencies and potential impacts. The process should be refreshed as technologies, regulation, supply chains and community expectations change.

4.2 Climate transition planning

Climate management is evolving from carbon-footprint reporting towards transition planning. This includes measuring greenhouse-gas emissions across relevant scopes, setting time-bound reduction targets, improving energy efficiency, procuring renewable electricity, redesigning logistics and assessing climate-related physical and transition risks. Credible plans explain the baseline, boundaries, interim milestones, capital expenditure, governance responsibilities and assumptions behind any use of offsets. A target without an implementation pathway can create reputational risk.

4.3 Circular economy and product stewardship

Circular-economy practices seek to reduce dependence on virgin materials and minimise waste by extending product life and retaining the value of materials. Common approaches include durable design, repair, refurbishment, remanufacturing, reuse, recycling and take-back systems. These practices require coordination between product designers, procurement teams, manufacturers, retailers and customers. They can create new revenue models, but their environmental benefits should be evaluated across the full lifecycle to avoid shifting impacts from one stage or location to another.

4.4 Sustainable supply-chain management

Organisations are extending sustainability expectations to suppliers through codes of conduct, risk screening, audits, capability-building programmes, traceability and collaborative improvement. Responsible sourcing increasingly considers labour rights, health and safety, emissions, water, biodiversity and responsible mineral or material sourcing. Traditional audit-only models may identify problems but fail to resolve root causes. Long-term supplier partnerships, worker voice mechanisms and remediation processes can provide a stronger basis for improvement.

4.5 Sustainable finance and investment

Sustainability considerations are increasingly incorporated into capital budgeting, lending, insurance and investment analysis. Internal carbon pricing, lifecycle costing and scenario analysis can make longer-term impacts more visible in financial decisions. Sustainability-linked finance may connect borrowing costs to defined performance indicators, but

the indicators need to be material, measurable and independently verifiable. Financial labels alone do not establish that an activity produces a positive environmental or social outcome.

4.6 Social sustainability and decent work

Social sustainability includes safe working conditions, fair treatment, inclusion, skills development, responsible restructuring and respect for human rights throughout the value chain. Organisations are increasingly expected to assess risks to workers and communities, provide accessible grievance channels and demonstrate how adverse impacts are prevented or remedied. Social outcomes should not be reduced to employee engagement scores; they require attention to wages, security, voice, equality and the distribution of costs and benefits.

4.7 Comparative analysis of emerging sustainable business practices

Table 1 compares the principal practice areas discussed in this review. The indicators are illustrative monitoring measures drawn from the paper's discussion; they are not reported empirical results and no performance values are assigned.

Practice area	Typical implementation	Illustrative indicators	Expected contribution / caution
Climate strategy	Measure emissions; set targets; improve energy efficiency; use renewable electricity; assess climate risks.	Absolute emissions; energy use; renewable-energy share; progress against interim targets.	Supports transition planning and risk management; targets need funded pathways and clear boundaries.
Circular economy	Design for durability and repair; reuse, refurbish, remanufacture, recycle; introduce take-back systems.	Material use; product lifetime; repair/reuse rate; waste generated and recovered.	Retains material value and reduces waste; lifecycle assessment is needed to avoid shifting impacts.
Sustainable supply chain	Supplier screening; codes of conduct; traceability; worker voice; capability building and remediation.	Suppliers assessed; traceability coverage; corrective actions closed; worker grievance outcomes.	Improves value-chain visibility and responsibility; audits alone may not resolve root causes.
Social sustainability	Promote safe work, fair treatment, inclusion, skills development and human-rights due diligence.	Injury rates; training completion; workforce indicators; grievance resolution and remedy.	Supports decent work and inclusion; employee engagement scores alone are insufficient.
Sustainable finance	Use lifecycle costing, scenario analysis, internal carbon pricing and sustainability-linked finance.	Capital allocated to transition; indicator performance; lifecycle cost; financing conditions.	Makes longer-term impacts more visible; financial labels do not prove positive impact.
Governance and disclosure	Board oversight; assigned responsibilities; materiality assessment; transparent reporting and assurance.	Board review frequency; data completeness; assurance coverage; target progress disclosed.	Strengthens accountability and decision-useful information; inconsistent metrics can reduce comparability.
Digital sustainability	Use sensors, analytics and digital platforms for monitoring, forecasting and traceability; govern AI responsibly.	Energy and water monitored; data completeness; process efficiency; technology footprint and risk controls.	Improves monitoring and resource efficiency; digital systems also have energy, privacy and labour impacts.

Table 1. Comparative analysis of emerging sustainable business practices.
Note: The table is a qualitative synthesis of the reviewed themes. Indicator examples should be adapted to organisational context and reporting boundaries; they are not measured values from a field study.

5 ENABLERS AND INNOVATION

5.1 Digitalisation for sustainability

Digital technologies can support sustainability through improved monitoring, forecasting, automation and coordination. Internet of Things sensors can measure energy, water and equipment performance; analytics can identify process inefficiencies; and digital platforms can improve material traceability. Artificial intelligence may support demand forecasting, predictive maintenance and route optimisation. These tools are most valuable when linked to clear operational decisions and verified outcome indicators.

5.2 Data quality and interoperability

Sustainability decisions depend on data that are accurate, comparable, timely and traceable. Organisations often collect information from multiple facilities, suppliers and enterprise systems, creating problems of inconsistent definitions and incomplete coverage. Data governance should define ownership, calculation methods, reporting boundaries, validation controls and correction procedures. Interoperability is important because firms may need to exchange information with suppliers, customers, auditors, regulators and investors using different systems.

5.3 Artificial intelligence and its sustainability footprint

AI can improve resource allocation and support environmental modelling, but its own footprint must be considered. Training and operating computationally intensive systems require electricity, cooling, hardware and data-centre infrastructure. Automated decisions can also create social risks through bias, surveillance, opaque accountability or changes to work. Responsible deployment therefore requires proportionality, impact assessment, human oversight, cybersecurity and transparent governance of data and models.

5.4 Innovation in products and business models

Sustainable innovation can involve low-impact materials, energy-efficient products, repairable designs, product-as-a-service models, sharing platforms and reverse logistics. Business-model innovation is particularly important because product efficiency alone may not reduce total environmental pressure if overall consumption continues to grow. Organisations should evaluate whether new models genuinely reduce lifecycle impacts and whether they distribute value fairly among customers, workers, suppliers and communities.

5.5 Collaboration and ecosystem approaches

Many sustainability challenges exceed the capacity of a single firm. Industry consortia, research institutions, local governments, non-governmental organisations and community groups can coordinate infrastructure, standards, skills and shared investment. Collaboration can accelerate learning and reduce duplication, although it requires clear roles, transparent decision-making and safeguards against conflicts of interest. Pre-competitive cooperation may be especially useful for recycling systems, supplier development and common measurement methods.

5.6 Organisational capabilities

Technology alone does not produce transformation. Firms need leadership commitment, cross-functional teams, employee training, incentives and a culture that supports experimentation and learning. Sustainability competencies should be incorporated into procurement, engineering, finance, marketing and human-resource roles. Managers also need the ability to recognise trade-offs and communicate uncertainty rather than presenting complex sustainability decisions as simple technical fixes.

6 GOVERNANCE AND MEASUREMENT

6.1 Board and executive oversight

Effective governance assigns clear responsibility for sustainability matters. Boards can oversee strategy, risk appetite, major investments and the credibility of public commitments, while executive teams translate direction into budgets, targets and operational plans. Responsibility should be distributed across functions without becoming fragmented. Linking selected management incentives to well-designed sustainability indicators can reinforce accountability, but poorly designed incentives may encourage narrow target optimisation or manipulation.

6.2 Reporting standards and disclosure

Sustainability reporting has developed from voluntary environmental reports into a more structured field of corporate disclosure. The Global Reporting Initiative provides standards focused on impacts on the economy, environment and people. The IFRS Foundation's International Sustainability Standards Board has developed IFRS Sustainability Disclosure Standards, including IFRS S1 on general sustainability-related financial information and IFRS S2 on climate-related disclosures. The European Sustainability Reporting Standards support reporting under the EU's Corporate Sustainability Reporting Directive. These frameworks have different scopes and legal contexts; organisations should identify which requirements apply to them.

6.3 Measurement architecture

A useful measurement system combines leading and lagging indicators. Leading indicators may include the proportion of suppliers assessed, capital allocated to transition projects, employee training completion or the share of products designed for repair. Lagging indicators may include absolute emissions, energy and water use, injury rates, waste generation and verified remediation outcomes. Metrics should have defined units, boundaries, baselines, owners, frequency and assurance arrangements.

6.4 Avoiding misleading claims

Greenwashing can occur when environmental claims are vague, selective, unsubstantiated or inconsistent with actual performance. Common warning signs include unsupported terms such as 'eco-friendly', emphasis on a minor improvement while major impacts are ignored, unclear offset claims and targets that lack interim milestones. Credible communication explains the scope of a claim, the evidence supporting it, relevant limitations and the organisation's progress against a baseline. Independent assurance can strengthen confidence, but it cannot compensate for weak underlying systems.

6.5 From reporting to decision-useful information

Reporting should serve management as well as external stakeholders. Data become decision-useful when they inform procurement choices, product development, maintenance schedules, site selection, capital allocation and workforce planning. A reporting process that is disconnected from operational systems can become a costly compliance exercise. The strongest systems connect internal management information with external disclosures while preserving consistency, traceability and appropriate confidentiality.

6.6 Performance and long-term value

The relationship between sustainability and financial performance is complex. Efficiency, innovation, risk reduction and trust may support long-term value, but costs, transition investments and sector-specific constraints can affect short-term results. Managers should avoid assuming that every sustainability initiative produces immediate financial returns. A balanced evaluation considers financial outcomes alongside impact, resilience, strategic capability and stakeholder legitimacy.

7 BARRIERS AND CRITICAL ISSUES

7.1 Short-termism and competing priorities

Quarterly performance pressure, high capital costs and uncertain market demand can discourage investment in projects with long payback periods. Managers may also face competing priorities such as affordability, service reliability, growth and employment. Sustainability integration therefore requires credible business cases, but it also requires governance that protects necessary long-term investments when immediate returns are uncertain.

7.2 Capability and resource constraints

Small and medium-sized enterprises often lack dedicated sustainability teams, specialist data systems and bargaining power over suppliers. They may face reporting requests from larger customers without receiving the resources or guidance needed to respond. Proportionate tools, shared training, sector-specific guidance and accessible finance can help smaller firms improve performance without imposing disproportionate administrative burdens.

7.3 Fragmented standards and regulatory uncertainty

The growth of reporting frameworks and regulatory requirements can create complexity, particularly for firms operating across multiple jurisdictions. Differences in definitions, boundaries and timelines may increase costs and reduce comparability. Greater alignment can improve efficiency, but harmonisation should not erase important differences in impact, sector exposure or stakeholder needs. Organisations need to monitor applicable requirements and maintain transparent documentation of methodological choices.

7.4 Supply-chain visibility and accountability

Multi-tier supply chains make it difficult to identify the origin of materials and the conditions under which products are made. Audits may be limited by sampling, language, access and incentives to conceal non-compliance. Traceability technologies can help, but they are only as reliable as the information entered and the governance around it. Effective due diligence combines data with worker engagement, local knowledge, independent verification and remedy.

7.5 Trade-offs and unintended consequences

Sustainability interventions can create trade-offs. A lower-carbon material may require more water; electrification may increase demand for critical minerals; automation may improve efficiency while displacing workers; and recycling may be technically or economically impractical for some products. Lifecycle assessment and social-impact analysis can help reveal these effects. Decisions should explain the trade-offs, identify who bears the costs and establish mitigation measures.

7.6 Greenwashing and symbolic adoption

Public commitments can become symbolic when they are not supported by operational budgets, executive accountability or transparent progress reporting. Marketing-led sustainability claims may overstate the significance of small initiatives. This risk is heightened when organisations select convenient indicators rather than material impacts. Credibility depends on alignment between stated purpose, actual resource allocation, business conduct and independently checkable evidence.

7.7 Unequal transition outcomes

The transition to more sustainable production can affect workers, communities and regions differently. Industries dependent on carbon-intensive activities may face employment disruption, while communities may experience changes in land use, energy prices or access to resources. A just transition requires social dialogue, reskilling, social protection, inclusive planning and attention to the distribution of benefits. It should be treated as a management and policy concern, not an afterthought.

8 RESEARCH TRENDS AND FUTURE AGENDA

8.1 Measuring real-world impact

Future studies should distinguish between sustainability disclosure, management adoption and measurable impact. A company may publish extensive information without achieving substantial environmental or social improvements. Longitudinal and comparative research can examine whether specific practices lead to reductions in emissions, resource use or labour-rights violations, and under what conditions. Researchers should also account for rebound effects and the possibility that improvements in one location shift impacts elsewhere.

8.2 SMEs and emerging economies

More research is needed on how small firms and enterprises in emerging economies implement sustainability under constraints involving finance, infrastructure, skills and regulatory capacity. Studies should examine informal supply chains, family businesses, local industrial clusters and sector-specific transition pathways. Research should avoid simply transferring models developed for large multinational corporations into contexts where institutional and resource conditions differ.

8.3 Biodiversity, nature and water

Climate change has received substantial corporate attention, but biodiversity loss, land degradation, freshwater stress and ecosystem dependencies require deeper integration into business research. Future work can examine how firms identify nature-related dependencies and impacts, incorporate location-specific information into decisions and collaborate with communities and conservation institutions. The Taskforce on Nature-related Financial Disclosures provides an emerging framework for considering nature-related issues.

8.4 Human rights and the just transition

Research should investigate how sustainability programmes affect workers and communities, particularly where production systems are being transformed. Relevant topics include living wages, occupational health, worker participation, reskilling, gender equality, migrant labour and access to remedy. Studies should assess whether corporate due-diligence processes improve outcomes for rights-holders or primarily serve compliance and reputation objectives.

8.5 Digital sustainability and AI governance

The relationship between digital transformation and sustainability remains underexplored. Future research can quantify the lifecycle footprint of AI systems, assess the net benefits of smart infrastructure, examine electronic waste and critical-material dependencies, and evaluate the labour implications of automation. Work is also needed on governance models that make algorithmic decisions transparent, contestable and aligned with human rights.

8.6 Sustainability finance and corporate performance

Research should examine when sustainability-linked loans, green bonds, transition finance and internal carbon pricing produce additional improvements rather than relabel existing activity. Stronger causal designs can help separate selection effects from the impact of financing mechanisms. Researchers should also investigate how investors interpret different types of sustainability information and whether reporting quality improves capital allocation.

8.7 Methodological opportunities

Mixed-method research can combine quantitative performance data with interviews, case studies and participatory methods. Comparative sector studies can identify context-specific mechanisms, while longitudinal designs can capture organisational learning and transition dynamics. Open measurement protocols and transparent data definitions would improve reproducibility. Researchers should report limitations and avoid treating correlations between ESG scores and financial performance as proof of causation.

9 CONCLUSION AND REFERENCES

9.1 Conclusion

This review has examined sustainable business management as an evolving field that connects strategy, operations, governance, finance, technology and stakeholder relationships. Emerging practice indicates a shift from isolated corporate responsibility activities towards integrated management systems that address material impacts and dependencies across the value chain. Climate transition planning, circular product design, responsible procurement, social due diligence, sustainability-linked investment and structured disclosure are becoming important elements of this shift.

The review also shows that sustainability transformation is not achieved through reporting or technology alone. It requires leadership, clear accountability, reliable data, employee capabilities, supplier collaboration and attention to social consequences. Digital tools can improve visibility and efficiency, but their own environmental and social effects must be governed. Similarly, sustainability targets are credible only when they are supported by funded pathways, measurable milestones and transparent explanations of progress and limitations.

For managers, the central implication is to connect sustainability priorities to the decisions that shape business performance: what the organisation produces, how it sources materials, how it treats people, where it invests, how it uses technology and how it measures success. For researchers, priorities include stronger causal evidence, greater attention to SMEs and emerging economies, nature-related impacts, just transition outcomes and digital sustainability. Sustainable business management is best understood as a continuous process of learning and adaptation, grounded in accountability and a long-term view of value creation.

References

Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st century business. Capstone.

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman.

Global Reporting Initiative. (2021). GRI Universal Standards 2021. https://www.globalreporting.org/standards/

Hart, S. L. (1995). A natural-resource-based view of the firm. Academy of Management Review, 20(4), 986–1014. https://doi.org/10.2307/258963

IFRS Foundation. (2023). IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information. https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/

IFRS Foundation. (2023). IFRS S2 Climate-related Disclosures. https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/

International Organization for Standardization. (2010). ISO 26000: Guidance on social responsibility. ISO.

Porter, M. E., & van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. Journal of Economic Perspectives, 9(4), 97–118. https://doi.org/10.1257/jep.9.4.97

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. Harvard Business Review, 89(1/2), 62–77.

Taskforce on Nature-related Financial Disclosures. (2023). Recommendations of the Taskforce on Nature-related Financial Disclosures. https://tnfd.global/recommendations/

United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. https://sdgs.un.org/2030agenda

World Commission on Environment and Development. (1987). Our common future. Oxford University Press.

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. Business Strategy and the Environment, 11(2), 130–141. https://doi.org/10.1002/bse.323