



The Role of Strategic Business Management in Implementing Responsible Consumption and Production Patterns with an Emphasis on Organizational Environmental Performance

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ABSTRACT

Responsible consumption and production, as reflected in SDG 12, requires organizations to reconsider how resources are sourced, transformed, distributed, consumed, and recovered. Businesses occupy a central position in this transformation because they control product design decisions, supply chain relationships, production systems, and performance priorities. Although many firms pursue sustainability initiatives such as green procurement, waste minimization, or resource efficiency, these actions often remain disconnected from core strategic management processes. This fragmentation limits the ability of organizations to translate sustainability intentions into coherent responsible consumption and production patterns. This article proposes a conceptual framework in which strategic business management provides the direction, resource allocation logic, and dynamic capability base for SDG 12 implementation. The framework positions strategic orientation as the antecedent of implementation levers such as circular design, supply chain reconfiguration, stakeholder engagement, and environmental performance monitoring. The framework consists of four interrelated building blocks: strategic sustainability orientation, implementation mechanisms, mediating and moderating conditions, and organizational environmental performance. Together, these components explain how firms could move from environmental intent to structured action and measurable environmental outcomes. The proposed framework would enable managers to diagnose strategic gaps, align sustainability objectives with operational decisions, and prioritize interventions that support responsible consumption and production. It also provides researchers with a theory-grounded structure for examining how strategic management could shape environmental performance. A strategy-driven approach to responsible consumption and production offers a pathway for aligning competitive advantage with sustainability transformation. By integrating strategic management and environmental performance perspectives, organizations could better contribute to global consumption and production goals.

Keywords: Strategic management, Responsible consumption and production, SDG 12, Environmental performance, Corporate sustainability, Circular economy

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INTRODUCTION

The transition toward responsible consumption and production has become a central concern for organizations seeking to align business activity with global sustainability priorities. Firms influence material extraction, product design, manufacturing practices, supplier conduct, consumer use patterns, and post-consumption recovery, which makes business strategy a critical mechanism for advancing SDG 12. Strategic management provides the direction through which environmental commitments can be translated into resource allocation, innovation priorities, and performance expectations (Provasnek *et al.*, 2017; Yadav *et al.*, 2017). Without such strategic integration, responsible consumption and production risks remaining a collection of isolated operational practices rather than a coherent transformation of business models and value chains (Geissdoerfer *et al.*, 2017, 2018b).

Despite the growth of corporate sustainability rhetoric, the integration of SDG 12 into core strategic planning remains

uneven and conceptually underdeveloped. Many organizations disclose sustainability ambitions or adopt environmental management practices, yet these commitments may not be systematically embedded in competitive positioning, investment decisions, governance structures, or supply chain coordination (Chaudhry & Amir, 2020; Gunawan *et al.*, 2020). The strategic gap is especially visible when firms pursue symbolic sustainability claims without aligning managerial incentives, innovation routines, and procurement systems with responsible production and consumption objectives (Brulhart *et al.*, 2019; Van Zanten & Van Tulder, 2021). A conceptual framework is therefore needed to explain how sustainability intent can be linked to strategic management processes that guide implementation over time.

Existing literature has made important contributions by examining green supply chain management, circular economy practices, environmental accounting, and sustainable business model innovation. However, environmental performance is often treated as the outcome of discrete operational improvements, rather than as the result of an integrated strategic management system that coordinates capabilities, stakeholders, and implementation levers (Mishra *et al.*, 2017; Solovida & Latan, 2017; Seman *et al.*, 2019). Studies of green

supply chain practices and environmental management systems show that firms may improve environmental outcomes through supplier collaboration, monitoring, and process redesign, but these practices require strategic prioritization to become durable organizational routines (Al-Sheyadi *et al.*, 2019; Micheli *et al.*, 2020). This suggests that environmental performance should be understood not only as an operational result, but also as a strategic construct shaped by managerial choices and organizational capabilities.

This article proposes an integrative conceptual framework that explicates how strategic business management could drive the implementation of responsible consumption and production patterns and thereby enhance organizational environmental performance. The framework connects strategic sustainability orientation, resource allocation, dynamic capabilities, stakeholder integration, and operational implementation mechanisms to outcomes such as emissions management, resource efficiency, waste minimization, and environmental management performance. It advances a theory-grounded view in which strategic management acts as the enabling architecture for circular product strategies, sustainable procurement, eco-innovation, and continuous performance monitoring. By doing so, the article contributes to strategic management and sustainability scholarship by clarifying the pathways through which firms could translate SDG 12 aspirations into organizational action.

Background

Responsible consumption and production in the business context

Responsible consumption and production in the business context refers to the strategic reconfiguration of products, processes, supply chains, and stakeholder relationships to reduce resource intensity, minimize waste, and extend the value of materials across their life cycle. For firms, SDG 12 is not limited to consumer behavior or public policy; it also concerns procurement choices, production technologies, distribution systems, product-service models, recovery mechanisms, and transparency practices (Gunawan *et al.*, 2020; Van Zanten & Van Tulder, 2021). The corporate interpretation of SDG 12 therefore requires managers to move beyond compliance and incorporate sustainability objectives into value creation and value capture logics (Geissdoerfer *et al.*, 2017, 2018b). The strategic gap emerges when global sustainability goals are acknowledged at the level of reporting but not translated into investment priorities, operational routines, or accountability systems.

Strategic management foundations

Strategic management theories offer a strong conceptual base for explaining why some organizations are better positioned than others to implement responsible consumption and production patterns. The resource-based view suggests that environmental capabilities, knowledge assets, and green intellectual capital may become valuable organizational resources when they are embedded in routines and aligned with competitive strategy (Yadav *et al.*, 2017; Asiaei *et al.*, 2022). Dynamic capabilities theory emphasizes the ability to sense sustainability pressures, seize circular economy opportunities, and reconfigure assets, suppliers, and processes in response to

changing environmental expectations (Marrucci *et al.*, 2022; Yi & Demirel, 2023). Stakeholder theory complements these perspectives by explaining how pressure from regulators, customers, investors, communities, and supply chain partners can shape strategic priorities and implementation choices (Brulhart *et al.*, 2019; Fobbe & Hilletoft, 2021).

Organizational environmental performance

Organizational environmental performance is a multidimensional construct that includes emissions reduction, energy efficiency, material productivity, waste minimization, pollution prevention, environmental compliance, and broader environmental management capability. It is strategically significant because these dimensions reflect how effectively a firm converts environmental intent into operational discipline and measurable environmental responsibility (Solovida & Latan, 2017; Centobelli *et al.*, 2019). However, linking environmental performance to strategy remains challenging because environmental outcomes are influenced by sectoral conditions, regulatory regimes, technology choices, supplier behavior, and measurement systems (Al-Sheyadi *et al.*, 2019; Chaudhry & Amir, 2020). A conceptual framework must therefore distinguish between strategic antecedents, implementation mechanisms, and the environmental performance dimensions that should be measured.

Prior models linking strategy to sustainability

Prior models linking strategy to sustainability have emphasized sustainable business model innovation, green supply chain management, circular economy transitions, environmental accounting, and stakeholder-oriented corporate responsibility. These models show that sustainability performance can be strengthened when firms redesign value propositions, collaborate across supply chains, and use environmental information to support strategic decision-making (Geissdoerfer *et al.*, 2018a, 2018b; Chaudhry & Amir, 2020). Yet many existing models give limited attention to the specific implementation of responsible consumption and production patterns as an integrated SDG 12 agenda within strategic management. As a result, the literature still needs a framework that connects strategic orientation, operational levers, mediating mechanisms, and environmental performance outcomes in one coherent architecture (Centobelli *et al.*, 2020; Van Zanten & Van Tulder, 2021).

The missing link: from strategy to sdg 12 implementation

The missing link in current scholarship concerns the translation of strategic intent into concrete responsible consumption and production practices. Studies on green supply chain management, circular business models, and environmental management accounting demonstrate relevant implementation pathways, but they often examine these practices separately rather than as interdependent elements of a strategy-led transformation (Mishra *et al.*, 2017; Seman *et al.*, 2019; Kazancoglu *et al.*, 2021). A firm may adopt supplier selection criteria, circular design practices, or environmental accounting tools, yet the full potential of these mechanisms depends on whether they are anchored in strategic priorities and supported by capabilities, leadership, culture, and stakeholder engagement (Dubey *et al.*, 2017; Gunarathne *et al.*, 2021). This

article therefore conceptualizes SDG 12 implementation as a strategic management process rather than a narrow operational or reporting activity.

Framework overview

High-level architecture

The proposed framework positions strategic management orientation as the primary antecedent of responsible consumption and production implementation. In this architecture, strategic sustainability orientation shapes implementation levers such as eco-design, circular product strategies, green supply chain coordination, responsible procurement, employee engagement, and stakeholder collaboration (Geissdoerfer *et al.*, 2017; Luthra *et al.*, 2017; Micheli *et al.*, 2020). These levers are expected to influence

organizational environmental performance by reducing resource intensity, improving waste prevention, supporting material recovery, and strengthening environmental management routines (Solovida & Latan, 2017; Centobelli *et al.*, 2019). Feedback loops connect performance measurement back to strategic planning, enabling firms to revise priorities, reconfigure capabilities, and refine their SDG 12 implementation over time.

Figure 1 presents the proposed strategy-led framework linking strategic sustainability orientation, responsible consumption and production implementation levers, mediating and moderating mechanisms, organizational environmental performance, and strategic learning (Varonekaitė *et al.*, 2024; Zhou *et al.*, 2024).

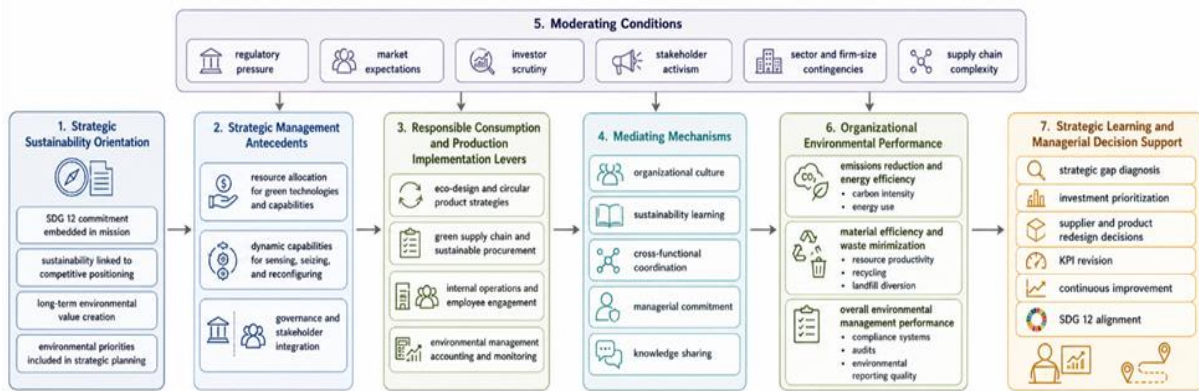


Figure 1. Strategy-Led Framework for Implementing Responsible Consumption and Production and Improving Organizational Environmental Performance

Core Inputs and pathways

The framework identifies three core strategic inputs: the firm’s sustainability posture, its resource commitments, and its dynamic capabilities for innovation and reconfiguration. A proactive strategic posture would be expected to encourage firms to invest in green innovation, circular business models, sustainable procurement, and environmental management accounting before external pressures make such changes unavoidable (Chaudhry & Amir, 2020; Kalyar *et al.*, 2020; Marrucci *et al.*, 2022). Resource commitments are important because responsible production practices often require new technologies, supplier development, employee training, product redesign, and cross-functional coordination (Luthra *et al.*, 2017; Seman *et al.*, 2019). Dynamic capabilities then provide the pathway through which these resources are adapted and recombined as market expectations, regulatory demands, and stakeholder pressures evolve (Zameer *et al.*, 2021; Yi & Demirel, 2023).

Design principles

The framework is theory-grounded, multi-level, dynamic, and actionable for managers seeking to align strategic planning with SDG 12 implementation. It is theory-grounded because it integrates the resource-based view, dynamic capabilities, and stakeholder theory to explain why environmental transformation depends on both internal capabilities and

external relationships (Brulhart *et al.*, 2019; Fobbe & Hilletoft, 2021; Asiaei *et al.*, 2022). It is multi-level because responsible consumption and production involves firm-level strategy, supply chain coordination, institutional pressures, and market expectations (Dubey *et al.*, 2017; Al-Sheyadi *et al.*, 2019). It is dynamic and actionable because it treats environmental performance monitoring as a feedback mechanism that can guide strategic learning, resource reallocation, and continuous improvement (Gunarathne *et al.*, 2021; Van Zanten & Van Tulder, 2021).

Strategic management antecedents

Strategic sustainability orientation

Strategic sustainability orientation refers to the extent to which a firm explicitly embeds environmental values, responsible consumption, and sustainable production goals into its mission, strategic intent, and competitive logic. Such orientation could influence which projects receive investment, which suppliers are selected, which products are redesigned, and which environmental indicators are prioritized in managerial review systems (Solovida & Latan, 2017; Yadav *et al.*, 2017). A strong sustainability orientation would be expected to reduce the risk that environmental initiatives remain peripheral, because it links environmental responsibility to corporate identity and

long-term value creation (Provasnek *et al.*, 2017; Brulhart *et al.*, 2019). In the proposed framework, strategic sustainability orientation acts as the initial condition that directs attention, legitimizes implementation investments, and frames environmental performance as a strategic outcome.

Resource allocation and dynamic capabilities

Responsible consumption and production requires more than environmental aspiration; it depends on the allocation of financial, technological, human, and relational resources to sustainability-oriented activities. Firms need dynamic capabilities to reconfigure production systems, develop eco-innovations, collaborate with suppliers, redesign products for circularity, and adapt business models to changing sustainability expectations (Geissdoerfer *et al.*, 2018a, 2018b; Marrucci *et al.*, 2022). These capabilities would be expected to support strategic flexibility by enabling organizations to move from linear production models toward resource-efficient and circular alternatives (Kazancoglu *et al.*, 2021; Yi & Demirel, 2023). In the framework, resource allocation and dynamic capabilities serve as the bridge between strategic intent and the operational mechanisms through which SDG 12 becomes actionable.

Corporate governance and stakeholder integration

Corporate governance and stakeholder integration shape whether environmental objectives are treated as strategic priorities or as discretionary initiatives. Board oversight, investor expectations, customer pressure, regulatory scrutiny, and community concerns can encourage firms to incorporate environmental performance into strategic decision-making and accountability systems (Brulhart *et al.*, 2019; Zameer *et al.*, 2021). Stakeholder integration also supports responsible consumption and production by broadening the information base available to managers, especially when suppliers, customers, and external partners contribute knowledge about product redesign, material substitution, and circular recovery pathways (Fobbe & Hilletoft, 2021; Meis-Harris *et al.*, 2021). Within the proposed framework, governance and stakeholder engagement operate as strategic antecedents that reinforce implementation commitment and strengthen the legitimacy of environmental transformation.

Table 1 clarifies how strategic management pathways translate SDG 12 intent into concrete responsible consumption and production implementation mechanisms.

Table 1. Strategic Management Pathways for Translating SDG 12 Intent into Responsible Consumption and Production Implementation

Strategic pathway	Conceptual role in the framework	Key managerial question	Implementation translation	Expected contribution to responsible consumption and production	Environmental performance logic
Strategic sustainability orientation	Establishes the strategic starting point for SDG 12 implementation by embedding environmental priorities into mission, competitive logic, and long-term value creation.	Is sustainability treated as a strategic priority or as a peripheral reporting activity?	Incorporates responsible consumption and production goals into corporate planning, strategic objectives, managerial review systems, and investment criteria.	Reduces fragmentation by aligning product design, procurement, operations, and stakeholder engagement around a common sustainability direction.	Environmental performance improves because environmental objectives become embedded in strategy rather than left to isolated operational projects.
Resource allocation	Converts sustainability intent into organizational capacity by directing financial, technological, human, and relational resources toward implementation.	Are adequate resources assigned to sustainability transformation, or are expectations unsupported by investment?	Funds green technologies, supplier development, employee training, circular design projects, environmental accounting systems, and cross-functional coordination.	Enables firms to move from symbolic SDG 12 commitment to concrete responsible production and consumption practices.	Performance gains are more likely when emissions, waste, energy, and material-efficiency goals are supported by dedicated resources.
Dynamic capabilities	Provides the adaptive capacity needed to sense sustainability pressures, seize circular economy opportunities, and reconfigure business processes.	Can the organization adapt its assets, routines, suppliers, and business model as sustainability expectations evolve?	Supports eco-innovation, product redesign, process reconfiguration, supplier collaboration, and circular business model experimentation.	Helps firms shift from linear production models toward more resource-efficient and circular patterns.	Environmental performance becomes more durable because firms can adjust implementation as technologies, regulations, and stakeholder expectations change.
Corporate	Creates oversight,	Who is	Links board	Strengthens	Environmental

governance	accountability, and decision authority for responsible consumption and production.	accountable for environmental transformation, and how is progress reviewed?	oversight, executive incentives, risk management, sustainability committees, and reporting structures to SDG 12 implementation.	implementation legitimacy and reduces the risk of symbolic or disconnected sustainability initiatives.	outcomes improve when governance systems connect environmental indicators to strategic accountability and corrective action.
Stakeholder integration	Expands the information base and legitimacy of sustainability strategy by incorporating suppliers, customers, regulators, investors, communities, and partners.	Are external stakeholders used as sources of pressure only, or also as sources of knowledge and collaboration?	Builds supplier partnerships, customer-facing circular mechanisms, transparency practices, regulatory alignment, and collaborative recovery systems.	Extends responsible consumption and production beyond firm boundaries into the value chain and product life cycle.	Performance improves when firms address upstream and downstream impacts rather than measuring only internal operational efficiency.
Environmental performance monitoring	Converts implementation into measurable evidence for strategic review and continuous improvement.	Are environmental metrics used for learning and decision-making, or only for disclosure?	Tracks emissions, energy use, material productivity, waste generation, recycling, compliance, audits, and environmental management maturity.	Supports ongoing adjustment of responsible consumption and production practices through evidence-based management.	Performance monitoring closes the strategy-implementation gap by identifying weak links, unintended outcomes, and improvement priorities.

implementation levers for responsible consumption and production

Eco-design and circular product strategies

Eco-design and circular product strategies translate strategic sustainability orientation into decisions about product architecture, material selection, durability, reparability, recyclability, and end-of-life recovery. These practices would be expected to facilitate responsible production by reducing material intensity and enabling value retention across multiple product life cycles (Geissdoerfer *et al.*, 2017, 2018a). Circular product strategies also support responsible consumption by encouraging product-service models, reuse systems, and consumer-facing mechanisms that extend product utility rather than accelerating disposal (Geissdoerfer *et al.*, 2018b; Meis-Harris *et al.*, 2021). In the framework, eco-design functions as a core implementation lever because it embeds SDG 12 principles directly into the value proposition and technical design of products.

Green supply chain and sustainable procurement

Green supply chain management and sustainable procurement extend responsible consumption and production beyond the boundaries of the focal firm. Supplier selection, supplier development, environmental monitoring, collaborative planning, and logistics coordination could help organizations reduce upstream and downstream environmental burdens while reinforcing strategic sustainability objectives (Luthra *et al.*, 2017; Mishra *et al.*, 2017; Vijayvargy *et al.*, 2017). These practices are especially important because many environmental impacts are embedded in supply networks rather than

controlled entirely by the focal organization (Al-Sheyadi *et al.*, 2019; Seman *et al.*, 2019; Micheli *et al.*, 2020). In the proposed framework, green supply chain and procurement mechanisms operate as implementation levers that connect corporate strategy to interorganizational environmental performance.

Internal operations and employee engagement

Internal operations and employee engagement are critical execution mechanisms because responsible production ultimately depends on daily routines, process discipline, learning, and cross-functional coordination. Lean-green process improvements, waste reduction programs, environmental management accounting, and operational performance monitoring could help translate strategic priorities into production-level practices (Dubey *et al.*, 2017; Centobelli *et al.*, 2019; Chaudhry & Amir, 2020). Employee involvement is also important because workers often identify inefficiencies, material losses, and improvement opportunities that may not be visible in high-level strategy documents (Provasnek *et al.*, 2017; Gunarathne *et al.*, 2021). Within the framework, internal operations and engagement convert strategic intent into organizational routines that would be expected to strengthen environmental management performance over time.

Organizational environmental performance: a multidimensional construct

Emission reduction and energy efficiency

Emission reduction and energy efficiency represent central dimensions of organizational environmental performance because they indicate whether strategic sustainability

commitments are being translated into lower environmental burdens across production and operations. A strategy-driven approach would encourage firms to evaluate carbon footprint, energy intensity, pollutant releases, and energy sourcing decisions as part of broader environmental management rather than as isolated technical metrics (Solovida & Latan, 2017; Yadav *et al.*, 2017). These measures should be linked to investment decisions, process redesign, supplier coordination, and innovation priorities so that emissions and energy performance become embedded in strategic review systems (Centobelli *et al.*, 2019; Zameer *et al.*, 2021). Within the proposed framework, emission and energy indicators function as outcome measures that help managers assess whether responsible production practices are moving the organization toward more resource-efficient and lower-impact operations.

Material efficiency and waste minimization

Material efficiency and waste minimization capture the extent to which organizations reduce input intensity, prevent avoidable losses, reuse materials, and support circular flows across the product life cycle. These dimensions are especially relevant to responsible consumption and production because circular economy business models and eco-design practices would be expected to shift firms away from linear take-make-dispose systems toward value retention and resource productivity (Geissdoerfer *et al.*, 2017, 2018a). Metrics such as material productivity, recycling performance, residual waste generation, recovery potential, and landfill diversion should be interpreted as strategic indicators of how effectively firms redesign products, processes, and supply chains for circularity (Kazancoglu *et al.*, 2021; Rodríguez-Espíndola *et al.*, 2022). In

the framework, material efficiency and waste minimization connect operational execution to SDG 12 by showing whether strategic choices are reducing resource throughput and supporting more responsible production patterns.

Overall environmental management performance

Overall environmental management performance refers to the organizational systems, controls, routines, and accountability mechanisms through which environmental objectives are planned, implemented, monitored, and improved. Environmental management accounting, audits, compliance systems, supplier monitoring, and internal reporting processes can help organizations convert sustainability strategy into consistent managerial information and decision support (Chaudhry & Amir, 2020; Gunarathne *et al.*, 2021). Certification-oriented practices, environmental review routines, and performance measurement systems should be treated as evidence of strategic effectiveness only when they guide learning, resource allocation, and corrective action rather than merely satisfying external reporting expectations (Dubey *et al.*, 2017; Solovida & Latan, 2017). In the proposed framework, environmental management performance acts as an integrative outcome that reflects the maturity of a firm’s strategy-led approach to responsible consumption and production (Satpathy, 2023; Tedeeva *et al.*, 2023; Delgado-Montemayor *et al.*, 2024; Kachenkova *et al.*, 2024; Kropova *et al.*, 2024).

Table 2 provides a multidimensional construct map for evaluating how strategy-led responsible consumption and production can be assessed through organizational environmental performance indicators.

Table 2. Environmental Performance Construct Map for Evaluating Strategy-Led Responsible Consumption and Production

Environmental performance dimension	What the dimension captures	Relevant SDG 12 implementation levers	Illustrative indicators	Strategic interpretation	Risk if poorly integrated into strategy
Emissions reduction	The extent to which the organization reduces greenhouse gas emissions and pollutant releases across operations, production systems, and supply chain activities.	Energy-efficient operations, cleaner production technologies, supplier coordination, logistics redesign, low-carbon procurement, environmental monitoring.	Carbon intensity, total emissions, emissions per unit of output, pollutant releases, supplier emissions data, process-related carbon reductions.	Indicates whether strategic sustainability commitments are reducing the environmental burden of business activity.	Emissions may be reported but not reduced if carbon goals are disconnected from capital investment, supplier selection, and process redesign.
Energy efficiency	The degree to which the organization reduces energy intensity and improves energy productivity across facilities, production, logistics, and service delivery.	Green technologies, lean-green operations, energy monitoring, process optimization, equipment upgrades, renewable energy sourcing.	Energy use per unit of output, energy intensity, renewable energy share, avoided energy waste, energy cost savings.	Shows whether environmental strategy is influencing operational efficiency and resource productivity.	Energy goals may remain technical facility-level projects rather than strategic priorities tied to innovation and cost structure.
Material efficiency	The organization’s ability to reduce input intensity, improve material productivity, and use resources more efficiently across the product life cycle.	Eco-design, material substitution, circular product architecture, sustainable procurement, production redesign, supplier collaboration.	Material productivity, input reduction, recycled-content use, material loss rates, resource intensity, recovered material share.	Demonstrates whether the firm is moving away from linear resource consumption toward responsible production.	Material-use improvements may remain fragmented if product design, procurement, and production teams are not strategically aligned.

Waste minimization	The extent to which the organization prevents, reduces, reuses, recycles, or recovers waste generated through production, distribution, consumption, and post-consumption stages.	Circular design, repairability, reuse systems, recycling partnerships, waste-prevention programs, employee engagement, reverse logistics.	Waste generation, landfill diversion, recycling rate, recovery rate, reuse volume, scrap reduction, hazardous waste reduction.	Indicates whether responsible consumption and production are being operationalized through value retention and waste prevention.	Waste initiatives may become end-of-pipe activities if they are not linked to upstream design, procurement, and business model choices.
Environmental compliance and risk control	The organization's capacity to meet regulatory requirements, prevent environmental violations, and manage environmental risk.	Governance oversight, audit systems, compliance monitoring, supplier standards, environmental management systems, regulatory scanning.	Compliance incidents, audit findings, corrective actions, regulatory penalties, supplier non-compliance rates, environmental risk assessments.	Shows whether environmental responsibility is institutionalized through accountability and control systems.	Compliance may become reactive if strategic planning does not anticipate regulatory change and stakeholder scrutiny.
Environmental management maturity	The strength of systems, routines, information flows, and decision processes used to plan, implement, monitor, and improve environmental performance.	Environmental management accounting, KPI systems, cross-functional review, strategic learning, employee engagement, performance dashboards, continuous improvement routines.	Environmental KPI integration, audit frequency, management review cycles, corrective-action closure, sustainability-linked incentives, reporting quality.	Captures whether environmental performance is a strategic management capability rather than a narrow technical output.	Environmental reporting may become symbolic if data are not used for learning, resource reallocation, and managerial accountability.
Supply chain environmental performance	The degree to which environmental responsibility is extended upstream and downstream through suppliers, logistics partners, customers, and recovery networks.	Green supply chain management, sustainable procurement, supplier development, supplier monitoring, logistics coordination, recovery systems.	Supplier environmental scores, green procurement share, supplier audit results, logistics emissions, take-back rates, recovery participation.	Demonstrates whether the firm addresses the value-chain nature of responsible consumption and production.	Internal improvements may be offset by unmanaged supplier impacts or downstream waste if strategy stops at firm boundaries.
Circular value retention	The organization's ability to preserve product, component, and material value through reuse, repair, remanufacturing, recycling, or product-service models.	Circular product strategies, eco-design, reverse logistics, customer engagement, product-service models, end-of-life recovery.	Repairability, product life extension, remanufacturing rate, reuse cycles, take-back participation, circular revenue share.	Indicates whether the organization is redesigning value creation and value capture around SDG 12 principles.	Circular initiatives may remain pilot projects if they are not integrated into business model strategy and customer value propositions.

Mediating and moderating mechanisms

Organizational culture and learning

Organizational culture and learning mediate the relationship between strategic sustainability orientation and responsible consumption and production implementation because they influence how employees interpret, accept, and enact environmental priorities. A culture that supports experimentation, cross-functional collaboration, knowledge sharing, and sustainability-oriented innovation would be expected to strengthen the translation of strategic intent into practical changes in products, processes, and supply chain routines (Dubey *et al.*, 2017; Provasnek *et al.*, 2017). Learning mechanisms are particularly important where circular economy practices and green innovation require firms to revise

assumptions about design, procurement, production, and customer value (Kalyar *et al.*, 2020; Asiaei *et al.*, 2022). In the framework, organizational culture and learning explain why similar strategic commitments may produce different implementation pathways and environmental performance outcomes across firms (Abdulrahman *et al.*, 2023; Ansari *et al.*, 2023; Kushkhova *et al.*, 2023; Mickevicius *et al.*, 2023; Khyade *et al.*, 2024; Pakalapati *et al.*, 2024).

External pressures and institutional context

External pressures and institutional context moderate the strategic impact of responsible consumption and production because firms operate within regulatory, market, stakeholder, and industry environments that can either accelerate or constrain sustainability transformation. Regulatory stringency,

customer expectations, investor scrutiny, industry norms, and stakeholder activism can encourage firms to treat environmental objectives as strategic priorities rather than optional initiatives (Brulhart *et al.*, 2019; Zameer *et al.*, 2021). Institutional pressure may also shape the adoption of green supply chain management, environmental accounting, and circular economy practices by influencing legitimacy expectations and competitive positioning (Al-Sheyadi *et al.*, 2019; Chaudhry & Amir, 2020; Gunarathne *et al.*, 2021). Within the framework, external pressures do not replace internal strategy, but they condition how strongly strategic sustainability orientation is converted into implementation levers and environmental performance improvements (Arabiah *et al.*, 2023; Petronis *et al.*, 2023; Aksoy & Akaydin, 2024; Ha & Hang, 2024; Hima *et al.*, 2024; Jegede, 2024; Joungrakul & Smith, 2024; Samur, 2024).

Practical decision-support and managerial guidance

Diagnostic tool for strategic gap analysis

The proposed framework can serve as a diagnostic tool for identifying gaps between declared sustainability commitments and the organizational mechanisms required to implement responsible consumption and production. Managers could use the framework to examine whether sustainability is reflected in strategic orientation, resource allocation, governance oversight, product design, procurement systems, operational routines, and environmental performance measures (Luthra *et al.*, 2017; Micheli *et al.*, 2020). This diagnosis would help distinguish between symbolic sustainability communication and substantive strategic integration, particularly where firms report SDG commitments without linking them to circular design, supplier engagement, or environmental accounting practices (Gunawan *et al.*, 2020; Van Zanten & Van Tulder, 2021). As a decision-support tool, the framework encourages managers to locate weak links in the strategy-implementation-performance chain and prioritize interventions that are aligned with SDG 12.

Roadmap for strategic integration

The framework also provides a roadmap for embedding responsible consumption and production into strategic planning cycles, key performance indicators, investment reviews, and managerial accountability processes. A strategy-led roadmap would begin with sustainability orientation, proceed through resource allocation and capability development, and then guide implementation through eco-design, circular business models, green procurement, employee engagement, and environmental performance monitoring (Geissdoerfer *et al.*, 2018a, 2018b; Marrucci *et al.*, 2022). Such integration would be expected to make environmental objectives more durable because they become linked to planning routines, innovation portfolios, supplier relationships, and performance review systems (Centobelli *et al.*, 2020; Yi & Demirel, 2023). The roadmap therefore supports managerial action by clarifying how strategic management can coordinate multiple implementation levers rather than treating sustainability as a separate operational program (Akbari, 2023; Babaei *et al.*, 2023; Cahyaningsih *et al.*, 2023; Dirican, 2023; Kusumawardani *et al.*, 2023; Cachón-Rodríguez *et al.*, 2024;

Kovalchuk *et al.*, 2024; Mohammad *et al.*, 2024; Saadati *et al.*, 2024).

Evaluation strategy for the framework

Qualitative validation through case studies

Qualitative validation through case studies would be appropriate for refining the proposed framework because responsible consumption and production implementation is context-dependent, multi-level, and shaped by managerial interpretation. Multiple case studies could examine how firms in different industries define strategic sustainability orientation, allocate resources, develop capabilities, engage stakeholders, and operationalize circular or green supply chain practices (Fobbe & Hilletoft, 2021; Kazancoglu *et al.*, 2021). Case-based inquiry would also allow researchers to trace how environmental performance indicators are selected, interpreted, and used in strategic decision-making rather than merely reported as compliance outcomes (Solovida & Latan, 2017; Gunarathne *et al.*, 2021). This approach could refine the framework by identifying additional mechanisms, boundary conditions, and sequencing patterns in the strategy-implementation-performance relationship (Gogoi *et al.*, 2023; Doddapanen *et al.*, 2024; Karthikeyan *et al.*, 2024; Shaji *et al.*, 2024; Singar, 2024).

Quantitative operationalization

Quantitative operationalization of the framework would require survey instruments and archival measures that capture strategic sustainability orientation, dynamic capabilities, stakeholder integration, implementation levers, and multidimensional environmental performance. Constructs such as green supply chain management, environmental management accounting, circular economy practices, organizational culture, and stakeholder pressure could be measured through validated scales and complemented with archival environmental indicators where available (Seman *et al.*, 2019; Chaudhry & Amir, 2020; Asiaei *et al.*, 2022). Researchers should avoid treating environmental performance as a single undifferentiated outcome, because emissions, energy use, materials, waste, compliance, and management systems may respond differently to strategic and operational antecedents (Yadav *et al.*, 2017; Centobelli *et al.*, 2019). A quantitative evaluation strategy would therefore enable empirical testing while preserving the framework's conceptual distinction between strategic antecedents, mediators, moderators, implementation mechanisms, and performance dimensions.

Longitudinal and comparative research

Longitudinal and comparative research would be needed to understand how strategic management influences responsible consumption and production over time and across institutional contexts. Because strategy implementation unfolds through learning, investment, supplier coordination, innovation, and performance feedback, cross-sectional designs may not fully capture how firms move from sustainability orientation to measurable environmental management maturity (Marrucci *et al.*, 2022; Yi & Demirel, 2023). Comparative studies across sectors, countries, and firm sizes could also clarify how regulatory environments, market expectations, stakeholder

pressure, and resource availability shape framework applicability (Vijayvargy *et al.*, 2017; Zameer *et al.*, 2021; Gonzalez *et al.*, 2022). Such research would be expected to strengthen causal interpretation by showing how strategic choices accumulate into implementation routines and environmental performance trajectories.

Limitations

Conceptual and measurement challenges

The proposed framework is conceptual and therefore does not establish empirical relationships, statistical effects, or universal performance outcomes. One limitation is that responsible consumption and production lacks a single universally accepted firm-level metric, which makes operationalization challenging across industries, supply chains, and product categories (Gunawan *et al.*, 2020; Van Zanten & Van Tulder, 2021). Environmental performance data may also be incomplete, inaccessible, non-comparable, or influenced by reporting practices, accounting boundaries, and regulatory requirements rather than by strategy alone (Solovida & Latan, 2017; Chaudhry & Amir, 2020). Consequently, future empirical work should treat the framework as a theory-building structure that requires careful construct definition, measurement validation, and contextual interpretation.

Contextual contingencies

The applicability of the framework may vary by firm size, sector, geography, technological intensity, supply chain complexity, and institutional environment. Small and medium-sized enterprises may face resource constraints but possess flexibility and local responsiveness, whereas multinational corporations may have broader governance structures, supplier influence, and reporting capacity but also more complex implementation challenges (Vijayvargy *et al.*, 2017; Rodríguez-Espíndola *et al.*, 2022; Khanal *et al.*, 2023). Sectoral differences are also important because manufacturing, logistics, agri-food, and service firms experience distinct material flows, stakeholder pressures, regulatory demands, and circular economy opportunities (Centobelli *et al.*, 2020; Gonzalez *et al.*, 2022; Ponta *et al.*, 2022). These contingencies suggest that the framework should be adapted to organizational context rather than applied as a uniform prescription.

CONCLUSION

This article has proposed a conceptual framework linking strategic business management, responsible consumption and production implementation, and organizational environmental performance. The framework positions strategic sustainability orientation, resource allocation, dynamic capabilities, governance, and stakeholder integration as antecedents that shape how organizations implement SDG 12-related practices. It explains responsible consumption and production as a strategy-led transformation rather than a set of disconnected operational initiatives. Through this perspective, environmental performance becomes a multidimensional strategic outcome rather than a narrow compliance measure. The framework's main strength is its integration of strategic management theory with sustainability implementation logic. It

connects high-level direction to practical levers such as eco-design, circular product strategies, green supply chain management, sustainable procurement, employee engagement, and environmental management systems. This integration provides managers with a structured way to diagnose strategic gaps and align sustainability priorities with planning, investment, and performance review processes. It also gives researchers a coherent model for examining how strategy could shape responsible consumption and production across organizational and supply chain boundaries.

Several challenges remain for future development of the framework. Empirical validation is needed to test the proposed relationships, refine the mediating and moderating mechanisms, and determine how the framework operates in different sectors and institutional settings. Measurement challenges also remain because environmental performance indicators differ across organizations, product systems, and reporting regimes. As sustainability reporting standards continue to evolve, future research should examine how strategic management systems interact with disclosure requirements, operational data, and stakeholder expectations. Managers can use the framework as a planning and decision-support tool for embedding responsible consumption and production into corporate strategy. Academic researchers can extend the framework through qualitative case studies, quantitative testing, and longitudinal comparative designs. The broader contribution of the framework is to clarify how strategic business management could help organizations move from sustainability ambition to structured implementation. In doing so, it offers a pathway for aligning competitive advantage, organizational learning, and environmental responsibility with global consumption and production goals.

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