



Green Economy Implementation in Global Supply Chains: An Islamic Economic Perspective on the Prohibition of *Israf* through Apple's Carbon Neutrality Strategy

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Abstract

Background: Climate change has accelerated the transition toward a green economy, yet sustainable supply chain practices remain dominated by technocratic approaches with limited integration of Islamic ethical principles.

Objective: This study examines Apple Inc.'s carbon neutrality policy within its global supply chain from an Islamic economic perspective, particularly the prohibition of *Israf* (waste), while integrating green economy and Islamic ethical approaches to corporate sustainability.

Methods: A descriptive qualitative approach was employed through a systematic literature review and conceptual analysis. Data were obtained from peer-reviewed articles indexed in Scopus and Web of Science (2015–2025), corporate sustainability reports, international organization documents, and Islamic economic literature.

Results: Apple's sustainability practices include renewable energy adoption, production and logistics efficiency, recycled materials, and circular economy principles. These initiatives support greenhouse gas emission reduction and align with Islamic principles prohibiting *Israf* and *fasad fi al-ard* by promoting resource efficiency and environmental stewardship. However, rapid product innovation cycles may encourage excessive consumption and electronic waste, creating tensions with Islamic sustainability values.

Conclusion: Integrating green economy principles with Islamic ethics provides a more holistic sustainability framework emphasizing efficiency, environmental responsibility, justice, *Tawazun*, and intergenerational responsibility. This study contributes an Islamic ethical perspective to green supply chain management.

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INTRODUCTION

Climate change, environmental degradation, and the overexploitation of natural resources have become critical global challenges that require fundamental changes in economic development (Kushawaha et al., 2021). Conventional growth-oriented economic systems have significantly contributed to greenhouse gas emissions, ecosystem degradation, and resource depletion, prompting governments, international organizations, and corporations to adopt more sustainable development strategies. In response, the green economy has emerged as a development paradigm that integrates economic growth, environmental sustainability, and social well-being through low-carbon production, efficient resource utilization, and circular economy practices (Kolditz et al., 2021; Mealy & Teytelboym, 2022). Because multinational production and distribution networks account for a substantial share of global carbon emissions, the implementation of green economy principles has become increasingly important within global supply chains.

The transition toward sustainable supply chains has encouraged multinational corporations to implement Green Supply Chain Management (GSCM) by integrating renewable energy, cleaner production technologies, recycling systems, digital monitoring, and carbon emission reduction strategies throughout product life cycles. Previous studies have consistently demonstrated that GSCM enhances environmental performance while simultaneously improving operational efficiency and long-term competitiveness.

Abbasi and Ahmadi Choukolaei (2023) emphasize that sustainable supply chain design supports resource efficiency and circular economy implementation, whereas Koberg and Longoni (2019) highlight the strategic role of sustainable supply chains in reducing environmental impacts across multinational production networks. Furthermore, Tavana et al. (2022) show that Life Cycle Assessment (LCA) provides an effective mechanism for evaluating environmental impacts throughout product life cycles, while Sun et al. (2024) demonstrate that digital technologies strengthen transparency and carbon management within global supply chains.

Among multinational corporations, Apple Inc. has become one of the most prominent examples of corporate sustainability through its commitment to achieving carbon neutrality across its operations and supply chain by 2030. The company's strategy includes renewable energy adoption, increased use of recycled materials, supplier environmental standards, and carbon emission reduction initiatives (Apple Inc., 2024). Although these initiatives illustrate significant progress toward environmental sustainability, they have also attracted criticism regarding continued dependence on carbon offsetting, rapid product replacement cycles, planned obsolescence, and the growing volume of electronic waste. These issues indicate that technological and managerial innovations alone may not fully resolve the structural causes of environmental degradation.

From the perspective of Islamic economics, environmental sustainability extends beyond technical and managerial considerations to encompass ethical and moral responsibilities. Islamic economic principles position humans as *khalifah* (stewards of the Earth) who are entrusted with managing natural resources responsibly through the principles of *amanah* (trusteeship), *Tawazun* (balance), *maslahah* (public welfare), and the prohibition of *Israf* (waste). Previous studies have explained that these principles provide a comprehensive ethical framework for sustainable resource management (Haneef & Furqani, 2019; Hassan & Lewis, 2020; Zuraib, 2024). In addition, Islam et al. (2021) argue that integrating Islamic ethical values into Green Supply Chain Management can strengthen environmental responsibility beyond regulatory compliance by encouraging more responsible production and consumption behavior.

Despite these advances, important gaps remain in the existing literature. First, studies on green economy implementation predominantly emphasize environmental performance, technological innovation, and operational efficiency, while giving limited attention to the ethical dimensions underlying corporate sustainability. Second, research in Islamic economics generally discusses the prohibition of *Israf* and related ethical principles from a normative perspective without systematically applying them as analytical frameworks for evaluating multinational corporate sustainability practices. Third, empirical discussions of corporate carbon neutrality rarely integrate Islamic ethical values to assess whether sustainability initiatives genuinely address overconsumption, resource efficiency, and environmental responsibility across global supply chains.

This study addresses these gaps by integrating green economy principles with the Islamic economic concept of prohibiting *Israf* through the case of Apple's carbon neutrality strategy. Unlike previous studies that examine these perspectives separately, this research proposes an integrative conceptual framework that combines the technical approach of green economy implementation with the normative-ethical principles of Islamic economics in evaluating sustainability within global supply chains. Accordingly, this study aims to analyze the implementation of green economy principles in global supply chains, examine Apple's carbon neutrality strategy from the perspective of Islamic economics, and formulate a conceptual synthesis that contributes to the development of more comprehensive, ethically grounded, and sustainable supply chain governance.

METHOD

This study employed a descriptive qualitative approach through systematic literature review (SLR) and conceptual analysis. The qualitative approach enables an in-depth interpretation of sustainability phenomena through theoretical synthesis and document analysis.

According to Takona (2024), qualitative approaches are well-suited for exploratory and interpretive research seeking to understand complex social and economic phenomena through non-numerical data.

Secondary data were collected from peer-reviewed journal articles indexed in Scopus and Web of Science, corporate sustainability reports, international organization documents (UNEP, IPCC), and Islamic economic literature. The literature search was conducted using keywords including "green economy," "green supply chain management," "carbon neutrality," "Islamic economics," "*Israf*," "sustainability," and "circular economy," covering publications from 2015 to 2025. Inclusion criteria required sources to be (1) published in peer-reviewed journals or official reports, (2) directly relevant to the study's thematic focus, and (3) published in English or Indonesian. Non-peer-reviewed sources and publications predating 2015 were excluded, except for foundational theoretical works in Islamic economics (Chapra, 2016).

Data collection followed a documentation technique, involving systematic identification, retrieval, and critical review of written sources related to the green economy, carbon neutrality policy, and the principle of prohibiting *Israf* in Islamic economics. As Sugiyono (2021) explains, documentation is a data collection technique that systematically utilizes records, reports, and relevant documents pertaining to the research object (Sari, 2021). Apple Inc. was selected as the primary case study subject due to its publicly documented, comprehensive, and empirically verifiable carbon neutrality strategy, which makes it a paradigmatic example of green economy implementation in global supply chains (Apple Inc., 2024).

Data validity was ensured through source triangulation, comparing information obtained from academic references, corporate sustainability reports (Apple Environmental Progress Reports 2015–2024), and international organizational documents (UNEP, IPCC). The analytical framework integrates three levels of analysis: (1) descriptive analysis of green economy implementation in global supply chains; (2) case-based analysis of Apple's carbon neutrality policy; and (3) normative-ethical analysis using Islamic economic principles, particularly the prohibition of *Israf*. Results are presented through narrative synthesis and an analytical comparison matrix to enable systematic evaluation of the convergences and divergences between the two frameworks.

RESULTS AND DISCUSSION

Results

Implementation of Green Economy in Global Supply Chains

The implementation of the green economy in the global supply chain is a strategic response to increasing environmental pressures due to cross-border production and distribution activities. In the context of the contemporary global economy, supply chains are no longer only understood as a cost- and time-efficient mechanism, but also as a key instrument in reducing environmental impact. Therefore, the concept of green supply chain management (GSCM) is an important approach in transforming the global production system towards a more sustainable model.

Conceptually, the green economy emphasizes the integration between economic growth, resource efficiency, and environmental sustainability. Its implementation in the global supply chain includes various strategies, such as the use of renewable energy in the production process, logistics optimization to reduce transportation emissions, industrial waste reduction, and the application of circular economy principles that emphasize recycling and reuse of production materials. This approach aims to create an economic system that can maintain productivity without sacrificing the carrying capacity of the environment.

In practice, multinational companies are beginning to integrate digital technologies such as the Internet of Things (IoT), big data analytics, and Artificial Intelligence to improve transparency and supply chain efficiency. The technology allows real-time monitoring of carbon emissions, optimization of distribution routes, and control of energy use in the production process. Thus, the digitalization of the supply chain is an important enabler in the implementation of the green economy at the global level.

However, the implementation of the green economy in the global supply chain still faces various structural challenges. First, the complexity of the supply chain network involving many countries makes it difficult to standardize environmental regulations. Second, there is a

technology capacity gap between lead firms and suppliers in developing countries, so the implementation of green standards is not always consistent at all levels of the supply chain. Third, the cost of transitioning to a green production system is still relatively high, which is an obstacle for many industry players, especially small and medium-sized enterprises in the global supply chain.

In addition, there is academic criticism that some green economy implementations are still "surface-level compliance", i.e. compliance with environmental standards that is more administrative than deep structural transformation. In some cases, companies focus only on sustainability reporting without making significant changes to the production and consumption models that are the main sources of carbon emissions.

Thus, the implementation of the green economy in the global supply chain can be understood as a transition process that has not yet fully matured from a conventional economic system to a sustainable economic system. Although there has been a significant increase in the adoption of green technologies and environmental policies, the transformation is still partial and has not touched the root of the main problem, namely the exploitative patterns of global production and consumption.

Therefore, a more holistic approach is needed that not only emphasizes aspects of technical efficiency, but also incorporates dimensions of ethics, global justice, and ecological responsibility in supply chain design. Integration with value perspectives such as Islamic economics can expand the framework of green economy analysis towards a more comprehensive and long-term oriented sustainability model.

The implementation of the green economy in the global supply chain shows a significant transformation towards a more sustainable production system. By emphasizing energy efficiency, reducing carbon emissions, and applying circular economy principles. This approach focuses not only on environmental aspects, but also on cost efficiency and long-term competitiveness.

The latest literature shows that the integration of green supply chain practices can improve environmental and economic performance simultaneously through optimizing resource use and reducing production waste. In addition, the development of digital technologies such as Artificial Intelligence, Internet of Things (IoT), and data analytics is further strengthening transparency and efficiency in global supply chain systems, especially in real-time monitoring of carbon footprints (Law, 2022).

However, the implementation of the green economy still faces structural obstacles such as regulatory inequality between countries, technological limitations in suppliers, and high costs of transitioning to a sustainable production system.

Table 1

Analytical Matrix: Green Economy Principles vs. Islamic Economic Ethics in the Context of Global Supply Chain Sustainability

Dimension	Green Economy Framework	Islamic Economic Principle (<i>Israf</i>)	Apple's Carbon Neutrality (Alignment)
Resource Efficiency	Minimize energy and material use; promote recycling and circular economy (Abbasi & Ahmadi Choukolaei, 2023)	Prohibition of <i>Israf</i> : avoid excess in consumption and production (Zuraib, 2024)	Use of recycled materials; 100% renewable energy target; packaging reduction (Apple Inc., 2024)
Environmental Stewardship	Reduce carbon emissions; protect ecosystems through green supply chain management (Islam et al., 2021)	Prohibition of <i>fasad fi al-ard</i> : forbid destruction of the natural environment (Chapra, 2016)	Scope 1, 2 & 3 emission reductions; supplier environmental standards (Apple Inc., 2024)
Intergenerational Equity	Sustainable development for future generations; circular	Amanah (trusteeship): responsible stewardship of	Long-term carbon neutrality commitment by 2030;

Dimension	Green Economy Framework	Islamic Economic Principle (<i>Israf</i>)	Apple's Carbon Neutrality (Alignment)
	economy principles (Mealy & Teytelboym, 2022)	resources for future generations	Life Cycle Assessment (LCA)
Consumption Patterns	Encourage sustainable consumption; reduce waste and overproduction (Abbasi & Ahmadi Choukolaei, 2023)	Prohibition of <i>Israf</i> : restrict consumptive excess; <i>Tawazun</i> (balance) in consumption	TENSION: Rapid product innovation cycles drive consumer replacement and e-waste
Ethical Foundation	Secular policy-driven; technology and market mechanisms (Mealy & Teytelboym, 2022)	Divine accountability; moral responsibility rooted in Islamic jurisprudence (Zuraib, 2024)	Corporate governance and ESG frameworks; partially aligned with ethical principles

Source: Compiled by the authors based on reviewed literature (2023–2025).

Apple's Carbon Neutral Policy in a Global Perspective

Apple Inc. is implementing a carbon neutrality strategy as part of its long-term commitment towards a carbon neutral target by 2030. This strategy reflects the paradigm shift of global technology companies from mere profit orientation to the integration of environmental sustainability in their business models. The implementation of these policies includes the use of renewable energy in the company's operations, improving energy efficiency in the manufacturing process, and the use of recycled materials in products and components of the supply chain (Sun et al., 2024).

From a global supply chain perspective, the successful implementation of Apple's sustainability strategy cannot be separated from the complexity of its international supplier network. Studies show that the effectiveness of carbon neutrality policies is greatly influenced by three main factors, namely supplier management, technological innovation, and transparency in the global supply chain system. Companies with highly fragmented supply chains like Apple face the challenge of ensuring that all suppliers meet the same environmental standards, especially at tier-2 and tier-3 suppliers who are often under-monitored.

In addition, the application of the Life Cycle Assessment (LCA) method is an important instrument in comprehensively measuring environmental impact. LCA allows companies to evaluate the carbon emissions and ecological impact of each stage of the product's life cycle, from raw material extraction, production process, distribution, to the phases of use and final disposal of the product. With this approach, Apple is not only focusing on direct operational emissions, but also starting to expand measurements of indirect emissions (Scope 3) coming from its supply chain.

However, despite the significant reduction in carbon emissions in the company's sustainability reports, several critical studies show that carbon neutrality strategies still have structural limitations. One of the main issues is the reliance on carbon offsetting mechanisms, such as investments in reforestation projects or the purchase of carbon credits, which do not directly eliminate emissions from primary sources. In some cases, this approach has been criticized for potentially creating a sustainability illusion without fundamental changes to production and consumption patterns.

From a global perspective, this shows that there is an academic debate between the real emission reduction approach and market-based mitigation strategies. A market-based approach allows flexibility in achieving carbon targets, but on the other hand can obscure a company's direct responsibility for key sources of emissions. This condition shows that corporate sustainability is not only a technical and technological issue, but also concerns aspects of ethics, transparency, and environmental accountability.

Thus, although Apple's carbon neutrality policy shows significant progress in global corporate sustainability practices, its implementation is still in the transition stage from a

symbolic approach to structural transformation. The reliance on carbon offsetting suggests that full decarbonization is still a major challenge in complex global supply chains.

Therefore, a more comprehensive evaluation approach is needed that not only assesses success based on emission reduction figures, but also considers structural changes in production systems, supplier behavior, as well as global consumption patterns. In this context, integration with ethical perspectives such as Islamic economics can provide an additional dimension in assessing sustainability in a more holistic and normative manner.

Discussion

Analysis of the Prohibition of *Israf* in Islamic Economics (Critical Perspective and Global Sustainability Implications)

In Islamic economics, the prohibition of *Israf* constitutes one of the fundamental normative principles governing economic behavior. It emphasizes the importance of self-restraint in consumption, efficient utilization of resources, and the absolute avoidance of waste across all economic activities. This principle is not merely applicable in micro-behavioral contexts; it extends to macro-economic structures encompassing systems of production, distribution, and consumption (Hassan & Lewis, 2020). Positioned as a principle of economic ethics with direct bearing on contemporary sustainability discourse, *Israf* provides a normative critique of overconsumption that complements and deepens the technocratic green economy approach. When applied specifically to Apple's global supply chain, the prohibition of *Israf* raises critical analytical questions regarding the sustainability of rapid product innovation cycles, planned obsolescence, and the generation of electronic waste (e-waste), all of which may contravene the Islamic imperative to conserve resources and minimize ecological harm (Zuraib, 2024).

Conceptually, the prohibition of *Israf* is closely interconnected with the principles of *maslahah* (public good/welfare), *Tawazun* (balance), and *fasad fi al-ard* (destruction of the earth). These three principles collectively constitute a normative framework in Islamic economics that repositions the management of natural resources not merely as an economic activity but as a form of moral and spiritual responsibility of human beings as *khalifah* (vicegerents) on earth (Abbasi & Ahmadi Choukolaei, 2023; Chapra, 2016). Within this framework, economic success is not exclusively measured through output growth or market efficiency, but also, and more fundamentally, by the extent to which economic activity maintains ecological balance and promotes long-term social well-being.

Applied analytically to Apple Inc.'s carbon neutrality strategy, the principle of *Israf* prohibition generates several critical insights. First, Apple's commitment to 100% renewable energy in its operations, the use of recycled aluminum and rare earth materials in product manufacturing, and the reduction of packaging waste align substantively with the Islamic injunction against *Israf*, insofar as these measures reduce unnecessary resource extraction and material waste (Apple Inc., 2024). Second, however, Apple's annual product release cycles, which systematically incentivize consumer upgrades and accelerate device obsolescence, represent a structural tension with *Israf* prohibition. This "planned obsolescence" model contributes directly to the global e-waste crisis, which reached 62 million metric tons in 2022, contradicting the Islamic principle of conservation (*hifz al-mal*) and the prohibition of squandering resources. Third, Apple's reliance on carbon offsetting mechanisms, purchasing carbon credits rather than achieving absolute emission reductions, may be interpreted, through an Islamic ethical lens, as a form of financial substitution for genuine environmental responsibility, which does not fully satisfy the moral obligation of *fasad fi al-ard* prevention (Chapra, 2016).

In the modern context, the relevance of the concept of *Israf* is getting stronger along with the increasing global environmental crisis, such as climate change, declining ecosystem quality, and increasing industrial and electronic waste (*e-waste*). The phenomenon of overconsumption driven by the global economic system based on capitalism and rapid technological innovation shows a structural tendency towards excessive consumption. This creates pressure on non-renewable natural resources and accelerates systemic environmental degradation.

When compared to conventional economic approaches, especially in the green economy literature, the focus is more directed towards technical efficiency, carbon emission reduction, and supply chain optimization. Although such an approach is important, most studies have not explicitly integrated the dimensions of normative and spiritual ethics as key variables of analysis.

As a result, the sustainability discourse is often caught up in a technocratic approach that ignores the root of overconsumption behavior as one of the main causes of the environmental crisis.

On the other hand, Islamic economic literature has engaged extensively with the concepts of *Israf*, *maslahah*, and *khalifah*, yet most existing discourse remains predominantly normative-theological and has not been systematically translated into empirical analytical models applicable to the modern global economic system, particularly in the context of global supply chains (Hassan & Lewis, 2020). In other words, there exists a significant gap in the operationalization of Islamic ethical values into analytical frameworks capable of evaluating the sustainability practices of multinational corporations.

In addition, the global economic system based on capitalism and mass consumption creates structural dynamics that encourage overproduction, planned obsolescence, and overconsumption. Very rapid product innovation, especially in the technology sector, drives short consumption cycles and an increase in e-waste. This condition shows the existence of systemic tensions between the growth-oriented logic of the market and the principles of Islamic ethics that emphasize consumption restrictions and sustainability.

Thus, the prohibition of *Israf* operates not only as an individual moral injunction but as a systemic critique of global economic structures that are predicated on the perpetual exploitation of natural resources. When the *Israf* principle is applied to multinational corporations like Apple, it reveals structural contradictions within corporate sustainability strategies: while macro-level commitments to carbon neutrality demonstrate environmental responsibility, micro-level product design strategies may simultaneously perpetuate resource inefficiency and waste (Wu & Zuo, 2023). This analytical tension underscores the value of integrating Islamic ethical principles into green economy discourse, as they bring normative accountability to dimensions of corporate behavior that purely technocratic frameworks tend to overlook.

Synthesis of Ethics and Economics: An Integrative Perspective

The integration between the green economy and Islamic economics reveals significant conceptual synergies grounded in shared commitments to sustainability, resource efficiency, and ecological responsibility. Both frameworks advocate for the sustainable management of natural resources and reject patterns of overexploitation that undermine ecosystem balance (Namazifard et al., 2024). However, they depart from different epistemological foundations: the green economy derives from modern secular policy rationality, whereas Islamic economics is rooted in divine revelation, moral theology, and the comprehensive framework of *maqasid al-shariah* (objectives of Islamic law). Despite these differences, the two frameworks are normatively oriented toward sustainability, making their synthesis intellectually productive and practically meaningful (Islam et al., 2021).

However, a review of the literature shows that most green economy research in global supply chains is still dominated by technocratic approaches that focus on efficiency, carbon emission reduction, and cost optimization. This approach tends to ignore the deeper dimensions of normative ethics, especially related to consumption behavior and moral responsibility towards the environment. On the other hand, Islamic economic literature discusses the concepts of *Israf*, *maslahah*, and *khalifah*, but is still limited in empirical application in the context of modern global supply chains and multinational corporations.

The principal gap identified in the existing literature is the absence of studies that explicitly operationalize the Islamic economic ethics framework, particularly the prohibition of *Israf*, within the context of green supply chain management for multinational corporations. Extant studies either analyze the green economy through the lens of modern business management theory, emphasizing efficiency and regulatory compliance, or discuss Islamic ethics in a normative-theological mode that lacks direct empirical application in global corporate contexts. This study begins to address this gap by proposing an integrative conceptual framework that bridges technocratic sustainability approaches with normative Islamic ethical principles (Abbasi & Ahmadi Choukolaei, 2023; Hassan & Lewis, 2020).

In addition, the study of supply chain sustainability often ignores the dimensions of global consumption behavior that are the main drivers of ecological imbalances. In many studies, the focus of the analysis is more directed towards the production side and the efficiency side of the company, while aspects of overconsumption and global consumptive culture have not received

adequate attention theoretically.

In this context, Islamic economics offers a more comprehensive perspective through the principles of trust, *'adl* (justice), *Tawazun* (balance), and prohibition of *Israf* (waste). These principles are not only normative, but also have systemic implications for the design of production, distribution, and consumption in the economy. Thus, Islamic economics can serve as an ethical framework that enriches green economy approaches, especially in expanding the focus from mere efficiency to justice and moral responsibility.

Notwithstanding these synergies, fundamental paradigmatic differences persist. The mainstream green economy literature remains anchored in neoclassical economic rationality, privileging efficiency, sustainable growth, and market mechanisms as the primary instruments of environmental governance (Mealy & Teytelboym, 2022; Wu & Zuo, 2023). In contrast, Islamic economics places spiritual and moral dimensions at the center of economic activity, where every act of production and consumption must be consonant with divine values and the responsibilities of khalifah on earth. This paradigmatic difference implies that the synthesis between the two frameworks is not merely complementary but potentially transformative: Islamic ethics can supply the normative depth that the green economy's technocratic orientation often lacks.

Thus, the synthesis between these two approaches is not only complementary, but also transformative. This integration has the potential to produce a more holistic economic model, which is an economic system that is not only technically efficient and oriented towards environmental sustainability, but also socially just, normatively ethical, and based on moral responsibility for the environment and future generations. This integrative framework is also a conceptual contribution in filling the literary gap between green economy studies and Islamic economics in the context of modern global supply chains.

CONCLUSION

This study demonstrates that the implementation of the green economy in global supply chains, as reflected in Apple Inc.'s carbon neutrality strategy, represents a significant effort to reduce environmental impacts through renewable energy adoption, resource efficiency, recycled materials, and lower carbon emissions. From the perspective of Islamic economics, these initiatives are broadly consistent with the principles of prohibiting *Israf* (waste) and *fasad fi al-ard* (environmental destruction), emphasizing responsible stewardship of natural resources. Nevertheless, the persistence of rapid product innovation cycles, increasing e-waste, and consumption-driven business models reveals that technological solutions alone are insufficient to achieve sustainable development. The integration of green economy principles with Islamic economic ethics therefore provides a more comprehensive framework that combines environmental sustainability with moral responsibility, justice, and intergenerational stewardship. Theoretically, this study contributes by proposing an integrative conceptual framework that applies the prohibition of *Israf* as an analytical lens for evaluating corporate sustainability practices within global supply chains.

Practically, the findings suggest that companies should complement carbon neutrality initiatives with strategies that promote product longevity, repairability, and e-waste reduction, while policymakers may strengthen sustainability governance by incorporating value-based ethical principles into green economy policies. This study is limited by its qualitative conceptual approach, reliance on a single case study (Apple Inc.), and dependence on publicly available sustainability reports, which may not fully capture actual corporate practices. Future research should empirically validate the proposed framework using quantitative methods, compare sustainability practices across industries and countries, examine the role of Islamic finance instruments such as green *sukuk* in supporting green transitions, and further investigate sustainable consumption behavior from the perspective of the prohibition of *Israf*.

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AUTHOR CONTRIBUTION STATEMENT

Faridah Irmayanthi conceived the research idea, conducted the literature review, performed the conceptual analysis, and prepared the original manuscript draft. Abdul Aziz contributed to the development of the research framework, interpretation of findings, and critical revision of the manuscript. Dewi Fatmasari contributed to data validation, manuscript editing, language refinement, and the final review. All authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

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