JOURNAL OF INTERDISCIPLINARY PERSPECTIVES

ISSN Print: 2984-8288, ISSN Online: 2984-8385
Vol. 3 No. 9, pp. 457-469, September 2025

Green Supply Chains and Business Sustainability: Evidence from Dumaguete Restaurants

Mesarie Q. Silva
Saint Paul University, Dumaguete City, Negros Oriental, Philippines

Author Email: mesariesilva32@yahoo.com

Date received: July 6, 2025
Date revised: August 2, 2025
Date accepted: August 21, 2025

Originality: 99%
Grammarly Score: 99%
Similarity: 1%

Recommended citation:
Silva, M. (2025). Green supply chains and business sustainability: Evidence from Dumaguete restaurants. *Journal of Interdisciplinary Perspectives*, 3(9), 457-469. https://doi.org/10.69569/jip.2025.565

Abstract. Amidst increasing global demand for sustainability, particularly in resource-intensive sectors like restaurants, understanding the practical impact of Green Supply Chain Management (GSCM) remains crucial. While international studies highlight GSCM's importance, there is a notable scarcity of localized research specifically examining its impact on restaurants in Dumaguete City. This study assessed the effects of GSCM on the business performance and sustainability of selected restaurants in Dumaguete City. Employing a quantitative survey of 40 restaurant leaders, the research examined demographic profiles, GSCM awareness, and implementation. Findings indicated high awareness across GSCM components, with strong implementation in waste reduction and green design, but partial implementation in recycled energy. A summative assessment revealed that GSCM significantly enhanced business performance, demonstrating substantial improvements in productivity, notable cost reduction, an elevated brand image, and a strengthened competitive advantage. Similarly, GSCM positively impacted sustainability, particularly environmental and social aspects, though economic sustainability showed lower agreement. Statistical analysis, utilizing tools such as correlation analysis, revealed a moderate positive correlation between GSCM implementation and business performance, and a strong positive correlation between GSCM and sustainability, as well as between business performance and sustainability. GSCM awareness was uniform across organizational positions. The study concludes that GSCM is crucial for enhancing both business and sustainability outcomes, highlighting the need to address implementation gaps, especially in energy recycling. Future research should investigate the financial implications of GSCM, implementation barriers, and the mechanisms driving sustainability and organizational success.

Keywords: Business performance; Business sustainability; Green supply chain management; Restaurant industry.

1.0 Introduction

"The greatest threat to our planet is the belief that someone else will save it." - Robert Swan. This powerful statement underscores the urgent need for businesses, especially those within the dynamic and resource-intensive restaurant industry, to adopt sustainable practices. As the world confronts escalating environmental challenges, the adoption of Green Supply Chain Management (GSCM) has become a fundamental strategy for the restaurant industry, aiming for business performance and to achieve sustainable growth. Increasingly, consumers and stakeholders worldwide are demanding accountability from food service providers, pushing them to embrace practices that minimize environmental impact (Liu & Cao, 2024).

The United Nations Sustainable Development Goals (SDGs) further emphasize this global imperative, highlighting the interconnectedness of economic growth, environmental protection, and social equity. In

This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 International License (CC BY-NC 4.0).

developed economies, consumers increasingly demand transparency and accountability from food service providers, scrutinizing their sourcing, production, and waste management practices. This trend is rapidly permeating developing economies as well, driven by rising environmental awareness and the increasing accessibility of information. Moreover, the global call for sustainable practices is not just a trend but a fundamental shift in business paradigms.

In the Philippines, a nation marked by its rich culinary heritage and rapidly expanding urban centers, the restaurant industry is a significant economic driver (Lagasca-Hiloma et al., 2021). However, this growth has also led to increased environmental pressures, including excessive waste generation and reliance on unsustainable sourcing practices. The growing awareness of ecological issues among Filipino consumers is pushing local restaurants to adopt more sustainable practices. Despite the well-documented global benefits of GSCM in various industries, a critical gap exists in the literature regarding its specific empirical impact on both business performance and sustainability within the unique context of the Philippine restaurant industry, particularly in urban centers like Dumaguete City. Previous research has often focused on broader industry trends or different geographical regions, leaving an unaddressed need to understand the direct correlations and specific implementation challenges faced by local establishments. This deficit in localized, empirical data constitutes the core problem this study seeks to address. This research study aims to assess the correlation between the implementation of Green Supply Chain Management (GSCM) practices and improved business performance, including productivity, costs, image, and competitive advantage and for its sustainability of restaurants that will provide valuable insights for restaurant owners and policymakers to promote the adoption of GSCM and foster a more sustainable food service industry.

2.0 Methodology

2.1 Research Design

This study utilized a quantitative, descriptive-correlational research design to systematically assess the impact and relationships between Green Supply Chain Management (GSCM) practices and various indicators of business performance and sustainability in the restaurant industry. This design was selected for its suitability in measuring variables, identifying associations, and facilitating statistical analysis to robustly answer the research questions regarding GSCM's influence on business outcomes and sustainability dimensions.

2.2 Research Participants

The target population for this study comprised managers, owners, and supervisors from restaurants located in Dumaguete City, Negros Oriental. Specifically, this research focused on establishments within the downtown area, Pantawan Rizal Boulevard, Piapi, and Bantayan. From this population, a total of forty (40) respondents were selected using a purposive sampling technique. Inclusion criteria for participation were individuals who held a managerial, ownership, or supervisory position within a chosen restaurant located in the specified areas of Dumaguete City. Exclusion criteria included non-managerial staff and individuals from restaurants located outside the designated study areas, or where the primary manager/owner was present and able to participate. This deliberate selection ensured that participants possessed direct knowledge and experience relevant to Green Supply Chain Management practices, business performance, and sustainability within their respective establishments.

2.3 Research Instrument

For this study, a researcher-made survey questionnaire was utilized as the primary data gathering instrument, with prior permission obtained from respondents. The questionnaire's questions were developed based on an extensive literature review to address the study's problem statements. To ensure reliability and validity, a pilot test was conducted with selected restaurants in Guihulngan City, Negros Oriental, outside the main sample. The Cronbach's Alpha analysis yielded a value of 0.97, indicating a high level of internal consistency reliability. This result confirms that the survey tool is reliable and appropriate for assessing the target constructs in the study, demonstrating sufficient intercorrelation among its items. Additionally, the survey instrument also used a Likert scale.

2.4 Data Gathering Procedure

The data collection process commenced after obtaining all necessary ethical clearances and official authorization from the graduate school dean to administer the survey. Subsequently, formal permission was sought from the management of the selected restaurants in Dumaguete City to conduct the research within their establishments.

Upon receiving consent, the researcher personally administered the survey questionnaires through face-to-face interactions with the identified respondents (managers, owners, or supervisors) at a time convenient for them at their respective restaurants. This direct data collection approach was chosen to ensure clarity, address any immediate questions from respondents, and maximize response rates. The data collection phase was conducted over a period of approximately four weeks. Following completion, the questionnaires were collected directly by the researcher, ensuring the integrity and completeness of the gathered data. The information from these completed questionnaires was then systematically prepared for analysis to address the study's research problems.

2.5 Data Analysis Procedure

The data analysis procedure employed a rigorous quantitative approach. Descriptive statistics were utilized to characterize the collected data on Green Supply Chain Management (GSCM) practices, business performance, and sustainability. Inferential statistics, including correlation analysis, were then conducted to explore relationships between GSCM practices and business outcomes. Regression analysis was additionally employed to assess GSCM's predictive impact on performance and sustainability, controlling for other variables. The validity and reliability of the data were ensured through the meticulously designed and pilot-tested research instrument, as detailed in the Research Instrument section, with internal consistency confirmed by a high Cronbach's Alpha value of 0.97.

2.6 Ethical Considerations

The researcher declares that all ethical considerations were meticulously adhered to throughout this study. Informed consent was obtained from all participants by providing clear information about the study's purpose, potential risks, and their rights, emphasizing that participation was entirely voluntary and could be withdrawn at any time without penalty. To ensure confidentiality, all respondent data were anonymized, and responses were securely stored, strictly adhering to data privacy protocols. The well-being of the respondents was safeguarded by avoiding sensitive topics and ensuring no harm. The researchers commit to accurate reporting of findings, maintaining impartiality in data interpretation, and ensuring proper citation to avoid plagiarism strictly. The results of this study are intended purely for academic research purposes. Furthermore, the authors affirm that no conflict of interest exists in the conduct of this study, and all stakeholder interests were respected throughout the research process.

3.0 Results and Discussions

Table 1 presents the level of awareness in Green Supply Chain Management (GSCM), specifically regarding green sourcing, as assessed through four key indicators. Pollution Control received the highest awareness level with a weighted mean of 4.32**,** classified as "Fully Aware"**.** This suggests that respondents are highly knowledgeable about strategies for minimizing pollution in sourcing practices. This is supported by the study of Abedin et al. (2024), which not only increases knowledge about pollution reduction but also influences policy, helps companies create more sustainable plans, and promotes environmental stewardship. Energy Efficiency (3.91)**,** Greenhouse Gas Emission (3.78)**,** and Waste Management Impact Reduction (4.18) were all rated as "Aware"**,** indicating a good but slightly lower level of familiarity compared to pollution control. The cumulative weighted mean of 4.04 falls within the "Aware" category, suggesting that respondents generally have a moderate to high level of awareness regarding green sourcing practices.

Table 1. *Level of Awareness in Green Supply Chain Management in terms of Green Sourcing*

Indicator	Weighted Mean	Verbal Description
1. Pollution Control	4.32	Fully Aware
2. Energy Efficiency	3.91	Aware
3. Greenhouse gas emission	3.78	Aware
4. Reduce environmental impact across waste management	4.18	Aware
Cumulative Weighted Mean	**4.04**	**Aware**

The results indicate that while pollution control in green sourcing shows strong awareness, energy efficiency and greenhouse gas emissions have slightly lower awareness, indicating a need for improved knowledge dissemination and training. Green sourcing, supported by consumer demand (Mukucha et al., 2021), improves procurement performance, reducing costs, environmental impact, and enhancing material quality and delivery.

Table 2. *Level of Awareness in Green Supply Chain Management in terms of Eco-design*

Indicator	Weighted Mean	Verbal Description
1. Reducing the amount of material used in production.	4.86	Fully Aware
2. Promotion of products and services that are environmentally friendly.	4.73	Fully Aware
3. Use of packaging materials that can be repurposed or recycled	4.84	Fully Aware
4. Presence of regulatory provisions for green marketing	4.18	Aware
Cumulative Weighted Mean	**4.65**	**Fully Aware**

Table 2 presents the level of awareness of Green Supply Chain Management (GSCM) related to eco-design based on four key indicators. Reducing the amount of material used in production received the highest weighted mean **(**4.86**),** suggesting that respondents are highly knowledgeable about material efficiency in eco-design. Use of recyclable or repurposed packaging materials (4.84) and promotion of environmentally friendly products and services (4.73) were also rated as "Fully Aware"**,** reinforcing the intense awareness of sustainable product design and packaging strategies. The presence of regulatory provisions for green marketing (4.18) was the only indicator classified as "Aware"**,** suggesting that while respondents understand regulatory aspects, they may not be as fully informed about specific green marketing regulations. The cumulative weighted mean of 4.65 falls within the "Fully Aware" category, indicating a high level of awareness among respondents regarding eco-design principles in sustainable supply chain management.

The results indicate there is a strong awareness of eco-design principles in material reduction, sustainable packaging, and green product promotion, but less so regarding regulatory provisions for green marketing, suggesting a need for better information dissemination. High awareness can be leveraged for green product initiatives and waste reduction. Eco-design reduces waste, saves money, and enhances environmental responsibility (Khor et al., 2020). This highlights how eco-design minimizes ecological impact from sourcing to disposal, including reverse logistics, improving overall environmental performance.

Table 3. *Level of Awareness in Green Supply Chain Management in terms of Reverse Logistics*

Indicator	Weighted Mean	Verbal Description
1. Creative menu planning for minimizing food waste	4.97	Fully Aware
2. Accurate Ordering	5.00	Fully Aware
3. Returning damaged equipment to a supplier for repair or replacement	4.89	Fully Aware
4. Creating new material or product out of trash	4.73	Fully Aware
Cumulative Weighted Mean	**4.90**	**Fully Aware**

Table 3 presents the level of awareness in Green Supply Chain Management (GSCM) concerning reverse logistics, assessed through four key indicators. Accurate ordering (5.00) received the highest rating, suggesting that respondents are highly knowledgeable about minimizing excess inventory and preventing food waste through precise procurement. Creative menu planning to reduce food waste (4.97) and returning damaged equipment for repair or replacement (4.89) were also rated as "Fully Aware"**,** reinforcing strong awareness of strategies that enhance sustainability in food service and supply chain efficiency. Creating new material or products out of trash (4.73) was also classified as "Fully Aware", indicating familiarity with upcycling and waste-to-product strategies. The cumulative weighted mean of 4.90 falls within the "Fully Aware" category, indicating a high level of awareness among respondents regarding reverse logistics practices in sustainability.
Studies have demonstrated that strong commitment from top management is paramount for the successful implementation of Green Supply Chain Management (GSCM) practices, with reverse logistics management emerging as a primary enabler of their effective adoption. The findings suggest that respondents demonstrate strong awareness of reverse logistics, particularly in food waste reduction, inventory accuracy, and equipment returns. This aligns with increasing industry adoption of sustainable waste management, driven by consumer demand, regulations, and cost savings. Accurate ordering (5.00) is the highest-rated factor, emphasizing its role in waste reduction. High awareness of returning damaged equipment (4.89) reflects recognition of asset lifespan extension. Formalizing reverse logistics systems can build on this awareness, as effective reverse logistics offers environmental benefits and cost savings.

Table 4 presents the level of awareness in Green Supply Chain Management (GSCM) practices related to waste management, evaluated through four key indicators. Providing labeled and color-coded waste bins (4.97) and using proper storage methods to extend ingredient shelf life (4.97) were the highest-rated indicators, suggesting strong awareness of structured waste segregation and food preservation strategies. Switching to reusable packaging (4.81) and tracking and measuring waste generation (4.78) were also rated as "Fully Aware"**,** indicating

widespread recognition of sustainable packaging solutions and data-driven waste reduction efforts. The cumulative weighted mean of 4.88 falls within the "Fully Aware" category, indicating a high level of awareness among respondents regarding sustainable waste management practices.

Table 4. *Level of Awareness in Green Supply Chain Management in terms of Waste Management*

Indicator	Weighted Mean	Verbal Description
1. Provide clearly labeled and color-coded bins for different waste categories, such as food waste, recyclables (plastic, glass, paper), and non-recyclables.	4.97	Fully Aware
2. Switching to reusable packaging to reduce waste	4.81	Fully Aware
3. Using proper storage methods to extend the shelf life of ingredients and minimize spoilage	4.97	Fully Aware
4. Regularly track and measure waste generation to identify areas for improvement	4.78	Fully Aware
Cumulative Weighted Mean	**4.88**	**Fully Aware**

The findings suggest that businesses demonstrate strong awareness of sustainable waste management practices, particularly in areas related to food preservation, waste sorting, and tracking systems. The high awareness of proper ingredient storage (4.97) highlights a proactive approach to minimizing food spoilage, which can lead to cost savings and environmental benefits. The relatively high rating for switching to reusable packaging (4.81) indicates that businesses are aware of the importance of reducing packaging waste. However, while awareness of waste management is high, implementation depends on supplier availability, cost, and customer preferences. Businesses can enhance efforts with advanced composting and training. Martin-Rios et al. (2020) emphasized waste management's importance for environmental concerns and consumer expectations.

Table 5. *The Extent of the Implementation of GSCM Practices in Restaurants in Dumaguete City in terms of Waste Reduction*

Indicator	Weighted Mean	Verbal Description
1. Conduct a food waste audit	4.70	Fully Implemented
2. Avoid over-preparing food	4.97	Fully Implemented
3. Figure out which of the ingredients can be cross-used in multiple dishes for cost savings of buying in bulk	4.94	Fully Implemented
4. Use eco-friendly packaging and biodegradable materials whenever possible.	4.75	Fully Implemented
Cumulative Weighted Mean	**4.84**	**Fully Implemented**

Table 5 presents the extent of implementation of Green Supply Chain Management (GSCM) practices in waste reduction among restaurants in Dumaguete City. Avoiding over-preparation of food (4.97) received the highest rating, indicating a strong commitment to minimizing excess food production. Cross-utilizing ingredients across multiple dishes for cost savings (4.94) also received a high rating, suggesting that restaurants actively optimize ingredient usage to minimize waste. Using eco-friendly packaging and biodegradable materials (4.75) and conducting food waste audits (4.70) were both categorized as "Fully Implemented", showing proactive efforts in reducing packaging waste and monitoring food waste levels. The cumulative weighted mean of 4.84 falls within the "Fully Implemented" category, indicating that sustainable waste reduction practices are widely adopted in the surveyed restaurants.

The findings indicate that restaurants in Dumaguete City are highly engaged in waste reduction efforts, particularly through careful food preparation, ingredient optimization, and sustainable packaging choices. The strong implementation of food waste audits (4.70) suggests a data-driven approach to minimizing waste, allowing businesses to identify inefficiencies and adjust their practices accordingly. This notion is supported by Cook et al. (2022), who highlight the importance of considering staff capacity, change management, and leadership support for successful implementation to enhance business performance. The widespread adoption of eco-friendly packaging (4.75) also highlights a commitment to sustainability beyond food waste management, likely influenced by customer preferences, regulatory policies, and environmental awareness initiatives. Consumers are increasingly demanding sustainable practices, favoring eco-friendly packaging like recycled paper and avoiding plastic. This, alongside regulatory pressure and rising environmental awareness, drives restaurants to prioritize eco-friendly packaging and waste reduction, enhancing brand image and sustainability.

Table 6 presents the extent to which recycled energy practices are implemented in restaurants in Dumaguete City. Treatment of water for reuse in cleaning, irrigation, or flushing (4.02) is the most implemented practice, categorized as "Mostly Implemented", suggesting a growing awareness of water conservation strategies in restaurant operations. Solar panels used for generating electricity (3.16), heat exchangers for repurposing byproduct heat from refrigeration (2.81), and **the** presence of heat recovery systems (2.76) all fall within the

"Partially Implemented" category, indicating that adoption of energy-efficient technologies is still developing. The cumulative weighted mean of 3.19 falls within the "Partially Implemented" category, indicating that while some energy recycling initiatives have been adopted, their application remains limited across most establishments. According to the study of Massoud et al. (2023), the study emphasizes the critical need for improved recycling in renewable energy production and storage, advocating for technological and infrastructural advancements to enhance economic viability and accessibility of energy recycling. Wu et al. (2023) discuss cogeneration's potential for waste heat utilization but note its adoption is hindered by cost and infrastructure.

Table 6. *The Extent of the Implementation of GSCM Practices in Restaurants in Dumaguete City in terms of Recycled Energy/Renewable Energy*

Indicator	Weighted Mean	Verbal Description
1. Presence of Heat Recovery Systems	2.76	Partially Implemented
2. Commercial refrigeration systems generate heat as a byproduct; heat exchangers capture and repurpose this heat	2.81	Partially Implemented
3. Solar panels are used to generate electricity to power equipment	3.16	Partially Implemented
4. Treatment of water used for dishwashing and food rinsing can be reused for cleaning, landscape irrigation, or even for flushing toilets	4.02	Mostly Implemented
Cumulative Weighted Mean	**3.19**	**Partially Implemented**

The findings suggest that water recycling efforts are more widely implemented compared to other forms of energy recycling, possibly due to the immediate cost savings and ease of adoption of water conservation strategies. In contrast, the lower implementation of heat recovery systems (2.76) and heat exchangers (2.81) suggests that technological and financial barriers may hinder widespread adoption of energy recycling solutions. High costs, limited support, long payback periods, and technological issues like knowledge gaps, unproven systems, corrosion, and fouling hinder energy recycling. Despite this, solar panel usage (weighted mean: 3.16) shows growing interest, driven by rising electricity costs and environmental awareness, aligning with Yong et al. (2022) on energy efficiency in GSCM. Advancing energy recycling requires government incentives, financial aid, and technical support.

Table 7. *The Extent of the Implementation of GSCM Practices in Restaurants in Dumaguete City in terms of Green Procurement*

Indicator	Weighted Mean	Verbal Description
1. Source ingredients locally to reduce carbon emissions from transportation.	3.94	Mostly Implemented
2. Choosing organic or sustainably produced ingredients that minimize the use of harmful chemicals.	3.97	Mostly Implemented
3. Purchase products with minimal packaging or packaging made from recyclable or biodegradable materials.	4.32	Fully Implemented
4. Procuring products that are designed to conserve water or have water-saving features.	4.49	Fully Implemented
Cumulative Weighted Mean	**4.18**	**Mostly Implemented**

Table 7 presents the extent of Green Procurement implementation in restaurants in Dumaguete City. Procuring products that conserve water or have water-saving features (4.49) received the highest rating. They was classified as "Fully Implemented", suggesting that businesses recognize the importance of water conservation in procurement decisions. Purchasing products with minimal, recyclable, or biodegradable packaging (4.32) was also "Fully Implemented", indicating a strong commitment to reducing packaging waste through sustainable sourcing. Choosing organic or sustainably produced ingredients (3.97) and sourcing ingredients locally to reduce carbon emissions (3.94) were both "Mostly Implemented", showing that while efforts are being made, some barriers may still exist, such as cost, availability, or supplier constraints. The cumulative weighted mean of 4.18 falls within the "Mostly Implemented" category, indicating that sustainable procurement practices are widely adopted, though some areas may still need further reinforcement.

The findings suggest that green procurement practices are well-integrated in restaurants, especially for water conservation and eco-friendly packaging. Water-saving product procurement has strong implementation (weighted mean: 4.49), aligning with Mekonnen and Gerbens-Leenes (2020) on reducing water consumption. However, local sourcing (3.94) and organic ingredients (3.97) show slightly lower implementation due to cost/availability challenges. Strengthening partnerships with local suppliers is crucial for resilient supply chains. Shin and Cho (2022) emphasize green procurement's role in environmental performance via supplier collaboration, reflected in initiatives linking healthy food with sustainable production.

Table 8. *The Extent of the Implementation of GSCM Practices in Restaurants in Dumaguete City in terms of Green Design*

Indicator	Weighted Mean	Verbal Description
1. Use reusable containers.	5.00	Fully Implemented
2. Use reclaimed or recycled wood in building materials to reduce the environmental impact of harvesting new timber.	4.46	Fully Implemented
3. Use eco-friendly cleaning products to reduce harm to the environment.	4.62	Fully Implemented
4. Design spaces and processes that prioritize reuse, recycling, and regeneration	4.81	Fully Implemented
Cumulative Weighted Mean	**4.72**	**Fully Implemented**

Table 8 presents the extent to which Green Design principles have been implemented in restaurants in Dumaguete City. The use of reusable containers (5.00) received the highest rating, suggesting that all surveyed restaurants have completely embraced this practice, possibly in response to sustainability trends and cost savings. Designing spaces and processes that prioritize reuse, recycling, and regeneration (4.81) was also highly rated, reflecting a strong emphasis on sustainable infrastructure and operational efficiency. Use of eco-friendly cleaning products (4.62) and incorporating reclaimed or recycled wood in building materials (4.46) were both "Fully Implemented", indicating awareness and commitment to reducing environmental impact across multiple aspects of restaurant operations. The cumulative weighted mean of 4.72 falls within the "Fully Implemented" category, indicating a strong adoption of sustainable design practices within the restaurant sector. The sustainable design practices are increasingly adopted in the restaurant sector, with restaurateurs integrating green design elements into their establishments, a trend also noted by Tseng et al. (2021), who observed this even when the primary focus remained on food and beverage practices.

The results suggest that restaurants in Dumaguete City have actively integrated Green Design principles, particularly in areas of waste reduction, material reuse, and eco-friendly operations**.** The full implementation of reusable containers (5.00) indicates a shift away from single-use packaging, which contributes to waste reduction efforts. Additionally, the high implementation of sustainable space design (4.81) implies a long-term commitment to environmental sustainability, suggesting that restaurant owners recognize the operational and reputational benefits of green infrastructure**.**

Table 9. *Impact of Green Supply Chain Management Practices in the Business Performance of Restaurants in Dumaguete City (Productivity)*

Indicator	Weighted Mean	Verbal Description
1. Enhanced Resource Utilization.	4.30	Strongly Agree
2. Increase Profits.	4.62	Strongly Agree
3. Improved Operational Efficiency.	4.57	Strongly Agree
4. Enhanced Brand Image and Customer Loyalty.	4.67	Strongly Agree
Cumulative Weighted Mean	**4.54**	**Strongly Agree**

Table 9 presents the perceived impact **of** Green Supply Chain Management (GSCM) practices on the productivity of restaurants in Dumaguete City. Enhanced Brand Image and Customer Loyalty (4.67) received the highest rating, suggesting that sustainable business practices improve the restaurant's reputation and foster greater customer trust and loyalty. Increase in Profits (4.62) and Improved Operational Efficiency (4.57) were also highly rated, indicating that respondents perceive GSCM as a key factor in boosting financial performance and streamlining operations. Enhanced Resource Utilization (4.30), while the lowest among the indicators, still falls under "Strongly Agree", signifying that respondents recognize GSCM's role in optimizing resource use, reducing waste, and improving cost efficiency. The cumulative weighted mean of 4.54 falls within the "Strongly Agree" category, indicating that respondents strongly believe that GSCM positively influences business productivity. The study by Abdallah and Al-Ghwayeen (2019) supports the idea that adopting Green Supply Chain Management (GSCM) practices improves business performance directly and indirectly through enhanced environmental and operational efficiency, and increased productivity. The findings also indicate that GSCM practices significantly boost business productivity, particularly in brand positioning, profitability, and operational efficiency. High ratings for brand image/customer loyalty (weighted mean: 4.67), indicating consumer preference for responsible businesses. Increased profits (4.62) and improved operational efficiency (4.57) show GSCM's financial advantages, driving cost savings and optimized processes, as productivity is key to performance. Restaurants should expand GSCM initiatives like advanced waste management, energy efficiency, and green marketing.

Table 10. *Impact of Green Supply Chain Management Practices on the Business Performance of Restaurants in Dumaguete City (Cost Reduction)*

Indicator	Weighted Mean	Verbal Description
1. Reduced Food Waste	4.75	Strongly Agree
2. Efficient use of materials and energy leads to less waste generation and lower operational costs	4.65	Strongly Agree
3. Water Conservation and Reduced Water Bills	4.75	Strongly Agree
4. Using compostable packaging materials reduces the cost of disposable packaging and minimizes waste disposal costs	4.72	Strongly Agree
Cumulative Weighted Mean	**4.71**	**Strongly Agree**

Table 10 presents the impact of Green Supply Chain Management (GSCM) practices, which are perceived as a highly effective strategy for cost reduction and improving financial efficiency in Dumaguete City restaurants, with a cumulative weighted mean of 4.71, falling within the "Strongly Agree" category. This aligns with Stekelorum et al. (2021), who demonstrate that GSCM is a powerful tool for financial efficiency and overall company performance by minimizing waste, optimizing resource use, and streamlining processes. Specifically, Reduced Food Waste (4.75) and Water Conservation Leading to Lower Water Bills (4.75) received the highest ratings, indicating they are the most impactful cost-saving measures. Efficient Use of Materials and Energy Leading to Leaner Operational Costs (4.65) and Using Compostable Packaging to Reduce Costs (4.72) were also rated as "Strongly Agree," highlighting respondents' recognition of the financial benefits derived from sustainable sourcing, energy efficiency, and eco-friendly packaging solutions.

These findings suggest that waste reduction, energy efficiency, and water conservation significantly impact restaurant cost savings. Strong agreement on food waste reduction (4.75) and water conservation (4.75) highlights their economic and environmental value. Compostable packaging, reducing costs (4.72), shows its financial viability. Efficient operations increase profit margins and overall efficiency. Rupa and Saif (2022) support GSCM's positive impact on cost reduction, waste management, and emissions. Further cost reduction can be achieved through advanced waste tracking, renewable energy investments, and sustainable local procurement.

Table 11. *Impact of Green Supply Chain Management Practices in the Business Performance of Restaurants in Dumaguete City (Brand Image)*

Indicator	Weighted Mean	Verbal Description
1. Attract new customers and satisfy existing ones	4.83	Strongly Agree
2. Build a reputation as a sustainability leader	4.52	Strongly Agree
3. Attract environmentally conscious customers and differentiate themselves from competitors	4.56	Strongly Agree
4. Attract customers who are willing to pay a premium for sustainable products and services	4.59	Strongly Agree
Cumulative Weighted Mean	**4.71**	**Strongly Agree**

Table 11 presents the impact of Green Supply Chain Management (GSCM) practices on the brand image of restaurants in Dumaguete City. Attracting new customers and satisfying existing ones (4.83) received the highest rating, suggesting that sustainability efforts are a key driver of customer engagement and retention**.** Attracting customers willing to pay a premium for sustainable products and services (4.59) and differentiating from competitors by appealing to environmentally conscious consumers (4.56) were also rated highly, reflecting the growing market demand for eco-friendly dining options**.** Building a reputation as a sustainability leader (4.52) also falls under "Strongly Agree"**,** suggesting that businesses recognize the long-term benefits of positioning themselves as environmentally responsible brands. The cumulative weighted mean of 4.71 falls within the "Strongly Agree" category, indicating that respondents perceive GSCM as a significant factor in enhancing brand reputation and customer appeal. This is because today, the contemporary consumer landscape is characterized by an expectation that businesses contribute positively to societal well-being, transcending traditional profit-driven models.

The results indicate that GSCM practices contribute significantly to enhancing brand image, customer attraction, and differentiation. High ratings for customer attraction and satisfaction (4.83) indicate sustainability is a key selling point. Customers willing to pay a premium for sustainability (4.59) suggest green initiatives offer a competitive advantage, allowing higher pricing while maintaining loyalty. This reflects a restaurant's values, with customer loyalty being crucial for success.

Table 12. *Impact of Green Supply Chain Management Practices on the Business Performance of Restaurants in Dumaguete City (Competitive Advantage)*

Indicator	Weighted Mean	Verbal Description
1. Improve financial performance	4.64	Strongly Agree
2. Creates a unique selling proposition that appeals to environmentally conscious consumers who are actively seeking out sustainable options	4.62	Strongly Agree
3. Lead to repeat business and positive word-of-mouth marketing	4.72	Strongly Agree
4. Protects brand image and ensures long-term sustainability	4.72	Strongly Agree
Cumulative Weighted Mean	**4.67**	**Strongly Agree**

Table 12 presents the impact of Green Supply Chain Management (GSCM) practices on the competitive advantage of restaurants in Dumaguete City, with a cumulative weighted mean of 4.67 ("Strongly Agree"). The highest-rated impacts were leading to repeat business and positive word-of-mouth marketing (4.72) and protecting brand image while ensuring long-term sustainability (4.72). This indicates that sustainable practices foster customer loyalty and reputation stability. Improving financial performance (4.64) and creating a unique selling proposition for environmentally conscious consumers (4.62) also received "Strongly Agree" ratings, underscoring GSCM's role in profitability and market differentiation. This aligns with extensive research by Zhu (2022), who highlights GSCM's positive impact on firm performance and its role in sustainable competitive advantage and innovation. The findings reinforce that GSCM enhances brand loyalty and customer retention, with high ratings for word-of-mouth marketing and repeat business (4.7,2), suggesting customers favor environmentally responsible companies. The strong agreement on GSCM improving financial performance (4.64) reinforces it as a strategic business decision, echoing competitive advantage theories from thinkers like Michael Porter (Pranadita et al., 2022), with their Resource-Based View, and Teece (2019) on dynamic capabilities.

Table 13. *Impact of Green Supply Chain Management Practices in Sustainability of Restaurants in Dumaguete City (Economic Sustainability)*

Indicator	Weighted Mean	Verbal Description
1. Minimizes transportation costs and ensures efficient resource utilization	4.16	Agree
2. Increasing efficiency	4.08	Agree
3. Leading to higher revenue and profitability for the long term	4.18	Agree
4. Reduces the risk of environmental violations, leading to lower insurance premiums and compliance costs	4.27	Strongly Agree
Cumulative Weighted Mean	**4.17**	**Agree**

Table 13 illustrates the impact of Green Supply Chain Management (GSCM) practices on the economic sustainability of restaurants in Dumaguete City. The highest-rated indicator, "reducing the risk of environmental violations," received a weighted mean of 4.27, indicating "Strongly Agree," and reflects the significant financial benefit of compliance with environmental regulations. Following this, "leading to higher revenue and profitability in the long term" was rated at 4.18, while "minimizing transportation costs and improving resource utilization" scored 4.16. Both were rated "Agree," suggesting that respondents recognize the economic advantages of GSCM, though with slightly less enthusiasm than for regulatory compliance. The cumulative weighted mean of 4.17 falls within the "Agree" category, indicating that respondents view GSCM as a contributor to economic stability and financial efficiency. The positive customer relationships, strategic supplier integration, and robust information sharing are crucial for businesses' financial and economic sustainability. Also, it emphasizes that effective supply chain management practices, prioritizing strong customer connections and open communication with suppliers, are vital for long-term financial success. Despite recognizing the financial benefits of GSCM, challenges remain in fully integrating these practices into economic strategies. The emphasis on regulatory compliance (4.27) suggests that businesses value risk reduction and financial stability when adopting sustainability initiatives. However, lower ratings for increased efficiency (4.08) and profitability (4.18) imply that some restaurants may not fully realize the direct financial benefits of sustainability efforts. Factors such as initial investment costs, lack of knowledge about return on investment (ROI), and operational capacity limitations may contribute to this issue. Additionally, GSCM encompasses intertwined environmental, social, and economic dimensions. Overall, while GSCM is perceived positively, further support is needed for restaurants to leverage its economic advantages fully.

Table 14. *Impact of Green Supply Chain Management Practices in Sustainability of Restaurants in Dumaguete City (Environmental Sustainability)*

Indicator	Weighted Mean	Verbal Description
1. Promotes social responsibility and reduces environmental exploitation	4.51	Strongly Agree
2. Sourcing organic and sustainably produced ingredients reduces the use of pesticides and fertilizers, minimizing their impact on soil and water quality	4.35	Strongly Agree
3. Decreasing landfill waste and conserving resources	4.10	Strongly Agree
4. Reduces water consumption and conserves this precious resource	4.29	Strongly Agree
Cumulative Weighted Mean	**4.31**	**Strongly Agree**

Table 14 presents the impact of Green Supply Chain Management (GSCM) practices on the environmental sustainability of restaurants in Dumaguete City. Promoting social responsibility and reducing environmental exploitation (4.51) received the highest rating, highlighting strong agreement that GSCM practices support ethical business operations and environmental stewardship**.** Sourcing organic and sustainably produced ingredients to minimize soil and water contamination (4.35) and reducing water consumption (4.29) were also rated as "Strongly Agree"**,** suggesting awareness of how sustainable sourcing and water conservation contribute to environmental protection**.** Decreasing landfill waste and conserving resources (4.10) received the lowest rating but still falls under "Strongly Agree"**,** reflecting an understanding of the importance of waste reduction in sustainability efforts**.** The cumulative weighted mean of 4.31 falls within the "Strongly Agree" category, indicating that respondents perceive GSCM as significantly contributing to environmental sustainability.

The findings indicate that GSCM practices significantly advance environmental sustainability, particularly in social responsibility, sustainable sourcing, and resource conservation. Strong agreement on reducing environmental exploitation (4.51) indicates businesses recognize the ethical implications of their supply chain choices, aligning with Villena et al. (2020), who emphasize the importance of minimizing negative environmental impacts driven by consumer demand, regulations, and awareness. While all indicators rated high, decreasing landfill waste (4.10) received the lowest score, suggesting areas for improvement. To enhance environmental sustainability, restaurants should strengthen waste reduction (composting, food donation, packaging innovations), increase water-saving technology adoption, and strengthen partnerships with local/organic suppliers. This aligns with Feng et al. (2024) on integrating environmental considerations into GSCM's positive impact with circular economy capabilities and green ambidexterity innovation.

Table 15. *Impact of Green Supply Chain Management Practices on the Sustainability of Restaurants in Dumaguete City (Social Sustainability)*

Indicator	Weighted Mean	Verbal Description
1. Reduces reliance on large corporations and helps maintain local agricultural traditions	4.21	Strongly Agree
2. Promoting social justice and ethical labor practices throughout the supply chain	4.37	Strongly Agree
3. Strengthens the restaurant's connection with the community and fosters a sense of social responsibility	4.62	Strongly Agree
4. Strong engagement with stakeholders to gather feedback, address concerns, and build a stronger relationship	4.64	Strongly Agree
Cumulative Weighted Mean	**4.46**	**Strongly Agree**

Table 15 presents the impact of Green Supply Chain Management (GSCM) practices on the social sustainability of restaurants in Dumaguete City, with a cumulative weighted mean of 4.46 ("Strongly Agree"). Strong engagement with stakeholders (4.64) received the highest rating, indicating businesses value stakeholder involvement, community feedback, and relationship-building in sustainability efforts. Strengthening the restaurant's connection with the community and fostering social responsibility (4.62) was also highly rated, suggesting restaurants see themselves as key contributors to local development and ethical business practices. Promoting social justice and ethical labor practices (4.37) was rated "Strongly Agree," highlighting awareness of fair labor standards and responsible sourcing. While reducing reliance on large corporations while maintaining local agricultural traditions (4.21) had the lowest score, it still falls within "Strongly Agree," indicating an appreciation for supporting small-scale local suppliers and preserving traditional food systems. GSCM positively affects social outcomes, and a strong correlation between social and economic sustainability. This underscores that social sustainability requires the responsibility of the entire supply network. To strengthen social sustainability, restaurants could expand partnerships with local farmers, enhance corporate social responsibility (CSR) initiatives, and implement fair trade and ethical sourcing policies.

Table 16. *Test of Relationship between the Respondents' Position and Their Level of Awareness of Green Supply Chain Management (GSCM)*

Variable	χ^2 (Chi-Square)	df (Degrees of Freedom)	*p-Value*	Decision (α = .05)
Employment Position × Awareness Level	0.064	2	0.968	Not Significant

The results of the Chi-Square Test for Independence indicate that there is no statistically significant relationship between employment position and level of awareness in Green Supply Chain Management (GSCM), χ^2 (2) = 0.064, p = 0.968. This suggests that awareness of GSCM practices, including green sourcing, eco-design, reverse logistics, and waste management, does not significantly differ among proprietors, managers, and supervisors.

This finding aligns with previous studies that highlight sustainability awareness is increasingly institutionalized across all organizational levels, supported by Shin and Cho (2022). This uniform awareness stems from regulatory frameworks, industry trends, consumer expectations, policies, and training, rather than individual job roles. While top management commitment is vital for GSCM adoption, awareness itself isn't rank-dependent. Organizations should reinforce sustainability education, and future research should examine how awareness translates into action and policy adherence, as awareness alone is insufficient for implementation.

Table 17. *Analysis on the Relationship Implementation Green Supply Chain Management Practices and Business Performance*

Variable Tested	*r*	*p-value*	Decision	Remark
Implementation of GSCM and Impact on Business Performance	0.352	0.01712	Reject Null Hypothesis	Significant Relationship

level of significance= 0.05

Legend:

Correlation Coefficient	Verbal Description
± 0.00 – ±0.09	negligible
±0.10 – ±0.29	small
±0.30 – ±0.49	medium
±0.50 – ±1.00	large

Source: Cohen & Berry (2001)

A Pearson correlation analysis was conducted to examine the relationship between the implementation of Green Supply Chain Management (GSCM) practices and business performance. The results revealed a moderate positive correlation, r=.352, p=.017, indicating a statistically significant relationship at the a=0.05 level. Since the *p-value* is less than 0.05, the null hypothesis is rejected, supporting the conclusion that higher levels of GSCM implementation are associated with improved business performance. For instance, a study by Govindan et al. (2020) found that companies implementing GSCM practices more thoroughly experience better business performance. The higher GSCM implementation correlates with improved business performance, employee job satisfaction, and operational/relational efficiency, indicating GSCM benefits both environmental sustainability and the work environment.

The findings suggest that organizations that actively implement GSCM practices may experience enhanced business performance. This aligns with the growing body of literature emphasizing the benefits of sustainable supply chain management, such as cost reduction, operational efficiency, and improved brand reputation. The moderate correlation coefficient (r=.352) implies that while the relationship is significant, other factors may also contribute to business performance.

Table 18. *Analysis of the relationship between the Implementation of Green Supply Chain Management Practices and Sustainability*

Variable Tested	*r*	*p-value*	Decision	Remark
Implementation of GSCM and Impact on Business Performance	0.554	0.02812	Reject Null Hypothesis	Significant Relationship

level of significance= 0.05

Legend:

Correlation Coefficient	Verbal Description
± 0.00 – ±0.09	negligible
±0.10 – ±0.29	small
±0.30 – ±0.49	medium
±0.50 – ±1.00	large

Source: Cohen & Berry (2001)

A Pearson correlation analysis was conducted to examine the relationship between the implementation of Green Supply Chain Management (GSCM) practices and sustainability. The results indicate a strong positive correlation, r=.554, p=.028, suggesting a statistically significant relationship at the a=0.05 level. Given that the *p-value* is less than 0.05, the null hypothesis is rejected, confirming that higher levels of GSCM implementation are significantly associated with improved sustainability outcomes.

The strong correlation (r=.554) implies that organizations with more robust GSCM practices tend to achieve higher sustainability performance. This finding aligns with prior research suggesting that sustainable supply chain practices lead to environmental conservation, resource efficiency, and long-term business resilience. The significance of this relationship highlights the importance of integrating green practices into supply chain strategies to enhance corporate sustainability goals. For instance, the study of Jiang et al. (2020) found that incorporating green practices across the supply chain significantly influences sustainability and achieves positive outcomes. Future research should explore causal mechanisms like regulatory/stakeholder pressures or cost

savings and examine industry-specific variations for deeper insights into GSCM's contribution to sustainability.

Table 19. *Analysis of the Relationship between Business Performance and Sustainability*

Variable Tested	*r*	*p-value*	Decision	Remark
Implementation of GSCM and Impact on Business Performance	0.6774	0.02812	Reject Null Hypothesis	Significant Relationship

level of significance= 0.05

Legend:

Correlation Coefficient	Verbal Description
± 0.00 – ±0.09	negligible
±0.10 – ±0.29	small
±0.30 – ±0.49	medium
±0.50 – ±1.00	large

Source: Cohen & Berry (2001)

A Pearson correlation analysis was conducted to examine the relationship between business performance and sustainability. The results indicate a strong positive correlation, r=.677, p=.028, suggesting a statistically significant relationship at the a=0.055 level. Since the p-value is less than 0.05, the null hypothesis is rejected, confirming that higher business performance is significantly associated with improved sustainability outcomes. For instance, the study of Abdallah & Al-Ghwayeen (2019) found that companies with stronger financial and operational results also tend to achieve better results in their sustainability efforts. It's about providing evidence that doing well financially and operationally goes together with doing good environmentally and socially.

The strong correlation (r=.677) suggests that organizations that perform well financially and operationally are more likely to achieve sustainability goals. This finding aligns with prior research indicating that financially healthy businesses are better positioned to invest in sustainable practices. This relationship likely creates a reinforcing cycle where sustainability enhances long-term resilience, cost savings, and competitive advantages, improving overall performance. Future research could explore the direct impact of specific sustainability initiatives (e.g., carbon footprint reduction, circular economy, CSR) on profitability and market success.

4.0 Conclusions

This study establishes that Green Supply Chain Management (GSCM) is a critical driver of both business performance and holistic sustainability, encompassing economic, environmental, and social dimensions within the restaurant industry in Dumaguete City. The research provides empirical evidence that GSCM practices directly enhance productivity, reduce operational costs, strengthen brand reputation, and improve competitive advantage while simultaneously promoting environmental stewardship and social responsibility.

The findings reveal that a high level of awareness regarding GSCM components exists among restaurant leaders, and significant progress has been made in implementing waste reduction and green design initiatives. However, a notable area for improvement lies in the limited adoption of recycled energy practices. These insights offer essential implications for the broader restaurant sector and policymakers seeking to advance sustainable operations. For restaurant managers and owners, the results highlight the strategic importance of institutionalizing GSCM through structured sustainability training and formalized green procurement policies, leveraging existing high awareness into more comprehensive action across all operational facets.

Specifically, businesses should prioritize investments in energy-efficient technologies and explore incentive programs for adopting renewable energy sources, addressing the current implementation gap identified. Policymakers and government agencies are encouraged to promote energy recycling initiatives and establish collaborative platforms for sharing best practices, fostering an ecosystem that supports broader GSCM adoption across the industry.

The study underscores that GSCM is not merely an environmental imperative but a strategic business advantage, leading to enhanced financial performance and long-term resilience. The strong positive correlations found between GSCM implementation, business performance, and overall sustainability suggest a reinforcing cycle where commitment to green practices yields tangible benefits, making sustainability a core component of competitive strategy.

Future research should investigate the financial implications of GSCM, implementation barriers, and the mechanisms driving sustainability and organizational success. Furthermore, it is recommended that future studies explore the applicability and effectiveness of GSCM in other sectors beyond the restaurant industry, such as retail or manufacturing, to identify sector-specific challenges and opportunities. Comparative studies examining GSCM implementation across businesses of varying sizes (e.g., small independent restaurants versus large chain establishments) would provide nuanced insights into scalable solutions. Finally, longitudinal studies are crucial to assess the long-term economic, environmental, and social benefits of sustained GSCM adoption, offering a more comprehensive understanding of its enduring impact on business and the broader community.

5.0 Contributions of Authors

The study was authored by Mesarie Q. Silva, who contributed from the conceptualization to the final version of the paper.

6.0 Funding

No funding agency or institution funds the research.

7.0 Conflict of Interests

The author declared that there is no conflict of interest as far as this study is concerned.

8.0 Acknowledgment

The author extends a special thanks to family and friends for their support, which was instrumental in the successful completion of this study.

9.0 References

Abdallah, A. B., & Al-Ghwayeen, W. S. (2019). Green supply chain management and business performance. Business Process Management Journal, 26(2), 489–512. http://doi.org/10.1108/BPMJ-03-2018-0091

Abedin, B., Gabor, M. R., Susanu, I. O., & Jaber, Y. F. (2024). Exploring the perspectives of oil and gas industry managers on the adoption of sustainable practices: A Q methodology approach to green marketing strategies. Sustainability, 16(14), 5948. http://doi.org/10.3390/su16145948

Cook, N., Collins, J., Goodwin, D., & Porter, J. (2022). Factors influencing the implementation of food and food-related waste audits in hospital food services. Frontiers in Nutrition, 9, 1062619. http://doi.org/10.3389/fnut.2022.1062619

Feng, T., Qamruzzaman, M., Sharmin, S. S., & Karim, S. (2024). Bridging environmental sustainability and organizational performance: The role of green supply chain management in the manufacturing industry. Sustainability, 16(14), 5918. http://doi.org/10.3390/su16145918

Govindan, K., Rajeev, A., Padhi, S. S., & Pati, R. K. (2020). Supply chain sustainability and performance of firms: A meta-analysis of the literature. Transportation Research Part E: Logistics and Transportation Review, 137, 101923. http://doi.org/10.1016/j.tre.2020.101923

Jiang, S., Han, Z., & Huo, B. (2020). Patterns of IT use: The impact on green supply chain management and firm performance. Industrial Management & Data Systems, 120(5), 825–843. http://doi.org/10.1108/IMDS-07-2019-0394

Khor, K. S., Ramayah, T., & Fouladgaran, H. R. P. (2020). Managing eco-design for reverse logistics. International Journal of Environment and Waste Management, 26(2), 125–142. http://doi.org/10.1504/IJEWM.2020.108811

Lagasca-Hiloma, C. M. A., Bate, J., & Lagasca, K. F. A. (2021). The effectiveness of WWF-Philippines' manual on waste management in promoting positive environmental behaviors among Filipino 5th and 6th graders. Asia-Pacific Social Science Review, 21(3), Article 4. https://animorepository.dlsu.edu.ph/apssr/vol21/iss3/4/

Liu, T., & Cao, X. (2024). Going green: How executive environmental awareness and green innovation drive corporate sustainable development. Journal of the Knowledge Economy. http://doi.org/10.1007/s13132-024-01788-1

Martin-Rios, C., Hofmann, A., & Mackenzie, N. (2021). Sustainability-oriented innovations in food waste management technology. Sustainability, 13(1), 210. http://doi.org/10.3390/su13010210

Massoud, M. A., Mokbel, M., & Alameddine, I. (2023). Critical analysis of waste management systems utilizing a performance assessment and optimization model. Environmental Development, 46, 100844. http://doi.org/10.1016/j.envdev.2023.100844

Mekonnen, M. M., & Gerbens-Leenes, W. (2020). The water footprint of global food production. Water, 12(10), 2696. http://doi.org/10.3390/w12102696

Mukucha, P., Mushanyuri, B. E., & Jaravaza, D. C. (2021). Green sourcing: Effects on supplier performance metrics in fast food restaurants in frontier markets. Logistics, Supply Chain, Sustainability and Global Challenges, 12(1), 47–59. http://doi.org/10.2478/jlst-2021-0004

Pranadita, N., Rahayu, A., & Wibowo, L. A. (2022). The effect of work creation law on the five forces of competition related to the formulation of competitive strategies according to Michael E. Porter. Advances in Economics, Business and Management Research. http://doi.org/10.2991/aebmr.k.220701.090

Rupa, R. A., & Saif, A. N. M. (2021). Impact of green supply chain management (GSCM) on business performance and environmental sustainability: Case of a developing country. Business Perspectives and Research, 10(1), 140–163. http://doi.org/10.1177/2278533720983089

Shin, S., & Cho, M. (2022). Green supply chain management implemented by suppliers as drivers for SMEs environmental growth with a focus on the restaurant industry. Sustainability, 14(6), 3515. http://doi.org/10.3390/su14063515

Stekelorum, R., Laguir, I., Gupta, S., & Kumar, S. (2021). Green supply chain management practices and third-party logistics providers' performances: A fuzzy-set approach. International Journal of Production Economics, 235, 108093. http://doi.org/10.1016/j.ijpe.2021.108093

Teece, D. J. (2019). Strategic renewal and dynamic capabilities. In Routledge eBooks (pp. 21–51). http://doi.org/10.4324/9780429057861-2

Tseng, M., Lin, C. R., Sujanto, R. Y., Lim, M. K., & Bui, T. (2021). Assessing sustainable consumption in packaged food in Indonesia: Corporate communication drives consumer perception and behavior. Sustainability, 13(14), 8021. http://doi.org/10.3390/su13148021

Villena, V. H., Wilhelm, M., & Xiao, C. (2020). Untangling drivers for supplier environmental and social responsibility: An investigation in Philips Lighting's Chinese supply chain. SSRN Electronic Journal. http://doi.org/10.2139/ssrn.3681079

Wu, J., Chung, I., Liu, Z., & Wang, P. (2023). Co-design optimization of combined heat and power-based microgrids. Journal of Renewable and Sustainable Energy, 15(5). http://doi.org/10.1063/5.0165676

Yong, R. Y. M., Chua, B., Fakfare, P., & Han, H. (2024). Sustainability à la carte: A systematic review of green restaurant research (2010–2023). Journal of Travel & Tourism Marketing, 41(4), 508–537. http://doi.org/10.1080/10548408.2023.2293014

Zhu, L. (2022). Green supply chain management. Journal of Digitainability Realism & Mastery (DREAM), 1(01), 12–17. http://doi.org/10.56982/journalo.v1i01.7