The Impact of Green Supply Chain Management on Sustainable Performance at Al Manaseer Group

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ABSTRACT

The study aimed to identify the impact of green supply chain management in its dimensions (green purchase, green manufacturing, green distribution, green logistics) on Sustainable Performance in its dimensions (environmental performance, social performance, economic performance) at AL Manaseer group. The study population was represented by all managers working in the top administrative leadership and middle management of each company in the Manaseer group of companies, numbering (297), as the group consists of (21) companies. An equal stratified random sample was relied upon to represent the population, amounting to (297) managers from management (top and middle). The equal stratified random sample was relied upon because the target group is a supervisory class that is equal in many characteristics in all companies affiliated with Al Manaseer Group. Based on this, the representative sample of the population (297) is (165) of the managers in the administrative leadership (Top and Middle) in Al Manaseer group.

The study findings indicate that Green Logistics, Green Manufacturing can explain all three measures of sustainable performance. However, Green distribution contributes to environmental and social performance and not economic performance. On the other hand, the use of Green purchase contributes to economic and social performance and not environmental performance.

Keywords: green supply chain management, Sustainable Performance, AL Manaseer group.

1. INTRODUCTION

Many challenges and developments have arisen in today's business environment that have had a significant impact on organizations in all sectors, thus maximizing the level of competition. In a rapidly changing business environment, achieving sustainable performance has become the goal of companies to improve their competitive position in the market. Since entrepreneurs are always trying to adapt their operations to an increasingly competitive environment, manufacturing companies are facing increasing pressures from global competition and a distinct challenge in achieving a smooth production process by reducing waste, increasing the value of activities, and constantly checking every opportunity to reduce costs without compromising their business performance (Figueroa et al,.2021).

The idea of merging sustainable performance with green supply chain practices is an integrated process that has formed an incentive for many large companies to adopt the approach to green supply chains, as it enables companies to preserve the environment, which is one of the most important goals pursued by many companies because sustainability is closely related to the environment (Awan et al.,2021).

The prosperity of organizations in the production sector in general at the present time depends on their acquisition of a green supply chain management capable of advancing the organization and leading it towards excellence and upgrading to provide the best goods and services that the customer needs, while preserving the environment continuously, as it is considered one of the recent trends that have been very popular To develop the management of organizations by building a deep culture of the concept of green supply chain management within the organization. It is a method of business development that expresses the creation of a strong base for competition that makes everyone within the organization know that customer service is the primary goal that it seeks (Hao et al., 2021).

1.1 The Study Problem

Through this study, the researcher aims to determine the impact of Green supply chain management on its Sustainable Performance for al Manaseer group and how to measure this impact.

Customer needs, requirements, and environmental factors determine the strategy of the sustainable performance system, as many researchers presented many models that confirm this. It is the responsibility of manufacturing and production companies to provide a final product with an appropriate shape and capable of performing the desired function. The idea of green and sustainable production is to give Prioritizing long-term effects and benefits over immediate and short-term financial gains, as it thinks about the future of business by investing in well-designed and safer products, resource-saving technologies and procedures, and skilled employees with whom companies may thrive. Production, human resources, resources, machinery and everything related to the organization to make it sustainable organizations in the long term (Teixeira et al., 2022).

Consequently, the study problem may be expressed as the following primary question:

What is the impact of Green supply chain management (Green purchase, Green manufacturing, Green distribution, Green logistics) on Sustainable Performance at Al Manaseer Group?

The following questions arise from it:

1.   What is the relative importance of Green supply chain management at Al Manaseer Group?

2.   What is the relative importance of Sustainable Performance with its dimensions (environmental performance, social performance, economic performance) at Al Manaseer Group Al Manaseer Group?

3.   What is the impact of Green purchase on achieving Sustainable Performance at Al Manaseer Group?

4.   What is the impact of Green manufacturing on achieving Sustainable Performance at Al Manaseer Group?

5.   What is the impact of Green distribution on achieving Sustainable Performance at Al Manaseer Group?

6.   What is the impact of Green logistics on achieving Sustainable Performance at Al Manaseer Group?

1.2 The Study Importance

There is a number of factors that rise the study's importance, including the researcher's interest in the current study's variables because of their significance and impact on organizations, especially in a rapidly environmental changing, as well as its scientific importance, which is reflected by inviting a large number of researchers and those interested in conducting further research. In addition to what the researcher expected, it is anticipated that the findings and suggestions of this study will serve as a guide for al manaseer group and that the intended advantages would be extended to all organizations in comparable sectors.

The importance of the study stems from the importance of the business and the sector in which it was used, as the production sector is considered one of the most important factors contributing to economic growth. It is also important in the Jordanian market. The Manaseer Group is considered one of the companies that has achieved great development in recent years in the production sector in particular, and it also highlights the importance The company, given that it includes many sectors such as construction, mining, energy, food, and other production-dependent sectors in its group of companies, where the beginning of the "Manaseer Group" was with a company for distributing chemicals and fertilizers with a total number of employees amounting to 15 employees. Since then, the group has grown to include more than 20 Company and has partnered with 3 of the largest companies in Jordan, and the Manaseer Group currently employs more than 10,000 employees in Jordan with capital investments amounting to 3 billion US dollars. Thanks to these resources, the group has become a market leader in various industries by focusing on quality and customer service, so The practical and applied importance of this study stems from the importance of the sector and company under study.

1.3 The Study Objectives

The researcher aimed to address the issue of the study from a theoretical scientific point of view, represented by clarifying the basic concepts of the study variables (Green Supply Chain Management and Sustainable Performance), as well as the dimensions of each of them, as well as their importance and practices. The researcher also aimed to address the problem from an applied practical point of view by identifying the extent to which al manaseer group apply Green Supply Chain Management in their presented reports and the extent of disclosing it and reaching the results and recommendations in this regard.

1.4. Research Framework and Hypotheses

The study aims to examine Green Supply Chain Management on Sustainable Performance, for that the reserarcher developed the following hypotheses:

• H01: There is no statistically significant impact at level ($\alpha \leq 0.05$) of Green supply chain management with its dimensions (Green purchase, Green manufacturing, Green distribution, Green logistics) on Sustainable Performance.

• Three sub-hypotheses are derived from the main hypothesis as follows:

• $H0_{1-1}$: There is no statistically significant impact at level ($\alpha \leq 0.05$) of Green purchase on achieving Sustainable Performance.

• $H0_{1-2}$: There is no statistically significant impact at level ($\alpha \leq 0.05$) of Green manufacturing on achieving Sustainable Performance.

• $H0_{1-3}$: There is no statistically significant impact at level ($\alpha \leq 0.05$) of Green distribution on achieving Sustainable Performance.

• $H0_{1-4}$: There is no statistically significant impact at level ($\alpha \leq 0.05$) of Green logistics on achieving Sustainable Performance.

Based on what was specified in the study's objectives and variables and on the previous relevant studies the researcher built the study framework as shown in Figure 1.

2. THEORETICAL BACKGROUND

2.1. Green Supply Chain Management (GSCM)

At this point, the definition of GSCM that is most used is as follows: "Green supply chain is a modern management mode that thoroughly addresses environmental effect and resource efficiency throughout the entire supply chain. It involves suppliers, manufacturers, sellers, and users and is based on supply chain management technology and green manufacturing philosophy. Its goal is to reduce products' negative environmental effects and increase resource efficiency throughout the whole production cycle, from raw material procurement to processing, packaging, warehousing, transportation, use, and scrap disposal (Xu et al., 2023).

Figure 1: Proposed research framework and hypotheses.
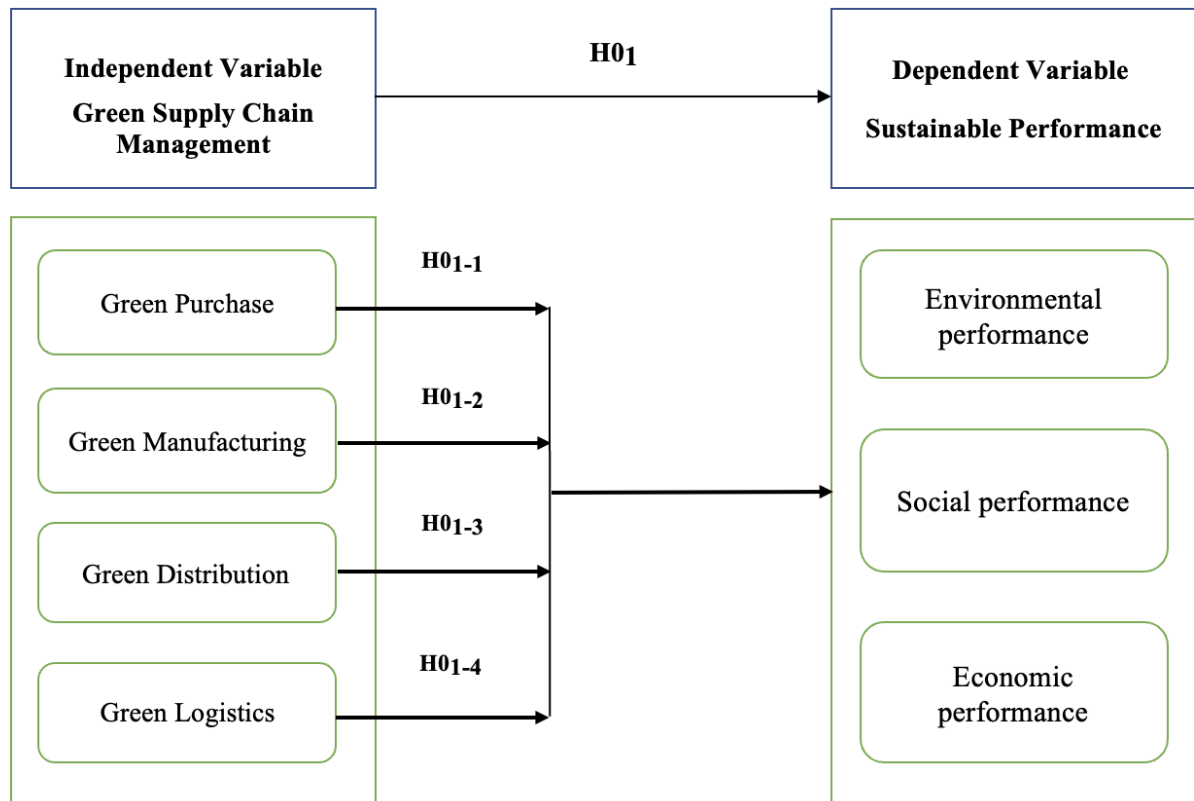
Source: Prepared by the researcher based on previous studies.

Green supply chain management incorporates environmental thinking into the supply chain. It comprises product design, raw material selection, production techniques, and product distribution to customers, as well as the end of its useful life, product management beyond its useful life, or reverse logistics (Fianko et al.,2021). Meng et al. (2021) claim that green supply chain management considers how business operations have an impact on processes ranging from raw materials to completed goods inside an organization.

The idea of considering the environmental impact of business operations on processes spanning from raw materials to completed goods inside a corporation is known as "green supply chain management." (Dzikriansyah et al., 2023).

A green supply chain or what is called a sustainable network can be defined as the operational management method and improvement approach to reduce the environmental impact along the life cycle of a green product, from raw materials to the final product (Putri et al., 2022).

Green supply chain management is not just about preserving the environment for the sake of the environment, it is also about improving sustainability and making operations more efficient as it is a holistic green method that considers the triple bottom line of sustainability: people, planet and profits (Singh et al., 2020).

Internal green supply chain practices are activities without the direct involvement of the supplier or customer, which can be managed and implemented by an individual manufacturer and include areas such as internal environmental management and environmental design. External green supply chain practices express environmental management practices that need partial cooperation and transactions with suppliers and customers. in terms of their environmental collaboration, green purchasing, and reverse logistics (Bon et al., 2018).

Green supply chain management is a set of green management practices to help organizations operate more sustainably and efficiently. It is also sometimes called sustainable supply chain management or green logistics (Awan et al., 2021).

The implementation of green supply chain management contributes to reducing waste of resources and reducing energy consumption, which contributes to the sustainable development of society and the environment, and thus the company's performance will be enhanced, and this explains that the adoption of a successful (GSCM) affects the performance of companies (Nejati et al., 2017).

2.2. GSCM Dimensions

2.2.1. Green Purchase (GP)

The main tactic used by businesses to increase productivity, cut waste, and perhaps boost competitiveness is green purchasing (Hazaea et al., 2022).

The term "green purchasing behavior" describes the practice of buying recyclable, ecologically friendly items (Sharma et al., 2022). On the other hand, green purchasing is one of the key elements of sustainable growth for institutions, according to (Lo et al., 2018), and it frequently has an influence on how well institutions accomplish their work as well as how they practice environmental protection.

Green purchasing is crucial in reducing the negative impact of production, usage, and recycling processes on the environment. It also improves community health by maintaining a clean environment, lowers health expenditures, and promotes environmental sustainability (Khan et al., 2022). Green purchasing improves dynamic and operational skills and has a beneficial impact on the environment and economy, achieving the aims of global sustainable development and boosting stakeholder confidence (Nguyen et al., 2019).

The term "green purchase behavior" describes the act of buying and using goods that are helpful to the environment, recyclable or sustainable, or considerate of environmental issues (Naz et al., 2020).

As environmental concerns increase, green shopping, also known as ecologically preferred purchasing (EPP), has become a significant topic. Making ecologically responsible selections at every stage of the purchase process, from product and process design to product disposal, is referred to as "green purchasing." (Yook et al., 2018).

According to the Institute for Supply Management (ISM), green purchasing techniques include not only traditional purchasing criteria like product pricing and supplier location but also all environmental issues pertaining to supply management decisions.

Green purchasing practices involve avoiding things that are harmful to the environment and society and choosing products that are sustainable, recyclable, and useful to the environment (Jaiswal & Kant, 2018).

Green purchasing is the practice of buying goods and services that, when compared to similar competitive goods and services, have a less or less significant impact on human health and the environment. The procurement of raw materials, manufacture, packaging, distribution, reuse, operation, maintenance, or disposal of the good or service may all be taken into account in this comparison (Zhuang et al., 2021).

2.2.2. Green Manufacturing (GM)

Green manufacturing is the practice of making goods and services in a way that has as little negative impact on the environment as possible while maximizing resource utilization. It also refers to the manufacture of goods and services that are environmentally friendly and may be employed in technologies like renewable energy sources and cleaner production processes (Ghadimi et al., 2021).

Green manufacturing is a global approach that aids in industry optimization and modernization, human life improvement, and economic development (Ning & Li, 2020).

Green manufacturing is the practice of using production techniques that not only aim to minimize waste production and the depletion of natural resources but also to prevent garbage from ending up in landfills (Karuppiah et al., 2020).

Green manufacturing is a modern manufacturing method that carefully weighs resource efficiency as well as the effects on the environment (Li et al., 2020).

The term "green manufacturing" has two different meanings: manufacturing "green" products, especially those utilized in renewable energy sources and clean technology machinery of all kinds; and manufacturing "greening," which refers to reducing contamination and waste by minimizing the use of natural resources, recycling and reusing materials, and lowering emissions (Agarwal et al., 2020).

Toke and Kalpande (2019) defined "green manufacturing" as a manufacturing system strategy that reduces the environmental impact through the reduction of harmful chemicals and waste, the efficient use of energy and resources, and the application of a life cycle analysis (LCA), closed loop, and end-of-life (EOL) strategy.

Green manufacturing is a manufacturing process that reduces greenhouse gas emissions while boosting social and economic resilience by making the best possible use of available resources, energy, and water (Sun et al., 2020).

2.2.3. Green Distribution (GD)

Green distribution refers to the selection of methods for product distribution that ensures client accessibility while having the least possible detrimental effects on the environment (Popović et al., 2023).

Green distribution is the term for logistical methods that reduce damage to the environment. Across the whole supply chain, including storage, order processing, packing, and last-mile delivery, greener decisions may be made (Yang et al., 2022).

Green distribution refers to the practice of delivering commodities through "low pollution vehicles" that have a minimal negative influence on the environment in

order to reduce the amount of air pollution released into nearby towns (Agustini et al., 2019).

Green distribution is a process that considers environmental considerations in moving products from the source to the consumer. Environmental considerations can be identified in reducing energy consumption and reducing emissions to mitigate global warming. Therefore, organizations must adopt and innovate safe ways and means of transportation and safe green places (Candrasa et al., 2020).

Green distribution is one of the important basic activities in the field of green marketing, as one of the primary objectives of any organization is to ensure that the goods it produces reach the consumer, and therefore it is assumed that green distribution aims to raise the level of consumer culture with the importance and characteristics of the green product (Appiah et al., 2022).

The distribution method must appear to be a green endeavor. A company that wants to present itself as environmentally friendly must do all in its power to prevent any pollution of the air or water from occurring throughout the distribution process (Mukonza et al., 2021).

The company must handle the possibility for green distribution processes to contribute to pollution through their mode of transportation (Li et al., 2022).

The definition of a "green distribution process" is the incorporation of environmental concerns into operations including packaging, shipping, and logistics (Candrasa et al., 2020).

Green distribution methods: Environmentally friendly packaging: Employing recycled materials, eco-friendly packaging, and better package designs and methods aids businesses in cutting waste and expenses. Environmentally friendly logistics and transportation: combining orders and rerouting traffic are two strategies for cutting CO2 emissions that save energy (Awamleh et al., 2022).

2.2.4. Green Logistics (GL)

Green logistics is based on lowering energy consumption, emphasizing environmental concerns, and fully utilizing cutting-edge logistics technologies that have full integration with social and economic advantages to carry out logistics activities like shipping, storing, packaging, discharge, and processing (Liu & Ma, 2022).

Green logistics is the planning, managing, and execution of the logistics flow using contemporary logistics approaches with the intention of reducing environmental risks (Tan et al., 2020). With the move toward green logistics, the logistics sector is progressively stressing how crucial it is to include economic and environmental considerations into logistics (Jinru et al., 2022).

The idea of "green logistics" connects resources with goods, and products with customers, which is useful for completing the circular economy (Seroka & Ociepa, 2019).

The study of green logistics covers all aspects of managing green supply chains, including green transportation, distribution, and delivery of logistics that are favorable to the environment (Mohsin et al., 2022).

A framework for green logistics (GL) was developed by (McKinnon et al., 2016) to simulate the relationship between logistics-related operations and environmental factors. Along with shipping, it emphasizes the movement of products.

The management of green supply chains depends heavily on green logistics, which is a key element of the framework for logistics and environmental excellence. According to (Pathak et al., 2020), green logistics are evaluated as a sign of the green supply chain management (GSCM) component.

According to (Dzwigol et al., 2021) green logistics refers to any initiatives to assess and lessen the environmental effect of logistics operations. This covers all actions involving forward and backward flows of goods, data, and services between the site of production and the place of consumption. Creating a balance between economic and environmental efficiency, this is the aim of establishing sustainable business value.

Green logistics, also known as sustainable logistics, is a growing trend that focuses on reducing the environmental impact of intensive transportation. Companies must adopt a range of green logistics strategies to achieve a sustainable supply chain (Rakhmangulov et al., 2018).

2.3. Sustainable Performance

Sustainable performance management is the process carried out by managers to ensure that resources are obtained and used effectively and efficiently in order to reach the company's economic, social and environmental goals. With economic information and reporting on sustainability (Kamble et al., 2020).

The delivery of essential company operations while balancing financial and environmental goals maximizes value. This is known as sustainable performance (Naciti, 2019). Sustainability performance can be defined as the company's performance in all aspects and dimensions to support the sustainability of the company (Sudusinghe & Seuring, 2022).

Sustainable performance is the interaction between an organization's ability to conduct business and its (environmental, economic, and social) performance. It is the capacity of the organization to conduct business and to increase value for shareholders while taking into account its long-term economic, environmental, and social responsibilities (Disli et al., 2022).

Sustainable performance of an organization refers to its capacity to balance the demands and expectations of customers and other stakeholders over the long term, by organization staff awareness, by effective management, by learning and implementing necessary improvements, and by innovation (Hussain et al., 2018).

The idea of sustainable performance is demonstrated by the social responsibility that should be practiced and supported through socially responsible investments, with a specific organization aiming to respond to complex performance criteria, including the non-financial nature criteria related to environmental management and resolution of social problems (Alsayegh et al., 2020).

A company performs sustainably when it stays loyal to its mission and core principles throughout time, all the while managing the dynamic business environment with

initiative and agility. Leaders work with the organization's assets while also devoting time to proactively finding opportunities for improvement (Shahzad et al., 2020).

Sustainable performance has emerged as one of the most researched areas of management which can be confirmed from the increasing research studies day by day as well as the practices of companies that are also beginning to incorporate sustainability principles into their operations, while attempting to comply with sustainable operations across their supply chains all over the world. the world (Qorri & Kraslawski, 2018).

Sustainable performance is the harmonization of environmental and economic goals in providing basic business activities with the aim of maximizing value. A shared commitment to sustainability drives leadership, investment and operational expertise to deliver outstanding business performance to partners and communities. As a result of this commitment, the discipline and fundamentals necessary to balance capital needs and risk management are not overlooked. and growth (Hebaz et al., 2022).

2.4. Sustainable Performance Dimensions
2.4.1. Environmental performance (ENP)

Environmental performance objectively measures the effects of an organization's environmental policies. If the organization has set targets for its environmental footprint or an environmental management system, it is important to check whether these measures are having the desired effect. Environmental performance assessment uses criteria to measure the impact of these policies (Chavez et al., 2022).

Environmental performance is the relationship between an organization and the environment. This relationship includes: the environmental impacts of the resources consumed, the environmental impacts of the regulatory process, the environmental impacts of its products and services, product recovery and processing, and meeting the environmental requirements of the law (Awan et al., 2021). Sustainable environmental production is very economical as it reduces energy use, reduces processing time, reduces waste and useless materials that are harmful to the environment. that facilities may face (Ford & Despeisse, 2016). Environmental performance includes adding biodegradable elements to products, cutting waste and pollution at the source, eliminating ecologically damaging materials, and improving energy efficiency (Singh et al., 2019).

The term "Environmental Performance" describes the relationship between a nation's economic growth strategy and its ecological institutions, policies, and the production of ecological consequences (Naz et al., 2023). Environmental Performance is the end result of a manufacturer managing the aspects of a product that have an influence on the environment (Ren et al., 2022).

Environmental Performance refers to the amount of energy and greenhouse gas emissions produced as a result of energy use, water use, waste creation and management, and any other environmental effects resulting from the use or operation of the Premises or the Estate (Roh et al., 2022).

Environmental Performance refers to a product's or a product group's, a trader's, or a sector's performance in relation to the environmental elements or environmental

repercussions of that product, product group, or trader's or sector's operations (Harris et al., 2021).

Environmental Performance includes all or any of the following that result from using or operating the Premises and/or the building: (a) energy use; (b) water use and discharge; (c) waste production and management (including recycling); (d) production and/or emission of greenhouse gases; and (e) other negative environmental effects (Simmou et al., 2023).

2.4.2. Social performance (SP)

Social performance is the outcome of a company's engagement, endeavors, and commitments that may have an impact on stakeholders either directly or indirectly or on the caliber of its interactions with them. The degree to which the business upholds its obligations, engages in contacts with the community, and engages in activities that have a local impact as well as larger societal implications is particularly significant to corporate social performance. Mineral resource management, revenue and contract transparency, and engagement with partners across the value chain on social hazards are all important (Lizarelli et al., 2023).

The definition of social performance as "the effective translation of the organization's mission into practice in line with accepted social values" demonstrates how social responsibility has been incorporated and put into practice in organizations. In other words, social performance is bringing a company's social mission—regardless of what it may be—to life. Offering financial and/or non-financial services to more of the poor and excluded people - Improving the quality and relevance of services offered - Increasing revenue generated by clients' businesses - Increasing clients' sense of empowerment - Reducing and alleviating poverty are some of the social values that are most frequently promoted in productive firms. - Reducing an organization's negative effects on the community or environment (Lee et al., 2019).

Social performance is the efficiency with which a company accomplishes its declared social objectives and adds value for the target market (Qian et al., 2019). The focus of social performance management is on how an organization's social mission is implemented through its management systems, processes, and products (Pinheiro et al., 2021).

Incorporate social performance management Organizations are held responsible for achieving their goals; the social purpose is integrated into daily operations and management practices; and organizations are prepared to add value to the clients, workers, suppliers, or community that make up their target market (Wang et al., 2022).

The social dimension of performance can be measured by examining variables such as education, access to social services, health, well-being, social capital, and quality of life (Leong et al., 2020).

Social performance is the achievement of the goals of the social mission of the organization and its management requires an institutional process to translate these goals into action (Sony et al., 2020).

The term "social performance management" refers to the methods that businesses employ to accomplish their declared social goals and that put their customers at the

center of their operational and strategic decisions. The social performance of a service provider refers to how effectively it accomplishes its declared social goals and adds value for clients. good social performance management procedures increase the likelihood that a service provider will achieve good social performance (Odziemkowska & Henisz, 2021).

2.4.3. Economic performance (ECP)
Economic performance is the production of revenue for society's citizens without utilizing resources or capital, which has a substantial influence and stabilizes the economy. technology, emissions, waste, etc. to gather your own charges (Chelan et al., 2018).
The economic performance calculation is one of the accounting fields used to evaluate environmental and economic indicators and their role in sustainable growth and comprehensive sustainable improvement. The dimensions of economic performance range from sales, market share and operational efficiency (Jia et al., 2018).
Evaluating the economic performance of businesses and nations involves examining both short- and long-term outcomes, such as the time it takes for the economy to stabilize after a sudden and unanticipated event. Economists gauge economic performance using a wide range of economic indicators, including income, national expenditure, and output, as well as more comprehensive measures of human development, such as infant mortality rates and life expectancy (Hebaz et al., 2022).
The economic performance of a firm is a result of its ability to provide advantages for its owners through product innovation and resource management. People typically recognize it as a form of profit when discussing this kind of economic performance in the context of business (Lizarelli et al., 2023).
The economic aspect of performance is connected to both financial and productive performance. By concentrating on lowering processing costs (the cost of raw food and labor in food processing), metrics like profit, costs, labor, and ROI (return on investment) are regularly adopted to evaluate economic success. concentrating on cutting distribution costs (distribution costs, which include handling and shipping costs) Reduce transaction costs (expenses associated with engaging in the market, such as costs associated with research, negotiating, policing, and enforcement); Reduce the cost of energy use; Penalties for environmental incidents are lessened less expensive customer returns cheaper garbage treatment; Think about expanding your market share Emphasize earnings from recycling Emphasize the sale of "green" products (Khan et al., 2023).

3.Study methodology
3.1 Introduction
This part is devoted to clarifying the methods and procedures that will be followed in this study, in terms of the type of study, its nature, and the strategy followed in it. The study population, the sample, and how to choose it will also be clarified, and an explanation of the study tool, the extent of its stability, and what statistical methods

will be used in it. Processing data and drawing conclusions. This is explained in detail as follows:

3.2 Type of study

The descriptive analytical method was followed to complete this study, this study is an explanatory study in terms of purpose, as it will work to discover direct and indirect relationships between variables and link cause and effect, as this study will be applied in nature (AL Najjar et al., 2020, 56- 53). In terms of mechanism and procedures, this study is considered quantitative (Saunders et al., 2019, 145), and it is also considered deductive in nature due to its reliance on administrative theories and previous studies.

3.3 Study strategies

This study is based on the use of a sampling strategy, where an equal, stratified random sample representative of the study population will be selected to determine the impact of the green supply chain on sustainable performance. This strategy is used to find out the variables that cause the phenomenon to exist for the purpose of arriving at the effect and result and studying the facts related to the nature of the phenomenon, so questionnaires are distributed on the employees of the Top and middle administrative leadership in the Manaseer Group.

3.4 Study population and sample

The study population was represented by all managers working in the Top administrative leadership (general director, deputy director, department managers) and middle (department heads) of each company in the Manaseer group of companies, numbering (297), as the group consists of (21) companies.

An equal stratified random sample was relied upon to represent the population, amounting to (297) managers from management (senior and middle). The equal stratified random sample was relied upon because the target group is a supervisory class that is equal in many characteristics in all companies affiliated with Al Manaseer Group. The adoption of stratified randomness is since each company is treated as a class. The aim of this is to ensure that all companies in the group are represented and included in the sample. Based on this, the representative sample of the population (297) is (165) of the managers in the administrative leadership (Top and Middle) in Al Manaseer group, based on Al-Najjar et al. (2020, 109), where a questionnaire was distributed to members of the study sample.

3.5 Unit of analysis

The analysis and sampling unit for this study consists of managers in the administrative leadership (Top and Middle) in AL Manaseer Group, as they possess all the information necessary to cover the aspects of the study.

Three stages of data analysis were conducted. Mostly, the answers were examined, and incomplete questionnaires were removed if they weren't determined to have answered the questions the study was trying to answer. After that, the surveys were coded and put into an SPSS program to look for any missing data. The suggested hypotheses were subsequently modelled using PLS-SEM, which was chosen due to its predictive capability and capacity to handle a variety of models (Peng & Lai, 2012). The explanatory research design employed in the investigation had an additional

impact on the utilization of PLS-SEM. The use of PLS-SEM was more appropriate since it can handle reflective and formative models, which is why the study aimed to explain rather than just describe (Hair et al., 2010).

3.6 Methods of collecting data and information

This study will adopt the quantitative (descriptive and analytical) approach, which is appropriate for the study model, by collecting the necessary data. The study will focus on two sources to collect the necessary data and information, which are:

First: Secondary sources

The information necessary for the study will be collected by referring to secondary sources, which are relevant Arab and foreign references, periodicals, reports, and research that dealt with the variables of the study and its dimensions. This data was documented based on the (American Psychological Association's documentation method. [APA], 2020).

Second: Primary sources

In collecting primary data, the questionnaire will be relied upon as a basic tool for the study in its analytical aspects, which will be developed from collecting primary data from the study sample in order to measure the study variables (independent and dependent) in their dimensions.

3.7 Study tool

This study will rely on a questionnaire to collect data from managers of top and middle administrative leaders, the study sample. The questionnaire will consist of three parts, Part one: This part will cover the personal and functional characteristics of the managers in the study sample. Part two: This part will consist of items that measure the green supply chain (the independent variable). Part three: This part will consist of items that measure sustainable performance (the dependent variable).

4. Findings

A model was developed to examine the hypotheses formulated. The model considered the four constructs of green supply chain practices as antecedents to sustainable performance. The model's quality was assessed using the quality criteria prescribed for reflective models. The Cronbach alpha, discriminant validity, average variance extracted (AVE), and the factor loadings for each of the constructs were assessed.

Table 1
Quality Criteria.

Constructs	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)	R^2	Adjusted R^2
Green Logistics	0.642	0.651	0.847	0.735		
Economic Performance	0.727	0.733	0.879	0.785	0.690	0.684
Green Manufacturing	0.684	0.753	0.859	0.754		
Environmental Performance	0.848	0.863	0.908	0.767	0.726	0.720
Green distribution	0.798	0.808	0.881	0.711		
Social Performance	0.868	0.870	0.919	0.792	0.599	0.591
Green purchase	0.749	0.641	0.832	0.624		

Table 1 presents the results of the quality criteria used in assessing the model. Cronbach alpha figures indicated that of all the variables under consideration, Green logistics and Green manufacturing recorded figures below (0.7) but were within the threshold of (0.642) and (0.684) respectively. Composite reliability for all the constructs was above (0.7) The average Variance Extracted for all constructs was also above (0.5) The quality assessment indicated that the model was deemed appropriate for the study.

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Table 2
Discriminant validity (Fornell-Larcker Criterion).

Constructs	Green Logistics	Economic Performance	Green Manufacturing	Environmental Performance	Green distribution	Social Performance	Green purchase
Green Logistics	0.858						
Economic Performance	0.735	0.886					
Green Manufacturing	0.704	0.780	0.868				
Environmental Performance	0.752	0.795	0.732	0.876			
Green distribution	0.734	0.666	0.729	0.804	0.843		
Social Performance	0.645	0.591	0.675	0.820	0.736	0.890	
Green purchase	-0.013	0.219	0.223	0.174	0.154	0.216	0.790

Table 2 presents the discriminant validity using the Fonell-Larcker Criterion. The results specified the existence of discriminant validity between all the constructs. The quality criteria and discriminant valid- ity results asserted that the model was appropriate for the analysis.

Table 3
Path Coefficient.

Constructs	Original sample (O)	Sample Mean (M)	Std.	T statistics	P values
GL - > ECP	0.398	0.392	0.073	5.446	0.000
GL - > ENP	0.303	0.304	0.063	4.822	0.000
GL - > SP	0.180	0.185	0.071	2.536	0.012
GM - > ECP	0.475	0.460	0.063	7.218	0.000
GM - > ENP	0.186	0.181	0.059	3.160	0.002
GL - > SP	0.207	0.205	0.070	2.968	0.003

GD - > ECP	0.023	0.024	0.057	0.399	0.690
GD - > ENP	0.435	0.439	0.062	6.996	0.000
GD - > SP	0.437	0.433	0.078	5.624	0.000
GP - > ECP	0.119	0.119	0.052	2.267	0.024
GP - > ENP	0.070	0.074	0.057	1.224	0.221
GP - > SP	0.105	0.110	0.052	2.031	0.043

Table 3 presents the bootstrapping results. Results indicate that Green logistics significantly predicts the economic, environmental, and social performance in AL Manaseer Group (0.000, 0.000, and 0.012 respectively) which affirms $H0_{1-4}$.

Green Manufacturing also recorded a significant effect on economic, environmental, and social performance which also confirms $H0_{1-2}$. However, Green Distribution recorded a significant effect on environmental and social performance. It, however, was not significant in predicting economic performance $H0_{1-3}$ cannot be accepted as a whole. Similarly, Green purchase was significant in predicting economic and social performance but was not significant in predicting environmental performance. $H0_{1-1}$ cannot be accepted as a whole. To affirm the significance of the predictive effect of green supply chain practices on sustainable performance, the effect size, as well as the predictive relevance of the model, was ascertained.

Table 4
Effect size

Constructs	Economic Performance	Environmental Performance	Social Performance
Green Logistics	0.190	0.124	0.030
Green Manufacturing	0.257	0.048	0.041
Green distribution	0.001	0.253	0.175
Green purchase	0.040	0.016	0.024

The effect size as shown in Table 4 indicates that Green Logistics record medium effect size for economic and environmental performance (0.190 and 0.124) and a weak effect size for social performance (0.030) Green Manufacturing also recorded a medium effect size of 0.257 for economic performance and weak effect size for environmental and social performance (0.048 and 0.041) in predicting economic performance. Green distribution recorded a medium effect size for environmental and social performance (0.253 and 0.175). Green purchase also recorded weak effect sizes for all three sustainable performance indicators (0.040, 0.016, and 0.024). This goes to confirm that Green purchase as a green supply chain practice is not a predictor of all three measures of sustainable performance as it recorded weak effect sizes in all three.

5. Conclusions and Recommendations
This study provided empirical evidence on which of the green supply chain practices can influence the three sustainable performance indicators. The government and local

communities are putting increasing pressure on production businesses, therefore the study was able to determine which green supply chain practises affected the manufacturing companies sustainable performance. In this regard, production companies, especially Al Manaseer Group, can make significant contributions to the economy and thus reduce the pressures on members of society and governments. the study confirms existing knowledge on the effect of green supply chain practices on sustainable performance and contributes to the empirical knowledge on the association between green supply chain practices and sustainable performance.

The study findings contribute to existing knowledge and indicate that Green Logistics, Green Manufacturing can explain all three measures of sustainable performance. However, Green distribution contributes to environmental and social performance and not economic performance. On the other hand, the use of Green purchase contributes to economic and social performance and not environmental performance.

This study aimed to examine the question of whether or not sustainable performance can be attained entirely via the use of green supply chain practises. According to the report, companies can achieve sustainable performance overall if they have green manufacturing and green logistics practises. but only when businesses practise green distribution can they attain social and environmental performance. Similarly, businesses that employ green purchasing may achieve social and economic performance. As a result, the results contribute to the body of knowledge about the significance of implementing a green supply chain for sustainable improvement.

Since the study focused on only four green supply chain practices, future studies could also focus on how the presence of institutions either motivates or discourages manufacturing companies from practising green supply chain.

The findings of the study also suggest that manufacturing companies should incorporate environmental performance contracts when developing company's strategies. Further, efforts should be put in place to address economic performance when promoting green distribution practices, this will ensure that all aspects of sustainable performance are addressed in the long run.

manufacturing companies seeking to promote all three measures of sustainable performance equally must have green logistics and green manufacturing, these practices maximize the economic, social, and environmental benefits of manufacturing companies.

However, manufacturing companies that seek to enhance environmental and social performance should rather promote green distribution. Further, when companies use green purchase, it can only enhance the social and economic benefits. This will help reduce the fee for waste treatment and discharge, fines and consumption of harmful materials related to production operations. Manufacturing companies should also ensure that they comply with environmental standards specified by ISO 45001. When these measures are put in place, manufacturing companies will be able to reduce possible future risks of lawsuits, ban and reputation.

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