

# ***The Impact of Green Supply Chain Management on Long-term Effectiveness of Enterprises***

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**Abstract:** Due to the expansion of the economy and society, higher standards have been proposed for the growth of enterprises. More and more attention has been paid to the sustainable development of enterprises. The shortage of resources and environmental pollution are another challenge for manufacturing enterprises, requiring businesses to give environmental issues more consideration modern management practices such as green supply chain management take the entire supply chain into account when making decisions. It incorporates suppliers, manufactures, sellers and users and is based on the principle of green manufacturing and supply chain management technologies. Its goal is to reduce environmental impact of the entire process of purchasing, processing, packing, storing, moving, using, and discarding products. This article begins with the meaning of supply chain management, examines the fundamental components of a green supply chain, elaborates on the implementation of a green supply chain, discusses the challenges a green supply chain faces in China, and then proposes green supply chain management strategies.

**Keyword:** supply chain sustainability, sustainable development, green innovation

## **1. Introduction**

The ongoing collaboration between businesses in China has basically been established, the pace of "horizontal integration" is accelerating, and the foundation for implementing supply chain management has been preliminary established [1]. The survey shows that most enterprises do not have a supply chain sustainability department. The supply chain department's duties include limited to the management of logistics. It lacks the ability to coordinate logistics, information flow and capital flow in a unified way, which is not really a supply chain management. This essay investigates the current issues with green supply chain management in China and focuses on the effects of such management on the sustainable performance of businesses. At present, China's overall environmental protection technology level is far behind that of developed countries, and the ability of enterprises to bear environmental protection costs is limited. Green supply chain management is still in its infancy in China, and there is still a long way to go. The idea for this study came from reading a lot of pertinent literature. This research makes an effort to investigate the relationship between supply chain integration and quality management practice and how it influences business performance based on the available literature.

## **2. Green Supply Chain Management's Meaning**

### **2.1. Definition**

Environmentally conscious supply chain management, sometimes referred to as green supply chain management, prioritizes environmental protection, considers environmental issues at all points in the supply chain, and encourages the coequal growth of the economy and the environment. In the context of sustainable development, a green supply chain must adhere to the notion of green development, use national standards, laws, and policies as a guide, and drive and coordinate core businesses' optimization of upstream and downstream supply relationships. It also must create a green supply chain management system. Using cutting-edge technology to thoroughly plan every link in the green supply chain, plan, organize, coordinate, and control the resource flow process, and achieve the balance of environmental, social, and economic considerations is known as "green supply chain management."

### **2.2. Basic Links**

#### **2.2.1 Green Product Design.**

The foundation of green design is to reduce, recycle, and recycle ("3R"), which calls for making goods and parts that can be easily categorized, recycled, or reused in addition to minimizing material and energy consumption and emissions of harmful substances [2].

#### **2.2.2 Green Procurement.**

Green procurement is the practice of businesses promoting the idea of going green and low-carbon in their procurement activities, fully taking into account environmental protection, resource conservation, safety and health, recycling low-carbon and recycling promotion, and giving priority to the purchase and use of raw materials that are low in energy, water, and other resources, as well as other products and services that are friendly to the environment.

#### **2.2.3 Green Manufacturing.**

Green manufacturing links are a set of connections between various processes, including product design, processing, packaging, and transportation. It mostly entails purchasing green materials, designing green products, manufacturing them, selling them, packaging them, and using them.

#### **2.2.4 Green Recycling.**

Green recycling is the practice of recycling goods and components after they have been scrapped in order to increase resource efficiency and lessen environmental impact.

#### **2.2.5 Green Logistics.**

Green logistics aims to reduce resource consumption and environmental pollution, integrate the concepts of sustainable development and ecological economy into the development of logistics management, To incorporate appropriate green technology into logistics processes including transportation, packaging, storage, loading, and unloading in order to offer consumers environmentally friendly goods and services and to achieve the sustainable growth of the logistics sector.

### **3. Advantages of Green Supply Chain Management**

#### **3.1. Improvement of Environment and Efficient Allocation of Resources**

The rapid economic growth at the cost of consuming a lot of resources and polluting the environment cannot be sustained for a long time, and new methods must be adopted to change the development model. Strengthening green supply chain management will therefore have a long-term positive impact on our nation's environment as well as on the effective distribution of social resources. China must choose between preserving ecological harmony and pursuing sustainable economic growth.

#### **3.2. Enterprises Acquire and Maintain Competitive Advantages**

People are becoming more and more aware of the need to safeguard the environment as a result of the widespread promotion of the concept of sustainable development. Green supply chain management has practically increased customer preference for products, boosting firm competitiveness. Facing the increasingly serious environmental problems, enterprises must actively solve the environmental problems in economic activities, establish a green supply chain system, and obtain a comparative competitive advantage if they want to gain competitive advantage.

#### **3.3. Achieving Sustainable Development**

Traditional supply chain management poses a significant obstacle to socially sustainable development because it will inevitably result in resource consumption that will, to varying degrees, pollute the environment during supply chain links like procurement, processing, packaging, transportation, and storage. Unlike the typical supply chain management, the green supply chain management is unique. Focusing on how resources are used throughout the process and how that affects the environment, it strives to minimize resource consumption and environmental pollution during supply chain operations. It also actively promotes the green idea throughout its operations, encouraging suppliers to increase the supply chain's environmental efficiency.

#### **3.4. Create a Sustainable Brand for the Company.**

Green supply chain management can increase resource efficiency, cut down on resource usage, and lower production costs. Businesses that use green supply chain management can build a reputation for producing products that are trustworthy and safe, attach importance to social responsibility, more easily gain the recognition and trust of dealers and consumers, help enterprises improve their green image and open up market awareness [3]. It is more beneficial for enterprises to establish and maintain competitive advantages and achieve sustainable development.

### **4. Issues with the Current Green Supply Chain Management System**

#### **4.1. Conflicts of Interest and Instability in the Supply Chain Partnership**

The agreement connection of sharing information, sharing risks, and creating profits within a specific time frame can be characterized as the cooperative partnership among the supply chain member businesses. Cooperation and trust serve as the foundation for establishing this partnership. Yet, the issue of dividing the cost of implementing the green supply chain is prone to dispute when the supply chain forms a coordination contract that maximizes the total profit of the supply chain. Enterprises all start from the maximization of their own interests, and any party is willing to only enjoy the benefits of implementing the green supply chain without bearing its operating costs.

## **4.2. Green Technology Encounters Bottlenecks**

Whether it is green design, supply, production, marketing, or recycling, science and technology must strongly support it. While green supply chains are still a relatively new concept in China, awareness of green management is still lagging and there is a dearth of skills in this field. Many businesses are unable to provide specific guidelines for systematic green supply chain management. Even though they may have the intention of creating a green supply chain, the effect is not immediately apparent because of technical limitations, high implementation costs, and complexity. Businesses are unable to swiftly and properly gauge the financial advantages and technological value that a green supply chain offers.

## **4.3. The Logistics System Is Not Sound and the Management Is Not Standardized**

Logistics is a crucial component of all supply chains, whether they are conventional or green. Without logistics, it is hard to purchase and sell smoothly, and it is also impossible to smooth manufacturing and financial administration. Governments and businesses in both developed and developing nations should now work actively to strengthen the development of logistics systems to offer the necessary tools and services for the creation of sustainable supply chains.

## **4.4. Ambiguous Understanding and Concept of Enterprise Leaders**

In terms of logistics, supply chain, green supply chain and other concepts, there is still a big gap between China and the western developed countries. On the one hand, the idea of governance and leadership has not entirely changed, the concept of a green supply chain has not yet gained widespread acceptance, and it is challenging for government decision-making departments to design a comprehensive strategy for managing the green supply chain. On the other side, although some organizations have created development goals for their internal green supply chain, they lack vision for the development of green supply chain management.

## **4.5. Incomplete Green Laws and Regulations**

China has promulgated a variety of laws and regulations, but due to the lack of effective supervision, these green standards have not been popularized and applied, and the punishment is not enough to fundamentally arouse the vigilance of enterprises. Many enterprises prefer to impose fines rather than implement green production in practice [4]. Although our government has released numerous rules to bolster support for green supply chain management businesses, these policies do not have broad applicability and it is challenging to stoke business excitement for green supply chain management.

# **5. Green Supply Chain Management Strategies**

## **5.1. Build Strategic Alliances Amongst Supply-chain Companies**

A network of suppliers, manufacturers, distributors, and customers that spans the fields of production, sales, transportation, consumption, investment, and other activities is known as the supply chain. Strengthen the cooperation between enterprises in the supply chain, learn from each other, and work together to achieve the coordinated management of all organizations in the supply chain. In addition, building a reasonable incentive mechanism and establishing environment-friendly strategic partnership among different stakeholders are important guarantees for the successful implementation of green supply chain management.

## **5.2. Boost Internal Control at Businesses along the Supply Chain**

Since each supply chain firm has a unique scenario, so too does the management style that is used. To ensure the successful implementation of green supply chain management and the reform, the user enterprise should begin with the implementation of each enterprise before making a decision to implement it [5].

## **5.3. Improve the Law Enforcement of Government Departments in Environmental Protection**

Government law enforcement departments should widely and deeply publicize the importance of environmental protection, not only to enterprises, but also to consumers. Businesses need to plan for long-term growth, get ready to integrate green supply chain management, and deal with an ever-increasing level of market rivalry.

## **5.4. Typically, Managers Take Part to Promote Green Supply Chain Management**

The successful adoption of green supply chain management is largely dependent on the involvement and cooperation of managers. Enterprises can create an environmental management system that suits their unique business needs with the assistance of senior management's dedication to green supply chain management. The successful implementation of green supply chain management is facilitated by top management's commitment to and support of environmentally friendly environmental protection measures. The ability of middle-level managers to successfully coordinate pertinent environmental protection efforts across departments reflects their supporting role in green supply chain management, thus improving the overall environmental management awareness of enterprises. Therefore, the commitment of senior managers and the support of middle managers can improve the environmental protection attitude and green corporate culture of enterprises.

## **5.5. Implement Green Procurement**

The long-term benefits of green procurement are far greater than the current costs. To implement green procurement, we should first start with suppliers, choose suppliers that focus on environmental protection, and reach a stable cooperative relationship with green suppliers [6]. Secondly, we should actively sign a green agreement with the local environmental protection bureau, actively accept external assessment and testing, timely disclose the environmental information of enterprises, and voluntarily fulfill social obligations.

## **5.6. Strengthen Collaboration with Consumers**

Customers are a vital factor in ensuring the survival and growth of businesses. The most crucial material for businesses should be the requirements and views of consumers [7]. With the increasing concern of consumers on environmental issues, enterprises should also be committed to developing green and clean production models.

## **6. Conclusion**

In other words, implementing green supply chain management can help better satiate customer demand for green products, which is on the rise. Enhance the core competitiveness of the supply chain overall, enterprise customer happiness in the supply chain, enterprise product green standards, and finally enterprise core competitiveness. Businesses should take a long-term perspective, plan for the implementation of green supply chain management, aggressively implement and promote green

supply chain management from all angles, and prepare to compete in an increasingly fierce market. Chinese enterprises are now using green supply chain management as a new management strategy to boost their economic and environmental performance and all-around competitiveness. According to the study above, implementing green supply chain management will have long-term positive effects on the economy and society. This paper lacks the support of certain mathematical theories. In the future, it will focus more on how to solve the deficiencies of China's green supply chain.

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