

# Green supply chain management literature reviews examples

[Business](#), [Management](#)



**Introduction:**

Moreover, the process of Green Supply may as well be considered as the practice of monitoring and enhancing environmental performance alongside the supply chain. Incorporating environmental awareness into the supply chain management, entails product design, viable raw-material sourcing and selection, efficient manufacturing processes, distribution of the final produce to the consumer as well as post-life product management, particularly after product use (Emmett & Sood, 2010).

**Responsible production and consumption:**

Greening the Supply Chain and Globalization:

In the modern market domains, globalization improves the opportunities for buyers in products' acquisition. As buyers elevate their focus on environmental improvements, this in turn enhances the supplier environmental performance. Firms and organizations that depict their honest regard for the environmental improvement, as both a corporate and social objective, and not as an issue cost, enjoys public recognition and loyalty across the globe. Consequently, their outward corporate image is illuminated and becomes distinguished (Sarkis, 2006).

It is important for the manufacturers to implement their performance in line with their raw-material suppliers, for the purposes of producing environment friendly produce. By employing their purchasing power, the manufacturing industries can establish environmental criteria for their raw-materials and component, which must be conveyed to their upstream suppliers within the

supply chain. Such a procedure would ultimately yield the greening of the supply chain (Fernie & Sparks, 2009).

**In brief, the green supply chain supply management (GSCM) can be summed up in the below equation.**

GSCM = Green purchasing + Green manufacturing and materials management + Green Distribution or marketing + Reverse logistics.

### **Green Supply Chain Management Practices in Gulf Cooperation Council:**

The Gulf Co-operation Council (GCC) is a regional and inter-governmental affiliation, both political and economic, comprising of the Arab States within the Persian Gulf. The member states include: Kuwait, Qatar, Bahrain, Oman, Saudi Arabia, and the United Arab Emirates. Also, there are prospects to include Jordan, Morocco, and Yemen in the near future (Gulf Cooperation Council, 2001).

Among its economic and political objectives, the union has formulated similar regulations evolving around the quality and integrity of their industrial raw-materials and products. It is mandatory that each member state must supply products that are of accepted quality, which must be thoroughly analyzed and tested through a team of experts, and or scientists. These scientists are teamed up from the member countries, and they serve within the common research centers dispersed within the various member states (Ramazani & Kechichian, 2008).

In the performance of the supply chain, the members have abolished all barriers and impediments, particularly on any opportunistic elements. This

implies that any country can supply and acquire any material or products at ease, without any impediments such as the quota system. In return, this has eased the cross-country investment and services trade. Co-operation among the stakeholders, especially between the environmental groups and investors, has been enhanced through a careful selection of the green suppliers (Krueger et al., 2009).

The green suppliers are meant to adhere to high levels of awareness to environmental integrity, which is effected through high level recycling and reusing of nearly every industrial component and post-products. This aspect is very important, especially in the steel and iron sector, food and agricultural divisions, chemical and petroleum industries, and in the automotive productions.

These member countries consider environmental sustainability as the most important aspect of sustainable development. Each of these member states government has avowed to espouse the concept of sustainable development across the region. They meaningfully uphold that the future generations relies on the present environmental resource pool for their future sustenance, and therefore all due regard must be accorded to environmental knowledge and sensitivity (Fasano-Filho & Schaechter, 2003).

Despite the lack of an elaborate leadership and support, especially among some of the member states, which is from lack of knowledge and expertise, the Gulf Co-operation Council comprises of the fastest growing economies in the world. For example, the Abu Dhabi Investment Authority retains over USD 900 billion in assets, which has been accumulated through long-term

sustainability of highly effective supply chain management pathways (Hudson & Kirk, 2014).

### **Green Supply Chain Supply Management in Kuwait:**

In nearly all its operations and management procedures, including industrial production and product distribution, such project management and optimization processes like linear programming are utilized. These processes can all be traced back to the military operations and government-centered activities (Hill, 2014). Over the years Kuwait has relied on the concept of Supply Chain Orientation (SCO).

The concept has been in use up to the modern day, in the management of the supply chain to harness products' value while upholding commitment to supervising the complex dimensions of the inter-industrial associations, intrinsic to the supply chain (Pagell & Wu, 2009).

The Supply Chain Orientation (SCO) process is strategic and tactical, allowing for the incorporation and synchronization of approaches and tactical processes within the members of the supply chain. The SCO philosophy is well-thought-out as a cultural, tactical and holistic model (Holcomb, 2011).

Trust is built on credibility and benevolence. Credibility implies that a certain firm can be trusted on delivering its promises and execute its stated obligations. Benevolence implies that the two firms trust in each other's welfare, and that they would work towards the common good, avoiding any adverse activities that may harm either of the parties. Also, commitment to the supply chain means that members ought to supply the requested materials and components as according to the stipulated quality guidelines,

and to the set standards without compromise (Bendul, 2014).

It is worth-noting, that the Kuwait government has put measures in maintaining the integrity of the environment, through thorough screening and detoxification of all industrial materials in all ports of entry and exit, particularly to any component that can severely harm the environment or interfere with its quality. Therefore, the attribute of green supply s inherent to the Supply Chain Orientation (Song, 2014).

### **Green Supply Chain Management Practices in Gulf Cooperation Council (GCC):**

Among the GCC countries, the concept of Green Supply Chain Management comprises of the following practices:

Vehicle and machinery recycling:

The process involves dismantling of dilapidated machinery, equipment, and automobiles for spare parts and raw steel, particularly after exhausting their useful life. Car crushers are used in reducing the size of the run-down vehicle for delivery into a steel mill. The vehicles are then shredded and the recovered metal is utilized in other construction purposes (Duffy, 2014).

The recycling generates over 75 percent of the required raw-materials, especially the polymers and residual metals, which are essential in supplying the steel demands across the GCC countries. Over 14 million tons of steel are generated annually through vehicle recycling. Most importantly, the recycling process saves energy and natural resources (Xie, 2014).

### **Ferrous metal recycling:**

For more than 150 years, the GCC countries have actively recycled ferrous metals- iron and its alloys- and hence generating steel. Cans, appliances, and construction equipment contribute to the 97 percent of the recycled materials. From this venture, the countries are able to supply most of their industries with cost-effective new form of steel (Duffy, 2014).

It has been considered cheaper to recycle steel than to mine iron-ore. As a result, the recycling cuts on energy and power requirements by up to 75 percent, an amount that is projected to supply power to over 18 million residential homes, which would have otherwise been lost (O'hara, 2014).

### **Use of biodegradables:**

The products are achieved through the use of renewable raw-materials and components from petrochemicals with biodegradable additives. This has been significant in keeping the environment safe from contamination, and also in recovering most of the recyclable wastes among the recycling companies (Yam, 2012).

### **Conclusion:**

Within the past decade, the business domains have moved away from the conventional supply chain processes, which purposely focused on refining efficiency and alleviating the overhead costs. The new trend is manifested in the concept of green supply chain, which is rooted in expanding businesses for extra revenue while improving the environmental awareness (Morana, 2013).

In closing, it is important that the concept of green supply chain must be

aligned to the business objectives. For example, if the business aspires to bring down its operational costs by up to 25 percent, it must hence strive in bringing down its consumption levels and budget first. This factor could be facilitated through the utilization of more energy efficient energy sources, or even adoption of efficient and greener equipment (O'hara, 2014).

## **References:**

Bendul, J. (2014). Integration of combined transport into supply chain concepts: Simulation- based potential analysis and practical guidance. Wiesbaden: Springer Gabler.

Duffy, J. E. (2014). Modern automotive technology. Tinley Park, IL: The Goodheart-Willcox Company, Inc.

Emmett, S., & Sood, V. (2010). Green supply chains: An action manifesto. Chichester, West Sussex, U. K: Wiley.

Fasano-Filho, U., & Schaechter, A. (2003). Monetary union among member countries of the Gulf Cooperation Council. Washington DC: International Monetary Fund.

Fernie, J., & Sparks, L. (2009). Logistics & retail management: Emerging issues and new challenges in the retail supply chain. London: Kogan Page Ltd.

Gulf Cooperation Council, & United Nations. (2001). Economic diversification in the oil-producing countries: The case of the Gulf Cooperation Council economies. New York: United Nations.

Hill, C. W. L. (2014). International business: Competing in the global marketplace. New York, NY: McGraw Hill Education.



Holcomb, M. (January 01, 2011). Challenges and Opportunities in Global Supply Chain Integration.

Hudson, M., & Kirk, M. (2014). Gulf politics and economics in a changing world. Hackensack, NJ: World Scientific.

Krueger, R. C., Kamar, B., Carlotti, J.-E., & International Monetary Fund. (2009). Establishing conversion values for new currency unions: Method and application to the planned Gulf Cooperation Council (GCC) currency union. Washington, D. C.: International Monetary Fund

Lengnick-Hall, M. L., Lengnick-Hall, C. A., & Rigsbee, C. M. (2013). Strategic human resource management and supply chain orientation. *Human Resource Management Review*, 23, 4, 366-377.

Morana, J. (2013). *Sustainable Supply Chain Management*. Wiley-ISTE.

O'Hara, K. D. (2014). *Earth resources and environmental impact*. Hoboken, NJ Wiley.

Pagell, M. & Wu, Z. (2009), " Building a More Complete Theory of Sustainable Supply Chain Management Using Case Studies of 10 Exemplars," *Journal of Supply Chain Management*, 45 (2), 37-56.

Preuss, L. (2005). *The green multiplier: A study of environmental protection and the supply chain*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

Ramazani, R. K., & Kechichian, J. A. (2008). *The Gulf Cooperation Council: Record and analysis*. Charlottesville: University Press of Virginia.

Sanders, N. R. (2012). *Supply chain management: A global perspective*. Hoboken, NJ: John Wiley & Sons.

Sarkis, J. (2006). *Greening the supply chain*. London: Springer.

Sarkis, J. (2014). Green supply chain management. New York, N. Y: ASME Press; New York, N. Y: Momentum Press.

Song, H. (2012). Service-oriented supply chain operations. Singapore: Cengage Learning Asia.

Tolinski, M. (2012). Plastics and sustainability: Towards a peaceful coexistence between bio-based and fossil fuel-based plastics. Hoboken, N. J: John Wiley & Sons.

Worrell, E., & Reuter, M. A. (2014). Handbook of recycling: State-of-the-art for practitioners, analysts, and scientists. Waltham, Mass: Elsevier.

Xie, L. (2014). Advanced Engineering and Technology. Boca Raton: CRC Press.

Yam, K. L. (2012). Emerging food packaging technologies: Principles and practice. Oxford: Woodhead Publishing.