### A Review on Green Supply Chain Management

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# ABSTRACT

Green Supply Chain Management (GSCM) is an environmental concept that integrates environmental factors to supply chain management. The purpose of this study is to review the latest features of GSCM and to develop a new directional area for this growing topic for this growing topic. Complete reviews are used to compile content and additional research. The focus of the review is on the development of GSCM in India, and includes all applicant researchers environmental and social feasibility in SCM and operations. It points out the lack of courses to investigate the adoption, implementation and integration of GSCM processes explicitly in developing countries such as India. This paper focuses on secondary data which was available for analysis and review.

*Keywords:* Green Supply Chain Management; GSCM; Environment; Close-Loop Supply Chain; Reverse Logistics; Reverse Supply Chain; Sustainable Supply Chain.

#### **1.0 Introduction**

Supply chain covers all of those activities associated with transporting goods from the raw material categories to the end user, proponents of the issued business process that dramatic increase in productivity can only occur in controlling relationships, knowledge, and the flow of material across all business boundaries. In other words, SCM are managers who integrate the practical movement of goods and related information, from purchasing to final use, customer enrichment, and economic value.

Carbon emissions are considered one of the key factors when it comes to making economic growth sustainable. In this framework, waste and emission from the supply chain have become major sources of major environmental problems. The GSCM exist as one of the latest ecosystems. Itnot only helps to improve the efficiency of the organization but also profits. Therefore, there is a huge scope in developing countries like India to embrace GSCM processes and organizational intelligence.

Through improvements in environmental efficacy, GSCM may become a source of competitive advantage for organizations. Enterprises may embrace the most environmentally friendly practises and set a model for non-green organisations to follow. While the pressure on value for money, bottom line, risk, delivery times, and flexibility is not going away. Environmental sensitivity has become a critical component of company's functioning in order to achieve its objectives.

### 1.1 Green Supply Chain Management (GSCM)

Patrick Penfield of the Whiteman School of Management very fittingly defines Green Supply Chain Management as "The process of using environmentally friendly inputs and transforming these inputs into outputs that can be reclaimed and re-used at the end of their life cycle thus, creating a sustainable supply chain".

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Organisations around the world continue to use hazardous chemicals, wasteful packaging, and transportation system that emit greenhouse gases that to add global warming. However, from the acquisition and production of building materials to the packaging, management and distribution, all stages of the supply chain offer opportunities to reduce waste and land pollution.

Here recycling and effective and efficient use of resources can essentially help in plummeting pollution. The companies should take note of the fact that GSCM actions can not only improve their performance levels but also help in safeguarding the environment.

# **1.2 Benefits of GSCM**

The effects of GSCM extends to all area, both tangibly and intangibly. SCM roles, including environmental and societal ones, could be endorsed by GSCM traits which in turn could be categorised as, material, immaterial, and emotional. From the materialistic standpoint, GSCM would help lower environmental load on environment, in lowering cost for supplier, in lowering the cost for the producer, in lowering the cost of ownership for the client, and in declining consumption of resources for society. From the immaterialist standpoint, GSCM would be cooperative in overcoming prejudice and scepticism for the environment, in declining rejects for the supplier, in an easier state of manufacturing for the procedure, in creating a sustainable situation and cheerful atmosphere for the customer, and in satisfying for societal advancement.

Lastly, from an emotional standpoint, GSCM would help inspire the stakeholder towards the environment, in improving the image in suppliers' and producers' minds, assisting clients in feeling good about themselves and their quality of life, as well as putting industry on the right road for social good (Sorraya and Edie, 2008)

# 1.3 GSCM and CSR

GSCM is a recent initiative by firms, especially small and medium business, to strengthen supply chain management capabilities (Singh,2013). His would allow business to acquire the trust of all stakeholders, including customers, employees, shareholders, and entire communities.

Furthermore, organisations have been urged to take responsibilities for teaching their executives to favour ecologically friendly goods and services. Following the above-mentioned devoted concerns would be difficult for prospective organisations and long-standing huge firms, but doing so would be a positive step in correct direction from three perspectives: reputation capital, eco-social perspective, and rights-based perspective (Ananda,2009).

The socio-environmental logic's stability and sustainability pave the way for the market's long-term viability. New generation firms and new-economy entrepreneurs are playing a pivotal role in putting this kind of thinking into reality, having instilled in them the value of being socially responsible. Such corporate endeavours would eventually lead to a reduction in poverty, which is primary cause of political instability.

As a result, to prevent a condition of political uncertainty that is detrimental to business, firms should implement policies that emphasise on "eco-social" approach (Ananda, 2009). From an eco-social standpoint, corporate social responsibility (CSR) can be considered as both a value and a strategy for ensuring the business' long-term viability.

GSCM = Green purchasing + Green manufacturing/ material management+ Green Distribution/ marketing + Reverse logistics



Figure 1: Phases of Green Supply Chain Management

Source: Self-understanding of topic

#### 2.0 Literature Review

Until now, there have been few research on sustainable supply chain management, often known as GSCM. Some researchers have aimed to explore the topic.

[1] Shang et al. (2010) researched environmental engagement, green marketing, stock and suppliers, eco-designing, green production, packaging and other aspects of GSCM. The findings suggested that companies that against their opponents, green marketing has become a successful competitor. [2] Wang et al. (2009) created a system to identify clients ready to pay extra for green products, recognising consumer behaviour toward green products to be a major commercial concern.[3] Yuang and Kielkiewicz Yuang (2001) gave an overview of existing techniques in supply chain network, [4] Ramudhin A. et al. (2010) offered a strategic planning model and emphasised the relevance of internal and external control mechanism to decision-makers.

Green supply chain management: pressure, practises, and performance in the Chinese automobile industry was studied by [5] Qinghua Zhu in 2006, and he found that increasing pressure from various stakeholders had prompted to improve both their economic and environmental performance, Chinese car SCM should evaluate and adopt GSCM struts. [6] Lamming and Hampson (1996) the notion of effective environmental management was investigated and related to procurement management techniques such as retailer audits, SCM strategies, procurement policy formulation, and working with suppliers to improve.[7] Chung-Hsiao investigated GSCM techniques in electronics sector in 2008, stating that while there were various proposals to implement GSCM, no investigations on the reliability and validity of such process were investigated in the electronics sector. According to results, the firms considered supplier management performance to be a critical factor in implementing GSCM. GSCM practices implementation was conceptualized by [8] QuinghuZhu et al. (2008) as embracing multirole dimensions of practices such as Green Procurement, Internal Environmental Management, Eco-design, Customer Cooperation, and Investment Recovery.

[9] Fengfei Zhou in 2009 studied the implementation of raw materials procurement management in the textile industry and saw that GSCM could be very helpful in resource utilization

and also provided a special reference for how to use GSCM in specialized industrial operations. A decision model for measuring the environmental practices of suppliers using a multidisciplinary approach was devised by Handfield et al. (2002) [10].[11] Walton et al (1998) tagged the magnitude of certain changes to maximize the influence of acquisition on environment outcomes.

GSCM is a novel concept in the Indian context where there were a few studies conducted by researches and therefore the concept is slowly speeding. In addition, new and old companies recognize the importance of GSCM's practices of increasing their loyalty to stakeholders in order to keep the business afloat. There have been many lessons about it. Some of them are printed as follows.

[12] Srivastava (2007) highlighted the concept of operational planning that gives GSCM a new angle of integrated and new research. The literature review began with concept of GSCM, followed by the division of GSCM based on the context of the problem in the area that had a significant influence on sales. It also categorized GSCM based on accepted process and method. Various mathematical tools/strategies/maps have been used in the literature according to GSCM scenarios. [13] Goknur et al. (2010), in their study, provided a critical literature review of the performance of the supply chain. The research also followed basic research method; related to the problem in asset sales and provided sound solution for better performance management in new procurement times. The study focused on procurement management and took into account the relevant data in such areas such as service delivery, IT, operation and management of business processes. [14] Rajesh Nair et al. (2010), highlighted green marketing in the automotive sector focusing on the perception of Indian Customer in green vehicles and the analysis of the demand gap. Identify area for the development of green makers that need to focus on them. In addition, it includes the most internationally accepted methods that can be used in India as well to increases the level of acceptance of green cars in essence to achieve a frugal competitive edge. [15] Deepak Bhagat et al. (2011) investigated critical issues involved in agricultural procurement management while conducting in-depth research on various aspects of the agricultural business. The study also provides insight into various research models that have demonstrated a good understanding of performance, communication and relationships in the supply chain of agriculture.

[16] Rakesh Rajpal, B.K. Roy and Pawan Kumar (2011) have studied the impact of green on procurement management. In addition, various barriers and opportunities were identified and evaluated from the study although Indian business regulatory, competitive and marketing pressure and forces have enhanced their environmental awareness, but this knowledge has never been transferred into GSCM's practice execution. [17]Moloy Ghosh (2011)highlighted in his paper the principle and ideas of green advertising, which are part of GSCM. This paper emphasised the importunate of raw marketing; explorers some of the reason why organizations are interested in adopting a green marketing philosophy. In addition, it outlined some of the problems the organization may face in order to exploit its raw marketing and its management implications as well as a few points of litigation. [18]Nimavat Dheeraj and Namdev Vishal (2012) focus on dealing with companies and their need to meet environmental and distribution policy requirements and distribution activities. They also integrate India's EPI with activities such as raw purchasing, manufacturing, marketing, recycling.

[19] Kottala Sriyogi (2012), in his study, proposed a method of calculation of procurement measure, their quality interpretation, and the general marking of the internal supply chain w.r.t. financial perspective. This paper emphasised that there is a strong link between SCM and the financial success of the companies that operates most in SCM. This is a concept paper that encourages business houses and administrative institution to reflect on their role in achieving sustainable developments through green advertising.

### 3.0 Research Background

The idea of buying green is a new concept, appearing in the latest sections of the book. While this was very important to the business, it was introduced recently and now the textbooks on environmental issues are still limited.

"Sustainable Development" is a key concept as discussed at the 1992 World Summit in Rio, in order to create long-term economy, governments and other international bodies resolved to adopt actual steps to safeguard the environment. The aim of today's agenda is to boost environmental usage and production in essence to improve environmental quality, alleviate poverty, and spur economic growth by providing improves health, working conditions, and long-term sustainability.

The researcher looked at green procurement management, including pressure and performance, in the Chinese automotive sector, and found that increasing pressure from variety of sources had prompted Chinese vendors to initiate managing GSCM and greenhouse gas management policies in essence to improve their economic and environmental processes.

#### 4.0 Objectives

The rapid and continuous growth of India's industries could be manufacturing, IT, chemicals etc. has posed significant challenges to energy security. The sector's concern for the environment is very limited and information on GSCM practices is limited. There are a few Indian companies that follow the environmentally friendly GSCM system. Difference in acquisition rates have some retailers use ecological methods such as green buying and eco-design.

Indian manufacturing companies have experienced an increase an environmental pressure while at the same time recognizing the multiple benefits and incentives to green their supply chain. Therefore, GSCM practice have emerged as a systematic way in India to measure the economic and environmental sustainability of firms. Research is trying to highlight the advantages of using the concept of GSCM. It also seeks to recognize the need to promote and facilitate the implementation of GSCM projects to increase the competitiveness of Indian industries. A GSCM project selection study was conducted in collaboration with national and international companies in the development of GSCM strategies. Lastly, the aim is to understand the problems, latest trends and challenges associated with GSCM and the benefits associated with participating participants.

#### 5.0 Research Methodology

The research is based in information gathered from reviews of various journals, articles, research papers, magazines, etc. Numerous innovative processes were considered in business, industrial, and cooperative environments. An in-depth study of the various companies' plans for GSCM has been conducted and appropriate recommendation have been obtained.

#### 5.1 Challenges

Doing GSCM is not so easy. Organization may face certain challenges, some of which include:

• Cost is said to be major problem in implementing GSCM.

Generally, Companies usually use any new technology or process where they can see results in unambiguous terms. But since GSCM is a naïve concept, it has become increasingly difficult to exploit any measurable data to test the value of the value chain.

• There is a need for right technology to be used to complete the business with Green Practices. Lack of green architects, consultants, green engineers, regional contractors. Due to the shortage of

green workers, organizations are afraid to continue investing. An important feature of GSCM is the integration of reusable products. It is a major challenge for many companies to integrate waste (recycled) as recycling materials for recycling facilities.

Another challenge is the fear of failure. Organization is not confident that the green program will lead to success or failure.

• Lack of awareness about implementation process, regulation and best practices.

The most important factor in implementing the GSCM system is the support and commitment from senior management but unfortunately due to lack of confidence in the original thinking and investment, senior management became alarmed at the use of crude practices.

• Since transactions have a large number of participants, the doubts of anyone's acceptance and involvement in the design and technology process affect the performance of the entire series.

Finally, due to a lack of customer awareness about GSCM and Green products, companies are reluctant to continue to do so.

# **5.2 Indian Context**

India is an important destination for the global economy. The availability of natural resources, low production costs and a large number of skilled workers make Indian business an attractive partner in international companies. With duplication of global supply chains due t impact of COVID-19, India continues to be on the radars of international companies as they look to build strong supply chains that can meet current and future business needs

India has promoted 10 places in the latest World Bank rankings for trade freedom, from 111 in 2019 to 101 of the 195countries in September 2021. Business changes over the past few years have helped India gain the position. Many Indian states hold consultation and meeting with international organizations to discuss investment opportunities and business growth in India. From April to July 2020, India has attracted investment and pledges from 15 companies to \$20 bn.

Within the country, there is a growing emphasis on the campaigns in the Make in India campaigns and the Self-Reliant India of Prime Minister Narendra Modi and a deeper focus on regional integration strengthening frugality in the supply chain of Indian Supply Chains. Under the India-Reliant India Campaign, a vision known as Aatma Nirbhar, a special economic package was released by the government in May 2020.

The idea is to provide financial support to the industry to help business manage the effects of COVID-19, return to work at first opportunity and increase the range of industries to get more business as they open up operations. In addition, the aim is to attract investment and create more opportunities for Indian business to become part of the global supply chain.

# 5.3 Indian Companies following GSCM

# 5.3.1 ITC Ltd.

Nowadays, the consequences of global warming and hateful climate change are threatening threats to sustainable economic growth and long-term business. To address such threats, the ITC has transformed and implemented its plans for its integration strategy, keeping social and national priorities. Demonstrating their commitment, the ITC adopted a strategy similar to that outlined in the Indian Government's National Action Plan on Climate Change (NAPCC) to tackle climate change.

The ITC continues to peruse The Triple Bottom Line Approach that contributes to economic, environmental and social development ("ITC Sustainability Report", 2012). The establishment of Green Buildings is one of the most appropriate answers to these environmental challenges. The start of construction of the ITC Green Center in Gurgaon marked the entry of ITC into the green building organization. This marks the first step that ITC has taken in achieving its green goals. In addition, the Green Center in Gurgaon received recognition as the largest LEED platinum area limited by offices in the world in 2004



Figure 2: Key statistics of India

Source: Data World Bank, (2019) https://data.worldbank.org/country/india

Recently, the new ITC building has been using raw materials that are being gradually developed in existing buildings and industries to meet green standards. This year, the Tobacco industry in Bangalore and Saharanpur has also received a LEED platinum rating from the Indian Green Construction Council and all major ITC hotels are now LEED-certified green buildings with platinum standards, with exceeding 38% of ITC total energy intake from renewable sources and is expected to affect 50% in the next 4-5 years.

For more than 5 years the ITC has had a 'strong solid waste recycling capacity'. It also launched a unique project-'Wealth out of Waste' (WoW), a re-awareness program through the 'Reduce-Reuse-Recycle'. As part of this project, the ITC approach creates public awareness about the advantages of the 'Reduce-Reuse-Recycle' process to protect the enjoyment, improves public health and hygiene as well as make inexpensive paper, plastic, metal and glass industries. The viability of resources allocation is emphasised by providing special bags for the collection of dry waste such as paper, plastic and metal thereby organizing their periodic collection b external agencies. The ITC has used waste paper and rest is sold to recycling industries.

Dry waste collection can save up to 40% of waste management costs, which can be used to improve public service. With the implementation of project in a way with families, it has begun to spread to school, government offices, companies and other bodies. The WOW initiative collected monthly increased to 26000 MT in 2011-12 from 100MT in2007.

#### 5.3.2 Aditiya Birla Group

As one of Fortune 500 companies, the AB group was ranked first in the Asia Pacific and under the survey of 'Global Top Companies for Leaders' ranked 4th, worldwide in 2011. The study, 'Top Leaders' Companies, was conducted by Aon Hewitt, Fortune Magazine and RBL (HR and Leadership Advisory company), which is detailed study of organizational leadership. Of the total revenue from various companies and organizations in the group, 53% are contributed by overseas jobs. It has made its mark in 36 countries including Asia-Pacific, South-East Asia, Europe, Africa and North America (''Aditya Birla Group'',2013)

The team is present in various fields that play a crucial part in each of the following areas: Production Manufacturers of the world's cheapest aluminium and copper

- The Leading firm in Viscose Staple Fibre
- A leading factory in Carbon Black
- The fourth-largest manufacturer of protectors
- The fifth-largest manufacturer of acrylic fibre
- One of the top ten cement manufacturers

Outside of business, this group focuses on the commitment of the Social Work Organization to having respect for a society that sees its responsibility as a 'Corporate Citizen' ("CSR policy Report", 2013).

The team does the following to achieve its goals of social responsibility:

- The group operates in 3,000 districts.
- For the community to start developing rural areas, the AB group reaches seven million people, led by Mr Rajeshree Birla. It is done every year.
- The group focuses on healthcare, education, sustainable livelihoods, infrastructure, and social transformation activities in India, Egypt, The Philippines, Thailand, Loas, Indonesia, Korea and Brazil.
- In addition, the AB group runs Scholl by providing education to 45000 children, among them 18000revice free education.
- Hospitals its 18 hospitals often expand to serve millions of rural people.
- The team has partnered with Columbia university in forming the Earth Global Institute of Columbia in Columbia, to fulfil its commitment to sustainable development.
- Has established FICCI Center AB CSR Center for Excellence, Delhi to embed CSR commitment to its organisations as a way of life in full use.

# 5.3.3 L&T

Larsen & Toubro Limited (L&T) is a \$14 billion-a-year engineering and construction company. The company is mainly involved in construction, heavy engineering, infotech etc. It is the first corporation in India to begin publishing sustainability reports. The organisation has incorporated a 3R Conception in its numerous initiatives, which stands for Reduce, Reuse and Recycle. L&T can now collect more than 23 million litres of rainwater. There has been a 6 percent reduction in rainwater usage, and wastewater has been discharged on 16 sites.

In terms of architecture, they've built offices that use electricity and the widespread use of renewable energy such as winds and solar energy in all their buildings. The company uses recycled material such as fly ash, crushed sand etc. The firm is constantly engaging in stakeholder engagement (internal and external) in identifying key material problems. The organization also promotes the use of video conferencing in internal meetings so that stuff travel is minimized and indirectly reduced vehicle use

# 5.3.4 TCS

In all of its programs, TCS is dedicated to utilising ecological friendly products. TCS has extended the usage of renewable energy in its workplace as a result of its infrastructure. According to 2012-13 statistics, the quantity of solar water produced per day is around 86,600 litters per day, a 55 percent increase over the previous year's estimates. The corporation also concentrates on purchasing raw materials from its vendors.

Some of the basic things like turning off computers at the end of the day, reducing the use of lights in many technologies such as installing frequency drivers. With the introduction of rainwater

harvesting, sewage treatment plants and other water management systems TCS could lessen saltwater use by more than 13% compared to 2008 figures.

The biggest challenge for all IT majors is the issue of e-waste. Outdated/Obsolete computers are officially deposed of through government-approved renewable energy users. Promotion of video conferencing was conducted at all TCS firms to shorten the movement of staff in customer area by vehicles, thereby reducing greenhouse gas emissions.



Figure 3: Progress of India in terms of environment and sustainable issue

Sources: Company websites, Annual reports, CSR Reports, RT, Books & Company analysis

# 6.0 Findings

Company	Objectives		
	Reduction of Carbon Footprint	Reverse Logistics	CSR
ITC Ltd.	1) Green Building	1) "Wealth out of Waste"	1) Rural Education
	Construction	approach	
	2) Achieving LEED-Platinum	2) "Strong Solid-Waste-	2) Public Healthcare
	certification for green	Recycling-Capacity"	
	building	Policy	
Aditya	1) Advanced heat	1) Waste heat recovery	1) Free rural education &
Birla	transfer enhancement		awareness
Group	2) Thermography	2) Man-Made cellulosic fibre	2) Free rural healthcare &
		(MMCF)	awareness
			3) Awareness towards anti-social
			norms of society
L&T	1) 3-R policy "Reduce-Reuse-	1) 3-R policy	Collab with communities, institutes
	Recycle"		and NGOs to promote skill
	2) Rain water Harvesting	2) Reuse of Fly-ash and	development and health &
	3) Solar energy	crushed sand	sanitation awareness

2<sup>nd</sup> International E- conference on Digital Learning Methodologies:

Transformation of Business, Management and Education Practices, FMS, Parul University, Gujarat, India

TCS	1) Use of Renewable Energy	1) Smart tagging for track-	1) Education and skill
	2) Solar water	and-trace operations	development programs
	3) Use of Star-Rated	2) Autonomous vehicles &	2) Healthcare and wellness
	appliances	drones for faster shipping	programs
	4) Rainwater Harvesting	and returns	
ONGC	1) Energy-Efficient		
	Crematorium	Advanced and efficient heat	1) Girl-Child development
	2) Replacement of traditional	transfer equipment's	programmes
	heating equipment		
	3) Reduction of wood		2) Protection of Heritage Sites
	consumption		(UNESCO)
	4) Reduction of Air & Water		
	Pollution		

Source: Self-analysis on various report published by companies

### 7.0 Recommendations for GSCM

#### 7.1 Biomimicry

The emerging fields of biomimicry (or biometrics) has spawned new technologically engineered technologies at both macro scale and nanoscale levels. Companies need to test this method of efficiency and sustainability as well

### 7.2 Product and Environmental Friendliness

Companies must use parts of environmentally safe products and finished products. Consumption of perishable material can reduce the harmful effects on the environment.

### 7.3 Adoption of clean technology

With a plethora of young engineering talent and the low cost of manufacturing products, India is well suited to create a hub of clean technology products. Open earth spaces can be used effectively to influence solar energy.

### 7.4 Green Stakeholders

It should be necessary category for companies to research their supplier and supplier should do the same for their supplier. Guidance on GSCM should be developed for all stakeholders to sphere to do it

#### 7.5 Waste Management

Waste disposal by companies during operation should be used as an assist for further operation after treatment. Hazardous waste cannot be used and should be disposed of safety. A proper method is used to separate the waste from the source to dodge contagion of non-hazardous waste and hazardous waste.

### 7.6 The Order of Order

Many regulations and laws are designed too late to prevent companies from dumping waste unnecessarily. Companies often worry only about the quality of the product produced but do not show the same interest in holding the end of product life. Therefore, the time has come for the postponed things to happen. The company's transaction must now begin accepting and installing the refundable product for reuse or disposal. Therefore, there will be a closed loop of retail sales starting at acquisition, manufacture, production and renewal/disposal of the product.

### 7.7 E-waste

As India is becoming a leader in IT sector, E-waste forms an important part of all IT companies. All obsolete computers, peripherals, batteries, cartridges etc. should be returned to e-waste vendors or to the suppliers who are authorized to dispose them appropriately

# 7.8 Driver, not a barrier

Companies have to recognize the green concept as a driver rather than a barrier to innovation. This will enable them to see opportunities and growth area where other apprehend risk and increased costs.

### 7.9 3I and 2C approach

Incorporate- GSCM should become a part of corporate strategy and business goals.

In Toto – The implementation and initiative should focus the entire cycle from the start till the finish

Intensive - GSCM should be intensive and no comprise in behalf of the upcoming opportunities.

Continues – Creating benchmarks and publishing innovations, ideas and impact of GSCM initiative. The proliferation of the findings to other divisions of the company.

Computable – Success should be measured in numbers, thus defining parameters metrics to quantify the success.

#### 8.0 Limitation/Scope

The above studies suggest that if the quantitative analysis is done on carbon emissions, waste products etc. then we can substantiate the green supply chain benefits even more. We can take a case study of big conglomerate that is willing to initiate a green supply chain scheme and can then calculate process efficiency and cost benefits. A numerical value can be focused on specific industries so that the finding can be generalized among the industries. A comparative study can be conducted between Indian companies following GSCM practices vis-à-vis other countries companies to have a better viewpoint on green supply chain sustainability.

#### 9.0 The Conclusion

Green is a journey and not a destination. Raw scales are a sector issue that will only grow in importance in the next years. Green energy requires ongoing time and effort to utilise and grow. The existing organizational action structure, not just in India but also internationally, is harmful to the environment, and the damage done to our planet will soon be irreversible.

If the land is to be maintained green, GSCM is a must. Organizations are under a lot of pressure to create ecological sustainable product in terms of manufacturing, production, transport and consumption. Organizations will engage extensively in network development, collaborative cooperation, acquisition, purchasing, package switching, and new ways in the next years, with a focus on lowering carbon footprint at all phases of sourcing. As additional sectors move closer to production site, implementing a green SCM will become increasingly important. Th expense of technology and the complexity of the processes are regarded key impediments to implementing Green SCM, bringing attention to the cost-effective and simple-to-use solution.

Efforts have led to companies become less efficient and more efficient. As the idea is still very low in India the information on raw SCM is not apparent. A framework needs to be established to create awareness and dissemination of information regarding GSCM practices that reflect the cost and benefits of companies. The chain consists of partners and the great and transparent collaboration

between them will lead to the successful and sustainable use of GSCM. Although the obstacles may change, the foundation of doing good business will remain the same. Leaders should see green purchasing management as a key part of a business that can create cost competition and price creation in the long run

### **10.0 Acknowledgement**

We both are wholeheartedly grateful to Vivek Hamal and Dhwani Bhavsar who are our professors, academic advisors and with whom we discussed putting final word on our current paper.

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