GREEN WAREHOUSING
TAPPING A LUCRATIVE OPPORTUNITY

Taking an initiative to reduce greenhouse gas emissions and safeguard the fragile resources of the earth, warehousing companies are moving towards green logistics. And to aid these companies in attaining these goals and executing environment-friendly supply chain operations, Milestone Capital Advisors offers its expertise in green warehousing. The company provides end-to-end solutions with respect to green design, energy-efficient operations to help logistics companies go green.

BY RACHITA JHA

Increasing environmental concerns have taken a center stage when it comes to effectively managing supply chain operations. According to reports, around 75 per cent of a company’s carbon footprint comes from transportation and logistics alone. In such a scenario, warehouses can play an important role in mitigating the environmental impacts of logistics activities through green initiatives. Currently, the warehousing sector is at a nascent stage and remains an under-serviced asset for many logistics companies. This is because storage, warehousing and logistics are the weakest links of supply chain infrastructure. In order to strengthen their performance, huge investment is needed for development purposes. But as the demand for quality warehousing infrastructure is being strongly felt across all industries owing to growth in the emerging economies, the future of the warehousing sector seems bright. According to reports, the future trends indicate a huge demand for nearly 340 million sq ft area of warehousing space by 2015, with investments worth $8 billion required in capex over the next five years. These investments would primarily come from the retail and manufacturing sectors owing to their substantial contribution to the growth of the Indian economy. The early planning and setting up of a warehouse facility under a company’s expansion strategy helps it to maximize economical gains at a faster pace.

STEPPING INTO GREEN LOGISTICS

The recent trend shows that many companies are taking the green route to develop warehouses that improve the environmental performance and build energy efficiency into operations. The driving force behind the green movement is the continuous rise in fuel costs. Moreover, growing demands from global players for green supply chain processes and the need to cut down on external and wasteful costs that leave carbon footprints in environment are other major factors driving companies to go green.

Milestone Capital Advisors, a leading investment firm, has caught the green pulse of the logistics industry and has ventured into assisting companies in shifting towards green warehouse facilities. Moreover, the company also aims at bridging the investment gap, which has been proving to be a hurdle in the development of organized and quality warehouses.

“In addition to the economic recovery, the increasing focus of companies on product diversity and consumer demands are sure to boost demands for green warehousing facilities amongst other logistics needs,” avers Ved Prakash Arya, MD and CEO, Milestone Capital Advisors.

Green logistics is changing the conventional thought process wherein warehouses are considered as cost centers rather than value creators. This is done by means of environmental

Priority agenda that will change the shape of present Indian warehouses...

• Removal of CST post 2010
• India becoming global manufacturing hub, especially for cars
• Growth of organized retailing in India
• Increased trend of outsourcing supply chain management
• Increased investments by private equity firms and capital flows by institutions into warehouse projects.

Inputs by Ved Prakash Arya, MD and CEO, Milestone Capital Advisors
The environmental initiative builds the value proposition of a logistics company and sets it apart from the competitors as it reflects its commitment to the environment. The benefits of undertaking environmental initiatives include:

- Brand building for being projected as an eco-friendly company holding corporate social responsibility.
- Cost management from energy savings by reducing fuel consumption and CO₂ emissions resulting in efficient and sustainable supply chain infrastructure, which creates an opportunity to earn carbon credits.
- Human well-being index results in increased productivity of employees.

**GREEN BENEFITS**

**ENERGY CONSERVATION**

- **TRENDS IN ENERGY CONSERVATION**
  - Logistics companies are giving impetus to energy-saving strategies in supply chain operations and warehouse design parameters.
  - This also helps in bringing long-term benefits to the companies. The large roof structures facilitating use of solar PV, reduction in costs of alternative fuels on a year-on-year basis, etc., will ensure greater savings.
  - Moreover, carbon credits add value to the company to flag its commitment towards the environment and connect with customers.

**MOVING TOWARDS A HOLISTIC GREEN STRATEGY**

- The entire process of transportation, storage and movement of goods needs to be simplified along with least cost operations, to stay sustainable. The logistics and supply chain system in the long run. An eco-friendly warehouse is not only about environment-friendly transport and inventory. These are by no means the only avenues to embark on green logistics. Amongst the other environmental initiatives that can be included for green warehousing, the architecture and design of the warehouse is an important aspect during the pre-construction stage. It includes the use of good passive design in the development stage itself that can actually avoid a lot of retrofit costs later. In this respect, Milestone has taken a pioneering initiative of providing complete sustainability solutions in the development space across industries including commercial, residential and large infrastructural projects with Ecofirst Advisory Services, a joint venture with UK’s leading zero carbon developer Ecofirst. The company has LEED accredited professionals in sustainable design background, along with experts in water resources management and energy consumption management. The provision of holistic green solutions to maximize environmental benefits in the warehouse facility. Elaborating on the way forward for warehouse facilities to go green, Arya adds, ‘The future outlook of any sustainable development initiative should be focused on developing and preserving sustainable communities, having their own systems and processes for material movement and storage, thus minimizing too many satellite storage options.’

**GREEN BUSINESS MAKES SENSE**

- **LOT OF MNCs are taking warehouses on lease to operate their functions on environment and investment as savings in energy, water and materials.**
  - To begin with, the company will need to adopt environment-friendly construction methodology and materials like precast concrete construction method as it is estimated to reduce CO₂ emissions by 12 per cent annually. Also use of recycled materials procured and supported by the local economy that would ultimately reduce distance traveled to source materials should be adopted. The warehouse design should use insulated steel panels in exterior wall of facilities, which improves insulation of the facility by at least three times. Also, the use of fibre with reinforced Plastic (FRP) or polycarbonate sheeting to about 20 per cent of total roof area, for natural light to penetrate throughout the warehouse is facilitated. The use of turbo ventilators or air extractors on rooftops for natural ventilation of hot air is also an effective warehouse design strategy for energy conservation and temperature control. Renewable energy installations such as wind turbines and photovoltaic systems are an added advantage. The building facility along with the warehouse as it puts a company above the others in its commitment towards the environment.

**FUTURE OUTLOOK**

- Several MNCs in India have started demonstrating green consciousness among their customers. The MNCs have made efforts to go green. Warehouse developers like Gazley and Prologis, well-known for their green warehouses, are setting up parks and have started working on the ways and means to develop eco-friendly warehouses.

**ENERGY EFFICIENCY**

- For example, currently asbestos sheets are used for roofs that can actually turn carcinogenic due to asbestos. The new approach would ideally involve use of non-corrosive coatings to avoid the same and add more life to the roof. Such simple measures can actually change the way warehouses are designed today.

**Design**

- The warehouse design is an important aspect while planning an environment-friendly warehouse, as the design of the building will decide the future lies in shifting towards green demand. The warehouse building facility," says Arya. But, the key challenges are in terms of accurate measurement and benchmarking of emissions across the extended supply chain. There is also a lack of clarity as to what constitutes green benefits, besides just good practices and cost management. The transition from traditional warehousing to green warehouse as it puts a company above the others in its commitment towards the environment.

**Environmental initiatives that can be included for green warehousing,**

**- Important steps for LSPs to become green:**
  - Building a roadmap based on corporate social responsibility, customer acceptance and good business sense.
  - Looking for customer competitive advantage and USPs.
  - Evaluating green initiatives in terms of cost, timescale and business.
  - Measuring and benchmarking.
  - Adapting the right green practices in master planning for eco-friendly design and energy-efficient construction and operations in warehouses.

**Eco-friendly Warehouses**

- The eco-friendly warehousing sector has seen a lot of growth over the past few years, with companies and municipalities recognizing the benefits of sustainable facilities. One of the key benefits is reduced energy consumption and carbon emissions, which can lead to significant cost savings and environmental benefits.

- For instance, a warehouse in the UK has implemented energy-efficient lighting fixtures, which has led to a reduction in energy consumption and a decrease in carbon emissions. Another example is a warehouse in the US that has installed solar panels on its roof, allowing the facility to generate its own electricity and reducing its reliance on the grid. These initiatives not only benefit the environment but also lower operational costs for the businesses involved.

- In addition to energy efficiency, eco-friendly warehousing also focuses on waste reduction and recycling. This includes implementing programs for sorting and recycling materials, reducing the amount of waste sent to landfills, and using renewable resources where possible. These practices not only benefit the environment but also align with customer and stakeholder expectations for sustainable business practices.

- Moreover, eco-friendly warehousing can also provide a competitive advantage by appealing to environmentally-conscious consumers and businesses. Customers are becoming increasingly aware of the environmental impact of their purchases and are looking for companies that align with their values. By implementing eco-friendly practices, businesses can differentiate themselves in the market and attract environmentally-minded customers.

- In conclusion, eco-friendly warehousing is an important aspect of sustainable supply chain management, offering benefits for the environment, businesses, and society as a whole. By adopting eco-friendly practices, businesses can reduce their environmental impact, lower costs, and appeal to environmentally-conscious consumers and businesses.