

Supply chain and greener business solutions: working towards a better environment

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By Neeraj Bansal, COO-India Global, National Leader – Supply Chain Re-alignment, KPMG in India, KPMG in India

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Key takeaways:

- *In the view of rising climate concerns, companies across the globe are adopting decarbonisation strategies and pushing for greener business solutions, leading to the evolution of more environmentally responsible supply chains*

Amidst the global concern for climate change and rising temperatures, organisations are being assessed for their social and environmental impact of their supply chain. Big businesses are expected to assume responsibility of how their manufacturing and supply affect the planet and its people. Hence, companies are adopting decarbonisation strategies and pushing for greener business solutions, leading to the supply chain becoming more environmentally responsible.

A sustainable supply chain includes reducing water and energy usage, utilising renewable energy and decreasing hazardous waste generation. Electricity and transportation, for instance, contribute massively to greenhouse emissions and companies are increasingly focussing on greener logistics to reduce their carbon footprint. The global transportation sector is a major polluter, and in 2020, it produced approximately 7.3 billion metric tonnes of carbon dioxide (CO₂) emissions.¹ Most delivery trucks use diesel since that is the affordable fuel option, but using diesel increases the carbon footprint by releasing 13 per cent more CO₂ into the atmosphere.²

Ways for a greener approach in procurement and manufacturing

- **Smart warehouses:** These are eco-friendly warehouses that use energy management systems for better utilisation of energy. With the combination of timers, thermostats and gauges for all forms of electricity, gas, heat and water, energy management systems support the best practices of consumption without excessive wastage. Warehouses also use telematics software to help in controlling fuel costs, allowing businesses to use less fuel and slash fuel costs.
- **Electric vehicles (EVs):** The use of electric vehicles (EVs) is an important technology in sustainable development as it leads to lower greenhouse gas emissions with lesser air pollution.

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The global electric truck market, for instance, is expected to reach USD1,893.1 million by 2027.³ Much of this growth is due to logistics companies substituting their existing fleet with greener vehicles. Aside from trucks, electric two-wheelers, three-wheelers and light commercial vehicles will also rise in demand.

- **Green sourcing:** With rising environmental concerns, procurement professionals should be encouraged to practise green sourcing—the sourcing or purchasing of materials and components, which have eco-friendly characteristics, such as reusability, recyclability and nonuse of hazardous/dangerous chemicals. A renowned logistics company has repeatedly redefined itself from a sustainability perspective; from introducing the industry's first carbon neutral supply chain service to becoming the first logistics company to commit to a zero-emissions target.
- **Digitisation:** Further, digitisation and automation should add to environmental sustainability by enhancing resource and information efficiency with the application of Industry 4.0 technologies throughout the product lifecycle. This would reduce menial, repetitive tasks and enable deep visibility into the supply chain where businesses could assess the sustainability practices of their suppliers and vendors.

What is India doing to achieve a greener supply chain?

- With India targeting net zero emissions across sectors, logistics companies are already looking into reducing their carbon emissions. India is introducing GPS-enabled toll payments to help ensure minimal wastage of fuels and resultant emissions from across hundreds of toll plazas across the country.
- E-commerce companies have committed to using 30 per cent of their shipment through electric vehicles. The government is focussing on decarbonizing the transport sector and aims to have EV sales penetration of 30 per cent for private cars, 70 per cent for commercial vehicles and 80 per cent for two and three wheelers by 2030.⁴
- Modern warehouses and logistics parks have been built with solar rooftops that sell carbon-free electricity rather than consuming it. Overall, the country has tripled its rooftop solar capacity addition to 1.3 GW during the first nine months of 2021, a 202 per cent increase when compared to nine months in 2020.⁵
- The strong impetus on developing transportation infrastructure has reaped significant benefits for the logistics sector. Road freight, for instance, carrying 64 per cent of transported goods in India,⁶ is witnessing a major boost with the government focusing on developing highways and dedicated freight corridors, facilitating easy connection between production centres and consumption centres. Apart from improving efficiency and managing costs, this leads to

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decongestion, faster connectivity, and lesser fuel consumption and emissions.

- The government is planning to promote LNG as an alternative fuel and set up 1000 LNG stations over the next three years owing to its lower cost and lesser emissions.⁷

How are Indian companies practicing sustainability?

Across sectors, businesses are increasingly evaluating their environmental impact. A leading Indian pharma company is “mentoring” their business partners and vendors about following sustainable practices in procurement and supply chain. A major Indian conglomerate uses Elemental Chlorine Free (ECF) technology, ozone bleaching, energy and water management techniques in its manufacturing, which has allowed it to reduce its dependence on fossil fuels. A renowned construction company practices “Reduce, Recycle and Reuse,” which has enabled them to harvest millions of litres of rainwater. They have achieved a reduction of 6 per cent in water consumption and several of their campuses have witnessed zero wastewater discharge.⁸ One of India’s leading Information Technology (IT) firm practices green procurement from its suppliers. IT companies face the problem of disposing of their old computers and controlling e-waste, which this company has been doing through government-authorised recyclers.

These are just a few examples. Globally, the news is encouraging as well. Worldwide, 80 per cent of companies now report on sustainability, with 40 per cent acknowledging the financial risks of climate change. Most companies now have established targets in reducing their carbon emissions and there is an increasing trend in linking corporate carbon targets to global climate goals.⁹ Companies are gradually incorporating sustainable development goals (SDGs) into their responsible business actions with the key themes revolving around energy, water, waste and data privacy. According to a recent survey, of the top 100 companies studied, 80 per cent of the companies have mapped their responsible business actions to SDGs.¹⁰

In a world which is suffering frequent and unpredictable environmental challenges, business leaders should further focus on building a climate-smart supply chain. They would thus be contributing to the global efforts to preserve the environment and, more importantly, garner profits in the long term by earning customer loyalty as consumers are increasingly conscious about the environmental impacts of product manufacturing, ready to even pay extra for sustainable products. With green consumerism seeing a rise, it is a win-win for companies to implement environment-friendly supply chain processes in the coming years.

¹ Distribution of carbon dioxide emissions produced by the transportation sector worldwide in 2020, by subsector, Statista, accessed on 3 January 2022

² 5 Tips To Navigate Sustainable Logistics, Forbes, 13 May 2021

³ Electric truck market statistics 2020-2027, Allied Market Research, July 2020.

⁴ Aim to have 30% of 2030 car sales as EVs, Nitin Gadkari while addressing a FICCI event in October 2021

⁵ India installed 1.3 GW of Rooftop solar capacity in 9M 2021, Mercom India Research's India Rooftop Solar Market Report Q3, 2021

⁶ Tech, balanced infra & government intervention key for supply chain rehaul, say ETILC members, The Economic Times, 9 September 2021.

⁷ Government to set up 1000 LNG stations in next 3 years, Tarun Kapoor, Union Petroleum Secretary in conversation with Financial Express in November 2021

⁸ Prashant Raman, Green Supply Chain Management in India - An Overview.

⁹ The time has come, The KPMG Survey of Sustainability Reporting 2020.

¹⁰ Top 100 companies in India for CSR and Sustainability in 2021, The CSR Journal, 30 December 2021

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