

CII-ITC Centre of Excellence for Sustainable Development





Integrating Sustainability in Value Chains of Companies

Integrating SUSTAINABILITY in the AUTOMOBILE VALUE CHAIN

Insights from Eco Edge



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INTRODUCTION



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The automobile industry is a cornerstone of global innovation and economic development and continues to advance rapidly, combining cutting-edge technology with dynamic consumer expectations and sustainability goals. Over recent years, the focus of automobile and component production has increasingly moved to Asian countries such as China, India, Thailand, and Indonesia, driven by cost-effective manufacturing, urban growth, and rising economic prosperity.

The automobile sector is a vital engine for the Indian economy, significantly benefiting from its extensive backward and forward linkages that spur widespread economic growth. The sector's importance is further underscored by rising middle-class incomes and a growing young population, indicating sustained industry growth in the future. Notably, the sector's contribution to India's GDP has increased from 2.77% in 1992-1993 to about 7.1% in 2023, reflecting its growing influence on the nation's economic fabric. Furthermore, the sector has provided employment both directly and indirectly, therefore it plays a pivotal role in shaping India's economic landscape.



Figure 1: Automobile sector snapshot (for 2023) (Source: PIB)

The industry encompasses two distinct sectors: automotive and auto components.

The automotive sector further includes four primary segments comprising two-wheelers (mopeds, electric scooters, scooters, and motorcycles), three-wheelers (passenger carriers, goods carriers), passenger vehicles (passenger cars, utility vehicles, multipurpose vehicles), and commercial vehicles (light commercial vehicles, medium and heavy commercial vehicles). In the domestic Indian auto market, two-wheelers and passenger vehicles collectively dominated, with two wheelers capturing 74.81% and passenger cars holding 18.35% of the market share in FY23.

The auto component industry encompasses players of all sizes, from multinational corporations to micro-entities, strategically located across manufacturing clusters throughout the country. As of 2022, the industry accounted for a noteworthy 2.3% of India's GDP, directly employing an impressive 1.5 million individuals. India is a key player in the global automobile component trade, with the U.S. being the top export destination for its parts and China as the primary source of import . Other significant markets include Germany, Brazil, Turkey, and the UK for exports, while imports come from Germany, South Korea, and Japan.





Figure 2: Auto-component manufacturing clusters across India (Source ACMA)

AUTOMOBILE SECTOR VALUE CHAIN

The concept of value chain is pivotal in understanding the processes and identifying the players involved in taking a product from its initial idea to its final consumption and this framework is particularly relevant in the automotive sector.

In the past, companies manufactured products within one country. However, the current practice involves the creation of a single finished product with processes across multiple countries, each contributing value and thus giving rise to global value chains. Description for each step of the automobile value chain is given as follows:

- a. Upstream
- Suppliers comprise players from the auto-component industry that provide complete assemblies, sub-assemblies, individual parts, and service providers that provide guidance and technical support.

Suppliers can be categorized based on their relationship to the Original Equipment Manufacturer (OEM), using a tiered system.



Table 1: Tiered Supplier system

Tier 1

At the top of this supplier hierarchy are Tier 1 suppliers, who have a direct selling relationship with the OEMs. These suppliers not only manufacture automotive components but also may obtain sub-assemblies, individual components, and/ or materials from lower-tiered suppliers. Tier 2

Suppliers that conduct business with Tier 1 suppliers are designated as Tier 2. They provide the necessary goods that contribute to the final automotive components made by Tier 1 suppliers.

Tier 3

Beyond Tier 2, the supply chain extends to include manufacturers of machined goods and raw material providers, all essential in the upstream production of auto components.

b. OEMs (Original Equipment Manufacturers)

OEMs lead the manufacturing process, assembling final products from components procured directly from upstream suppliers. They also design, develop, and engineer new models, incorporating advanced technologies and meeting consumer and regulatory demands.

All motor vehicle manufacturers are OEMs.

c. Downstream

• **Dealers:** entities that engage in the sale, service, and provision of spare parts for various types of vehicles and act as a bridge between OEMs and consumers.

Upstream

• The aftermarket: comprises sellers of automotive spare parts. The spare parts are sourced from component suppliers.

It can therefore also be said that growth of the automotive component industry is intrinsically tied to the advancements of original equipment manufacturers (OEMs).

Environmental and Social Impacts of the Automotive Value Chain

The automotive sector faces significant environmental challenges across its value chains, with considerable scope for reducing carbon emissions not only during vehicle use but also across the manufacturing and assembly stages.

Table 2: Environmental impacts of the value chain

Metallic materials constitute 80% of vehicles' weight.

- Steel production relies on coal, emitting CO₂ and air pollutants like nitrogen and sulphur oxides.
- Aluminium production is energy-intensive, leading to indirect GHG emissions and the release of perfluorocarbons and water pollutants.



• Plastic production contributes to GHG emissions throughout its lifecycle, including during raw material extraction, processing, and transportation.

The shift towards EVs changes emission profiles, with increased use of materials like batteries, potentially raising life-cycle emission proportions.



- Energy consumption is critical in automotive manufacturing, extending beyond the paint shop to machining, assembly, and other energy-intensive stages, all demanding substantial electricity and natural gas.
- Water consumption in automobile manufacturing is substantial, especially in processes such as surface treatment, coating, cooling, and rinsing, requiring significant amounts.
- Mishandling and improper disposal of hazardous materials, including paints, solvents, and oils, can result in environmental pollution, health hazards to locals, and damage to natural resources.

Downstream

- Water contamination via discharge of surfactants, detergents, dust, mud, oil, and grease poses toxicity risks to animals and disrupts nutrient balances in water bodies due to the presence of phosphates found in some acids.
- High water usage during car washing activities, ranging from 180 to 350 litres per wash, exacerbates water scarcity concerns.
- Air emissions from spray booths, maintenance workshops, and welding fumes degrade air quality, posing respiratory health risks.
- The generation of solid waste, including used tyres, packaging materials, and hazardous wastes like mineral oils, paints, organic solvents, and electronic waste, requires proper management to prevent environmental harm.

Apart from environmental impacts, the value chain faces various social challenges, such as inadequate oversight and the use

of hazardous materials, impacting workers and communities. Details are highlighted in Table 3.



Table 3: Social impacts of the value chain

Human Rights

- Poor employment conditions, such as low wages, long hours, compulsory overtime, and restrictions on freedom of association, contribute to human rights concerns. Issues like child labour and forced labour are also present.
- Non-permanent workers, prevalent in supplier factories and auto sector brands' factories, likely face unequal treatment in Occupational Safety and Health (OSH) policies compared to permanent workers.
- Weak or non-availability of human rights policies with limited implementation, along with insufficient grievance mechanisms for addressing human rights violations.

Health and Safety

- Workers are at risk of being struck or trapped by moving machinery parts due to poor health and safety standards, alongside facing unsafe infrastructure.
- Exposure to unsafe working conditions, including slips, trips, falls on oily or cluttered floors, and exposure to harmful substances like solvents and paints.
- Workers are exposed to hazardous substances and chemicals without adequate safety protocols, leading to both short and long-term health risks.
- Lack of sufficient information and training provision for workers and employees regarding health and safety issues exacerbates risks, especially when provided in languages inappropriate for the workforce.

Given these extensive challenges, sustainability is not just an option but an imperative for the automobile industry's value chain. Focusing on environmental and social factors is crucial for OEMs to mitigate these risks, ensure long-term viability, and align with global standards and consumer expectations for responsible production.



ECO EDGE - INTEGRATING SUSTAINABILITY IN VALUE CHAINS OF COMPANIES



10 | Integrating Sustainability in the Automobile Value Chain



Integration of sustainability within the automotive sector and its value chain require practical strategies and actionable inputs. Eco Edge, developed by the CII-ITC Centre of Excellence for Sustainable Development, is a significant endeavour that aims to support companies and their value chains (upstream and downstream) incorporate sustainability into their operations.

The program provides comprehensive training on value chain sustainability, conducts baseline assessments, offers gap reports and finally awards maturity-based certificates. The program also ensures that the sustainability practices of sourcing companies and their Value Chain Partners (VCPs) align with both domestic and global ESG compliance.

The main objectives of the program are:

- Help companies manage their scope 3 emissions.
- Improve the sustainability performance of value chains including MSMEs.
- Prepare Indian companies on domestic and global ESG compliance.
- Create a multiplier effect by having companies engage with their Value Chain Partners (VCPs), who then propagate these efforts to their own value chain partners.
- Establish a network of sustainable vendors.

The Eco Edge framework addresses environmental and social aspects through four key focus areas: Decarbonization, Circularity, Health & Safety, and Human Rights.

Focused on the automotive sector in its pilot phase, the program has successfully engaged with 3 Original Equipment Manufacturers (OEMs) and 150 VCPswhich includes upstream comprising auto component suppliers and downstream comprising automobile dealers.

Eco Edge Anchor Point

The focal point of Eco Edge's engagement is the sourcing company, typically represented by the OEM in the automotive sector. As part of the program, the sourcing company can undergo assessment on environmental and social parameters as well as its engagement practices with its VCPs for sustainability.

Sourcing companies are chosen as the anchor point for the program due to their extensive global reach, resources, potential for innovation and research and global mandates which requires sourcing companies to disclose environmental and social practices of their value chains. They support partners of all sizes, from Micro, Small, and Medium Enterprises (MSMEs) to larger corporations, through collaborative finance options and capacitybuilding initiatives aimed at promoting environmental and socially responsible practices among their VCPs. Moreover, sourcing companies influence VCPs via practices by integrating procurement sustainability mandates into the process, serving as criteria for partner selection and maintaining business relations, verified through risk assessments and audits.

The Eco Edge process provides OEMs with insights into their VCPs performance, both upstream and downstream. This data-driven approach enables OEMs to strategize with both upstream and downstream partners to enhance overall value chain performance. Through Eco Edge, VCPs receive guidance on fulfilling regulatory compliance and meeting sourcing company expectations. Fostering



coordination and collaboration between sourcing companies and VCPs, Eco Edge

facilitates the exchange of data and best practices.

As part of the Eco Edge process, several best practices of assessed OEMs \exists have been identified:

- Upholding stringent sustainability standards outlined in the Code of Conduct for Business Partners, covering various areas such as greenhouse gas emissions, resource efficiency, waste management, and ethical treatment of animals.
- Implementing OECD's "Due Diligence Guidance for Responsible Business Conduct" and introducing a Raw Materials Due Diligence Management System for sustainable sourcing of materials.
- Establishing a Supply Chain Grievance Mechanism to investigate suspicions of sustainability breaches, accessible through the whistleblower system.
- Implementing proactive initiatives such as the Code of Conduct for Business Partners, media screenings, and a sustainability rating system to ensure adherence to sustainability standards. Conducting risk assessments, and mandating sustainability performance to ensure adherence to standards and mitigate risks effectively.

Figure 3: OEMs best practices

In this section, the findings from the assessment of 150 Value Chain Partners on environmental and social parameters are presented. Graphs and brief explanations

are utilized to emphasize the potential role these focus areas can play in enhancing sustainability within industries and value chains.

ENVIRONMENT

Eco Edge assess emissions data and reduction goals for scope 1, 2, and 3 emissions annually, analysing trends and proposing actions for reduction. It evaluates the incorporation of renewable energy into the energy mix and efforts to reduce emissions and optimize transportation.

Additionally, Eco Edge identifies and assesses climate risks in the automotive sector, recommending mitigation measures

through methodologies like scenario analysis and stakeholder engagement.

It encourages water conservation, enhances wastewater treatment, and promotes ethical sourcing practices, fostering sustainability. Furthermore, Eco Edge guides value chains on waste management practices, circular economy principles, resource efficiency ensuring compliance and minimizing environmental impact through tailored recommendations.





• Targets entail reducing greenhouse gas (GHG) emissions by reducing reliance on fossil fuels and transitioning to cleaner energy sources to mitigate climate change impact.

Circularity

• Emphasizes minimizing environmental impacts throughout the supply chain, including resource conservation during raw materials extraction and eco-friendly disposal methods at the end of product life cycles.



80%

Decarbonization

Automobile manufacturers need to address emissions across three scopes:



Figure 5: Scope Emissions Definitions

As per results of the assessments, 42% of the VCPs are currently engaged in actively monitoring their scope 1 and 2 emissions,

while 29% of them have also initiated target setting for reducing their overall emissions.





Amongst the assessed VCPs one is striving to achieve net zero emissions by 2040, aligning with the Science Based Targets Initiative (SBTI) to reduce scope emissions.







Figure 8: Adoption of Renewable Energy

Transitioning to renewable energy sources, such as solar and wind power, presents an opportunity to reduce carbon footprints in both manufacturing and operational processes. 64% of VCPs have integrated renewable energy into their overall energy mix. This strategic move aims to diminish reliance on fossil fuels and curb carbon emissions associated with manufacturing operations. Notably, these partners have highlighted benefits such as cost savings and decreased carbon emissions resulting from this transition.



Figure 9: VCP best practice for renewable energy adoption

Identifying and assessing climate risks in the automotive sector involves recognizing potential threats from factors like extreme weather events, regulatory changes, consumer preferences for sustainable transportation, and supply chain disruptions due to climate impacts. This process assesses the risks' potential impact on manufacturing, product development,

supply chain management, and market demand. By doing automotive SO, industries can develop strategies to mitigate risks, encourage resilience, and seize opportunities in a shifting climate landscape. 58% of VCPs have proactively identified climate-related risks within their overall risk management process. Additionally, a subset of these partners has taken mitigation actions in response to the identified risks.



Figure 10: Identification of Climate Related Risks

Some of the climate risks identified by the VCPs include:

Water scarcity could disrupt the automobile painting process

Deforestation for producing packaging materials, such as cartons, may lead to resource depletion, potentially delaying the dispatch of finished goods

Dependence on non-renewable energy sources for operations may deplete natural resources, leading to increased energy costs and rendering the business financially unsustainable

Figure 11: VCPs identified climate risks list



Some of the mitigation measures taken by the VCPs in response to the above identified risks are highlighted below:

Implemented water recycling and reuse systems in the automobile painting process to mitigate water scarcity risks

Explored alternative plastic packaging materials sourced from recycled sources to reduce dependence on virgin material

Transitioned to renewable energy sources solar and wind power to decrease
reliance on non-renewable energy

Figure 12: VCPs mitigation measures for identified climate risks

Water Management

In the automotive sector, water plays a key role throughout manufacturing processes, including washing, surface treatments, coatings, rinsing, paint spray booths, cooling, and air conditioning systems. To manage water responsibly and meet regulatory requirements, the industry could employ integrated water and wastewater management strategies. These efforts involve water conservation, efficient resource utilization, pollutant removal, and proper disposal or recycling.



Figure 13: Water Management

As per the data presented in the accompanying figure, 79% of the VCPs engage in recycling or reusing water as part of their total water consumption. Some of them engage in wastewater treatment prior to discharge.

Moreover, some utilize the recycled water for gardening or related purposes. Furthermore, a few of them have implemented Zero Liquid Discharge (ZLD) systems within their facilities.



Figure 15: Zero Liquid Discharge Definition



Raw Material Sourcing

Sustainable raw material sourcing focuses on minimizing negative environmental, social, and economic impacts. This includes using materials from ethical suppliers, prioritizing sustainable options like recycled metals and bio-based plastics, and reducing waste through recycling initiatives.

The accompanying graph highlights that 61% of the VCPs incorporate recycled or reclaimed raw materials into their product portfolios. This promotes circular economy principles, contributing to resource conservation and waste reduction efforts.



Figure 16: Raw Material Sourcing

Single Use Plastics

In the automotive sector, Single-use Plastics (SUPs) have notable environmental implications. Eco Edge guides the value chains through strategies to phase them out which involves exploring alternatives like material substitution and product redesign while engaging suppliers to adopt eco-friendly practices. It keeps a close eye on its efforts, assessing commitments, targets, and third-party audits to eliminate SUP usage. Its tailored recommendations and roadmaps empower them to transition towards sustainable alternatives, fostering environmental responsibility within their operations.

It is evident that only 34% of the VCPs have implemented policies, procedures, and relevant measures to ban or phase out SUPs from their facilities. The remaining VCPs are encouraged to take necessary actions to ensure alignment with government compliance regarding SUP usage.



Figure 17: Phase out SUP

Waste Management

In the automotive sector, waste management involves systematically handling and disposing of various waste types generated throughout the product lifecycle and supply chain. Types of waste produced within the automotive sector includes scrap metal, used oil, scrap tyres, paint sludge, and plastic trimmings. To ensure proper waste management, the



Figure 18: Waste Management



automobile sector can minimize waste generated by optimizing resource use, and reducing environmental impact through strategies like recycling, reusing, treatment of hazardous waste, and compliance with waste management regulations.

According to the findings of Eco Edge, it is observed that 91% of the VCPs are actively monitoring their generated waste, utilizing either tools or manual methods. Furthermore, 71% of them are diverting their waste through recycling or reuse initiatives.



Figure 19: VCP best practice for recycled packaging

SOCIAL

The automotive sector needs to actively parameters such address social as employee wellbeing, healthcare provisions, and human rights policies to ensure a holistic approach to sustainability. By prioritizing factors like Total Incident Frequency Rate (TIFR), Lost Time Incident Rate (LTIFR), Occupational Illness Fatality Rate (OIFR), near miss reporting, and emergency preparedness, industries can foster safe working environments and mitigate risks. Embracing gender diversity, supporting differently abled individuals, implementing fair remuneration practices, establishing transparent and remedy mechanisms are important steps towards upholding human rights within the industry. These initiatives not only enhance employee satisfaction and safety but also contribute to a more ethical and sustainable automotive sector overall.

Eco Edge helps companies, and their VCPs in enhancing health and safety practices and promoting human rights within their operations. The initiative focuses on supporting businesses in improving their standards related to health and safety as well as upholding human rights principles throughout their value chain.

Health and Safety

Targets reducing health and safety risks in the workplace by implementing comprehensive safety protocols and promoting a culture of well-being and prevention.

Human Rights

Emphasizing the importance of respecting human rights throughout supply chains and conducting due diligence to identify, address, and mitigate adverse human rights impacts that may occur at any level of the supply chain.

Figure 20: Eco Edge Social Focus Areas



Implementing safety protocols and promoting a culture of well-being, along with ensuring human rights throughout the value chain, strengthens sustainability in the automotive sector by safeguarding employees, enhancing operational resilience, and developing stakeholder trust.

Eco Edge conducts comprehensive assessments of workplace hazard identification processes, risk assessments, the communication of and risks employees across value chains. It assesses the employee well-being culture including stress management, fitness, medical and health facilities, and retirement benefits throughout value chains. Additionally, Eco Edge monitors industries and value chains for injury frequency rates and near misses and provides recommendations for mitigation. The initiative also assesses human rights aspects such as child labour, equal opportunity, freedom of association, and minimum wage policies throughout the value chain, along with the assessment of stakeholder engagement on human rights issues. Eco Edge ensures equal opportunity and gender diversity throughout value chains and assesses the inclusion of differently abled employees for compliance with the Rights of Persons with Disabilities Act, 2016. Moreover, it assesses the process of remedy mechanisms for internal and external stakeholders concerning human rights violations throughout the value chain.



Figure 21: Employee well being

Health and Safety

According to the Eco Edge assessment, a significant portion of VCPs prioritize employee well-being initiatives. Specifically, 68% of them help with work-related stress management, while 40% provide fitness facilities such as gyms and yoga classes on-site. Additionally, 46% of the VCPs have flexible working hour policies to support childcare and elderly care needs and 77% of them offer regular health check-up facilities. A notable 86% of them provide retirement benefits like Provident Fund (PF), Employee State Insurance (ESI), and Gratuity to their employees and workers.

These findings indicate a positive trend towards prioritizing employee health, wellbeing, and work-life balance within value chains. By offering such initiatives, value chain partners not only enhance employee



satisfaction and productivity but also demonstrate a commitment to fostering a supportive and inclusive workplace culture.

Figure 22 highlights that only 24% of VCPs have established processes for identifying health and safety risks and implementing corresponding strategies. Additionally, a mere 21% of them provide training to employees and workers regarding health and safety risks.

These outcomes are a matter of concern, highlighting a gap in health and safety practices within the VCPs. Without proper identification of risks and training for employees, there is an increased likelihood of workplace accidents and injuries. Addressing these deficiencies through



Figure 22: OHSMS

improved risk identification processes and comprehensive training initiatives can significantly enhance workplace safety, reduce accidents, and ultimately improve overall employee well-being and productivity.



Human Rights

Figure 23: Human Rights Policy Coverage

An overwhelming majority of VCPs, specifically 95%, have implemented policies addressing child and forced labour.

Additionally, 90% of these partners have established equal opportunity policies within their human rights framework. 81% of VCPs provide their employees and workers with the freedom of association and collective bargaining rights, while 85% have policies concerning minimum wages in their human rights policy.

These results indicate a positive commitment among VCPs towards upholding fundamental human rights principles. By implementing such policies, these partners contribute to creating fair and ethical working environments, promoting equality, and protecting the



rights of their employees. Additionally, these initiatives can enhance stakeholder trust, mitigate reputational risks, and foster longterm sustainability within the value chain.

Diversity and Inclusion

Only 24% of the VCPs have women employees comprising more than 10% of the total workforce. Additionally, 33% of these partners have women workers constituting over 10% of their workforce.

These results highlight the evident gender gap among the VCPs. Increasing the representation of women in the workforce can lead to diverse perspectives, improved decision-making, and enhanced innovation. By prioritizing gender diversity and inclusion initiatives, VCPs can create a more equitable workplace and contribute to sustainable business growth.



Figure 24: Women representation (above 10%) in the workforce



Figure 25: VCPs best practice for diversity and inclusion

As per figure 27, 57% of the VCPs have integrated differently abled individuals into their overall workforce. Additionally, 59% of these partners have made infrastructural adjustments to accommodate differently abled employees.

These findings indicate a positive trend towards inclusivity and accessibility within the VCPs. By actively employing differently abled individuals and making necessary accommodations, these partners demonstrate a commitment to diversity and equal opportunities in the workplace.







37% of the VCPs address grievances raised by stakeholders, and subsequently implement relevant modifications to address these complaints.

These findings suggest a significant commitment among VCPs to address stakeholder concerns and improve their processes accordingly. By actively responding to grievances and making necessary adjustments, these partners demonstrate responsiveness, accountability, commitment and а to continuous improvement. Such actions can enhance trust, strengthen relationships with stakeholders, and contribute to long-term sustainability within the value chain.



Figure 27: Grievance Mechanism



SUSTAINABILITY INSIGHTS IN THE AUTOMOTIVE SECTOR

The following figure showcases the results and best practices identified from the assessment of 150 Value Chain Partners (VCPs) on select environmental and social indicators.











SOCIAL

Workforce Diversity and inclusion







accommodate them

*Best practice identified from 3 different VCPs





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WAY FORWARD





As the world grapples with the convergence of economic progress and sustainable development, it is increasingly imperative for corporations to integrate sustainability into their fundamental business strategies including value chains. Nations worldwide are implementing regulations mandated thorough evaluations and declarations from companies on environmental and human rights practices within their own operations as well as in value chains. The following graphic illustrates this global trend:



Figure 28: List of domestic and global value chain mandates

In this landscape of increased accountability, Eco Edge acts as a catalyst for fostering sustainable practices throughout companies' value chains. To this end, the initiative offers the following broad recommendations in the automotive sector, aimed at propelling companies beyond traditional procurement practices and towards building collaborative networks for sustainability with their value chain partners. These recommendations not only foster continuous improvement but also pave the way for a more sustainable future:

Table 4: Eco Edge recommendations

Dedicated Resources for Sustainability Integration Allocate dedicated human and financial resources for sustainability efforts within the value chain. Such resources are crucial for enhancing engagement with VCPs, implementing capacity-building programs, conducting regular monitoring, and enforcing compliance with sustainability standards.

Financial resources can be leveraged through banks or other financial institutions.





Training programs can be conducted for VCPs and their procurement teams. These programs ensure that all partners are equipped to meet evolving market demands and maintain high standards of quality and compliance.

By understanding key environmental and social concepts, procurement teams are better equipped to develop sustainable procurement practices and policies. This holistic approach ensures that sustainability becomes a core consideration in all aspects of the value chain and can further create a trickle-down effect that can influence even the most remote tiers of their value chains.

The training program can be done in house or via consultants or through third parties such as CII.

Sustainable Procurement as a Strategic Focus

Sustainable procurement practices play a vital role in driving environmental responsibility within the automotive sector. By awarding contracts to vendors who prioritize sustainability, OEMs can leverage their purchasing power to incentivize positive change throughout the value chain.

This approach encourages suppliers to adopt eco-friendly practices and align with the OEM's sustainability objectives.



Risk Assessment and Continuous Improvement

Sustainability requires a proactive approach. Regularly assessing risks and monitoring the performance of VCPs is critical. By working collaboratively with partners, OEMs can develop targeted mitigation strategies to address these risks.

Digital tools can play a crucial role in this process. They enable efficient data collection and analysis, facilitate transparent communication between partners, and support the ongoing assessment of sustainability initiatives. An example of such a system is that of a global OEM which utilizes Sustainability Ratings to carefully select suppliers based on strict environmental, social, and compliance standards.





Recognition and Reporting for Transparency

Recognition programs can be established to acknowledge and celebrate VCPs who demonstrate exemplary efforts in reducing their environmental and social impact.

Additionally, encouraging partners to publicly report on their sustainability metrics promotes transparency and fosters accountability across the supply chain. This transparency is vital for building consumer trust and loyalty in today's market, where Environmental, Social and Governance aspects (ESG) are increasingly scrutinized.



Leveraging ESG Scores to Attract Investment

In today's scenario, ESG scores are key for attracting investors, as they signal a company's sustainability efforts. OEMs and their partners can enhance these scores and attract eco-focused investors by implementing the above-mentioned strategies and using third-party assessments like Eco Edge.

As businesses navigate the complexities of today's global marketplace, the imperative for sustainable supply chain management has never been clearer.

By embracing Eco Edge, companies can not only fulfil their ethical responsibilities but also unlock new opportunities for growth and resilience in an increasingly competitive landscape.

As we look to the future, it is evident that sustainable supply chains are not just a business necessity but a cornerstone of a more equitable and prosperous world for all.



ABOUT ECO EDGE



Integrating Sustainability in Value Chains of Companies

Integration of sustainability across value chains to build resilience is need of the hour. Value chains which also include SMEs have massive environmental and social footprint. This includes emissions, unsafe working conditions, issues around wages, inequality, waste handling etc. These issues pose ESG risks to sourcing companies. Eco Edge, an initiative of CII-ITC Centre of Excellence for Sustainable Development intends to help companies manage these risks in an integrated manner by working with their value chains.

The Eco Edge program offers a structured, maturity-based certification to recognize companies and their Value Chain Partners (VCPs) for their sustainability efforts. The program features three levels of certification, as detailed below.





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CII-ITC Centre of Excellence for Sustainable Development (CESD) is one of CII's 11 Centres of Excellence. The Centre is a not-for-profit, industry-led institution that helps businesses become sustainable organisations. It is on a mission to catalyse innovative ideas and solutions, in India, and globally, to enable business, and its stakeholders, in sustainable value creation. Its knowledge, action and recognition activities enable companies to be future ready, improve footprints profiles, and advocate policymakers and legislators to improve standards of sustainable business through domestic and global policy interventions.

The Centre leverages its role of all-inclusive ecosystem player, partnering industry, government, and civil society. It has been a pioneer of Climate Change, environment management systems, biodiversity mapping, sustainability reporting, integrated reporting, and social & natural capital valuation in India, thus upgrading business in India to sustainable competitiveness. The Centre operates across the country and has also been active in parts of South and South-East Asia, Middle East, and Africa. It has held institutional partnerships and memberships of the United Nations Global Compact, Global Reporting Initiative, International Integrated Reporting Council, Carbon Disclosure Project, development agencies of Canada, the USA, the UK, and Germany.

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