



Cultivating The World





## MESSAGE FROM THE CHAIRMAN



**Mallika Srinivasan**  
Chairman & Managing Director

It is my privilege to address you, representing a company deeply dedicated to catalyzing positive change and sustainable development in the communities we serve. We firmly believe that our success is not solely defined by financial metrics, but by the meaningful impact we create on the society and the environment. Our journey towards a brighter future begins with a steadfast commitment to our core values, Corporate Social Responsibility (CSR) and ethical business practices. Aligned with national sustainable development goals and the United Nations Sustainable Development Goals (UN-SDGs), our CSR initiatives span a broad spectrum of activities aimed at tackling critical societal issues and fostering inclusive growth.

Even before formal regulatory frameworks were established, we have consistently strived to enhance sustainability across our operations.

We believe that we carry the profound responsibility of minimizing our environmental impact beyond mere compliance. We are committed to reducing our carbon footprint and conserving precious natural resources by integrating innovative solutions at every stage of our manufacturing processes and beyond. By prioritizing initiatives such as infrastructure investments, adoption of renewable energy sources, and waste reduction measures, we are actively working towards a cleaner, greener, and more sustainable future.

From conducting health camps and supporting eye care initiatives to spearheading education and empowerment programs, we are driven by a mission to make a tangible difference in the lives of individuals and communities. Through strategic partnerships with esteemed organizations like the Sankara Nethralaya Eye Research Foundation and the establishment of our own J Rehab Centre, we are actively creating opportunities for marginalized populations and nurturing a culture of inclusivity.

Looking ahead, we remain steadfast in our commitment to upholding the highest standards of corporate governance, transparency, and integrity. We understand that our actions today will shape the world of tomorrow, and we are fully dedicated to ensuring that our legacy is one of enduring positive impact and sustainable growth.

Together, we will continue to cultivating a better world, one community at a time.

## About This Report



Sustainability is at the core of what we do and how we operate. In cognizance of our efforts to create long-term impact, we welcome our stakeholders to our 2<sup>nd</sup> Annual Sustainability Report. Through this report, we aim to showcase our sustainability initiatives as well as the efforts to address critical sustainability concerns. We remain committed to surpassing benchmarked excellence as a leading, integrated, research-led global tractor manufacturing company. Our Sustainability Report also communicates our consistent efforts to ensure transparency and integrity across our business activities.

### **Reporting Boundary (GRI 2-2)**

This report has been prepared with reference to the GRI Standards. Relevant sustainability information can be found in the report, providing all the stakeholders with information on our sustainability performance. Data collated across all our manufacturing plants, and corporate functions listed below are included in this report.

### **Reporting Period (GRI 2-3)**

The Report includes data covering the financial year from April 2023 to March 2024. This Sustainability Report was published on 15-May-2024

## Restatements of information [GRI 102 – 4]

A restatement of information is not applicable.



### Plant:

Madurai Plant (MDU);  
Doddaballapur Plant (DBR)  
Sembiam Plant (SBM);  
TAFE Gears Division (TGD);  
Bhopal Plant – Eicher Tractor Bhopal (ETB);  
Alwar Plant – Engine Business Unit (EBU);  
Parwanoo Plant – Gear Business Unit (GBU);  
Turkey Plant is currently not in the scope of this report

### External Assurance [GRI 2-5]

The data in this report on production, material consumption, operational aspects, etc., including our financial reporting systems, are audited by external auditors.

The additional metrics presented in this report, including improvement projects and case studies, are supported by verifiable data and are open to verification or audit.

However, it is important to note that for the current year, the report has not undergone external assurance by a third-party provider

### Tractors and Farm Equipment Limited

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## **Purpose**

### Cultivating The World

## **Sustainably**

### **VISION**

To achieve the distinction of being the first choice among the farming community of India and ensure a growing presence in international markets through setting leadership standards of performance and customer care in the agricultural machinery business.



## Core Values

TAFE's core values define our beliefs, principles and practices. It outlines the conduct of business in our everyday lives, dictates our overarching vision and corporate strategy.

The new core values logo is a symbolic depiction of progress, energy and integrity. It vividly portrays the value sets practiced within the organization.

The outer wheel indicates enduring progress and the inner chakra infuses whorls of energy that permeate the entire organization. The inner white space attributes justice and fairness, the perfect canvas for inscribing our values.



Enriching Lives. Empowering Dreams



## Our Corporate Profile

(GRI 2-1, 6, 7, 8)



TAFE - Tractors and Farm Equipment Limited, is an Indian tractor major incorporated in 1960 at Chennai, India, with an annual turnover in excess of INR 12,500 crores. One of the largest tractor manufacturers in the world and the second largest in India by volumes, TAFE sells over 180,000 tractors annually. TAFE is also a significant shareholder in the AGCO Corporation, USA - a US \$14.4 billion tractor and agricultural equipment manufacturer.

TAFE has earned the trust of customers through its range of products that are widely acclaimed for quality and low cost of operation. A strong distribution network of over 1600+ dealers effectively backs TAFE's four iconic tractor brands - Massey Ferguson, TAFE, Eicher Tractors and IMT. TAFE acquired the Serbian tractor and agricultural equipment brand IMT - Industrija Mašina i Traktora in 2018. TAFE exports tractors to over 80 countries, powering farms in Asia, Africa, Europe, the Americas, and Russia.

Besides tractors, TAFE and its subsidiaries have diverse business interests in areas such as farm-machinery, diesel engines and gensets, agro-industrial engines, engineering plastics, gears and transmission components, hydraulic pumps and cylinders, vehicle franchises and plantations.

From a humble beginning with just one tractor model in 1961, TAFE today is recognized as a high-quality mass-manufacturer with an extensive product range to meet the expectations of every farmer and every farm mechanization need. TAFE's R&D facilities are centers of excellence renowned for their innovative design and engineering expertise and have been recognized by the Department of Scientific and Industrial Research, Government of India.

Besides tractors, TAFE and its subsidiaries have diverse business interests in areas such as farm-machinery, diesel engines and gensets, agro-industrial engines, engineering plastics, gears and transmission components, hydraulic pumps and cylinders, vehicle franchises and plantations.

TAFE believes in sound corporate governance and is reputed for being a consistent profit-making company and an ethical organization. TAFE's commitment to

## Business Relationships with Value Chain Partners (GRI 2-6)

Apart from tractor manufacturing, we provide comprehensive after-sales services to support our customers. Primarily serving the agricultural market, our tractors fulfill utility requirements, specialized operations, and material handling tasks.

We hold a significant presence in the Indian market, supported by its extensive dealership and service center network. Our network of 1,600 authorized dealerships plays a crucial role in selling and supporting its products, with some having sub-dealerships and branches for better customer service.

Our authorized service centers ensure optimal performance through maintenance, repairs and warranty services, staffed by trained technicians. Downstream operations include entities supplying genuine spare parts, financial institutions offering financing options, and ultimately, farmers utilizing our tractors for agricultural and utility activities. JFarm Services, one of our novel initiatives, enhances access to farm mechanization solutions through tractor and equipment rentals, catering to small and marginal farmers who may not afford tractor ownership. Our sustainability achievements, targets, and actions are available in our official website.



**TAFE** 

**TAFE** 

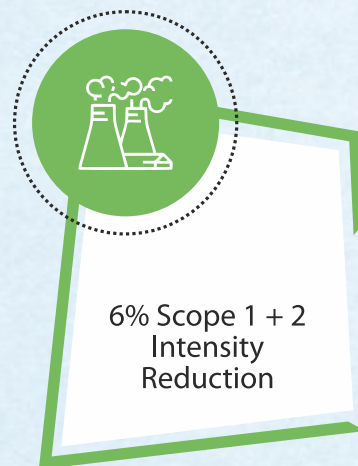
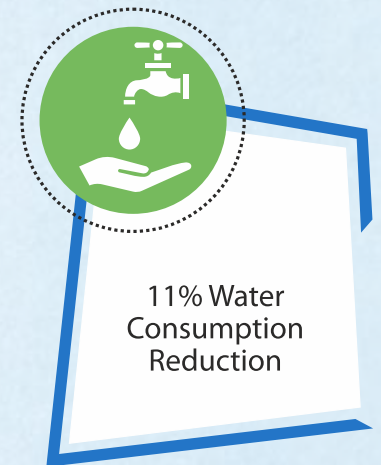
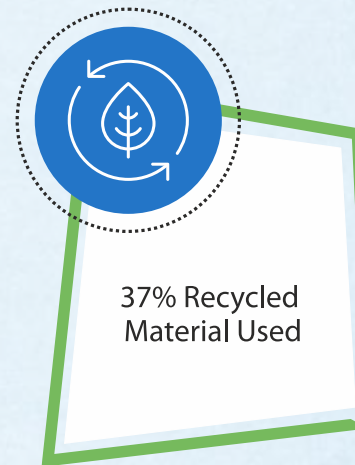
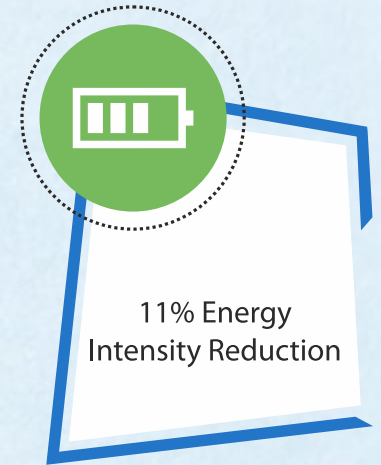
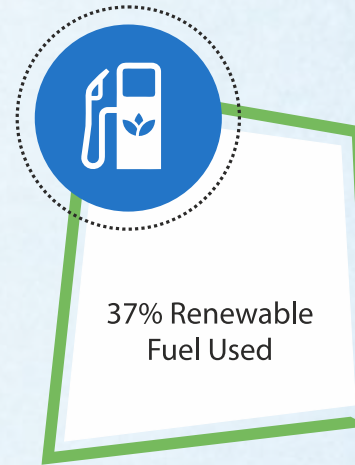
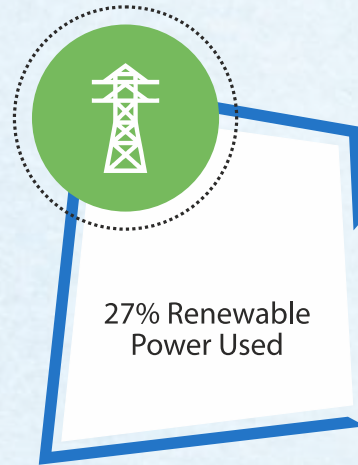
**65** 

**YEARS**

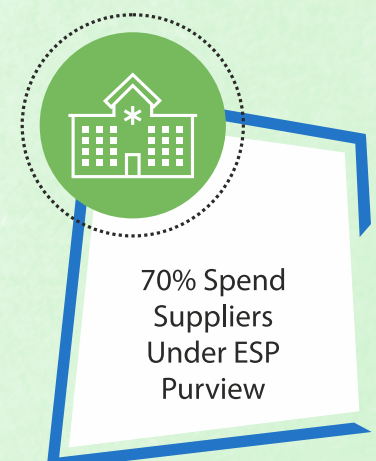
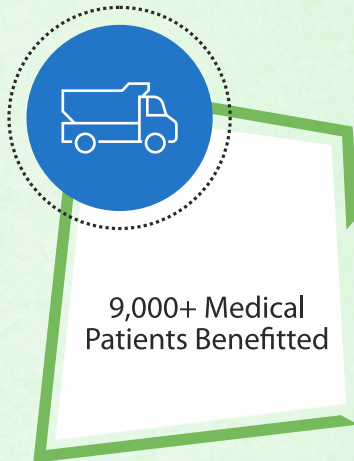
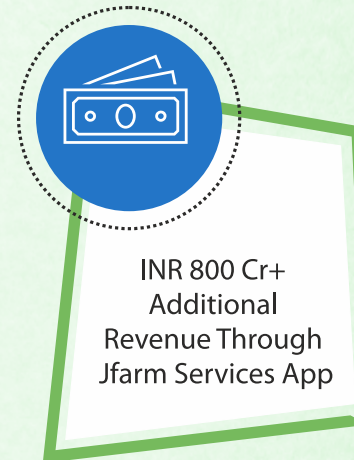
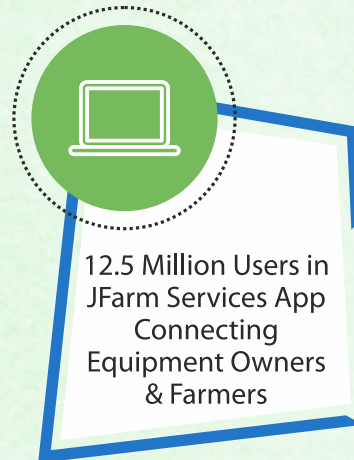


CELEBRATING 65 YEARS OF CULTIVATING THE WORLD  
**DESH. DHARTI. TAFE.**

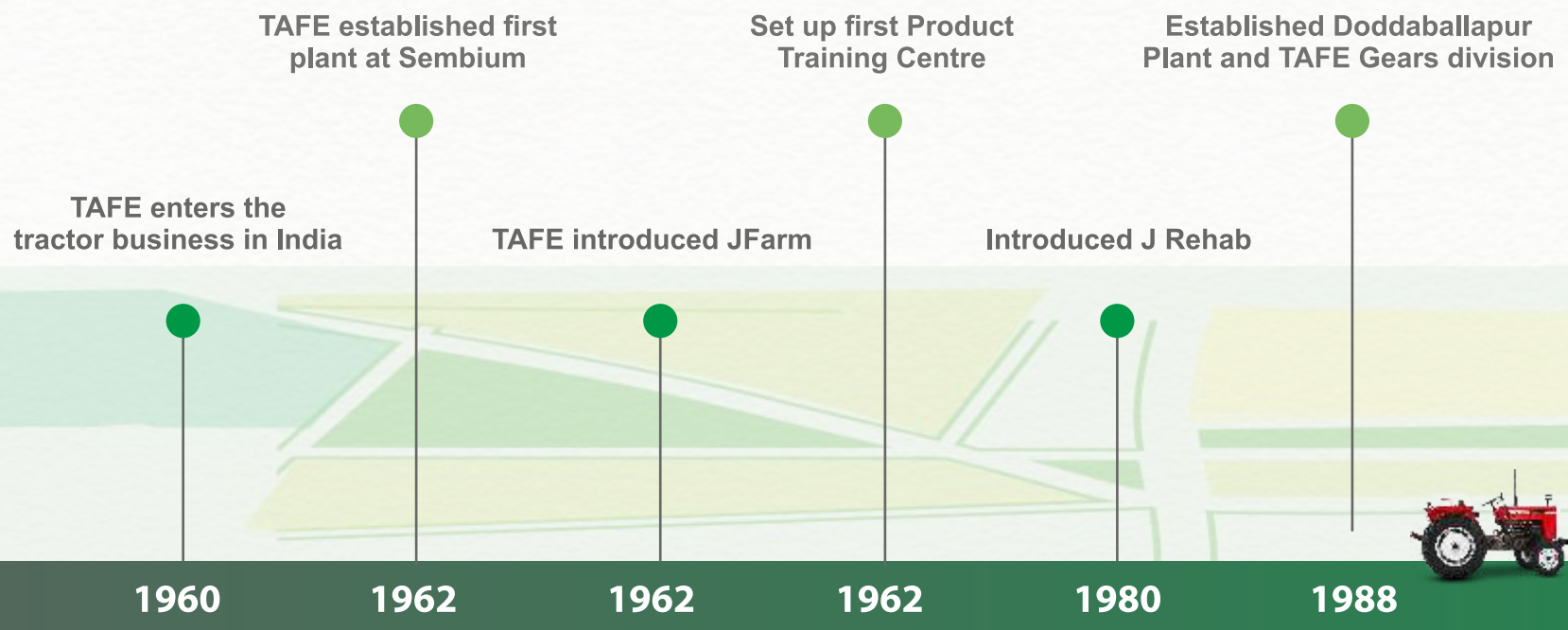
## Highlights of FY24



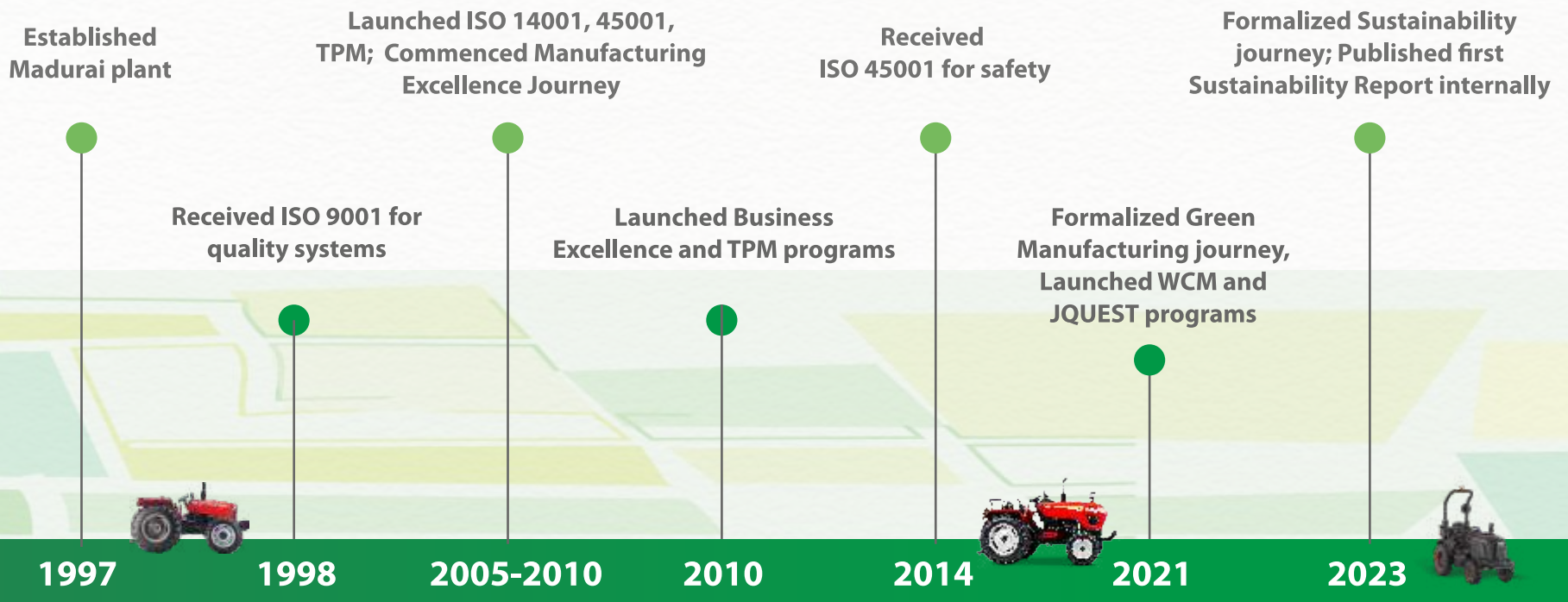
## Highlights of FY24



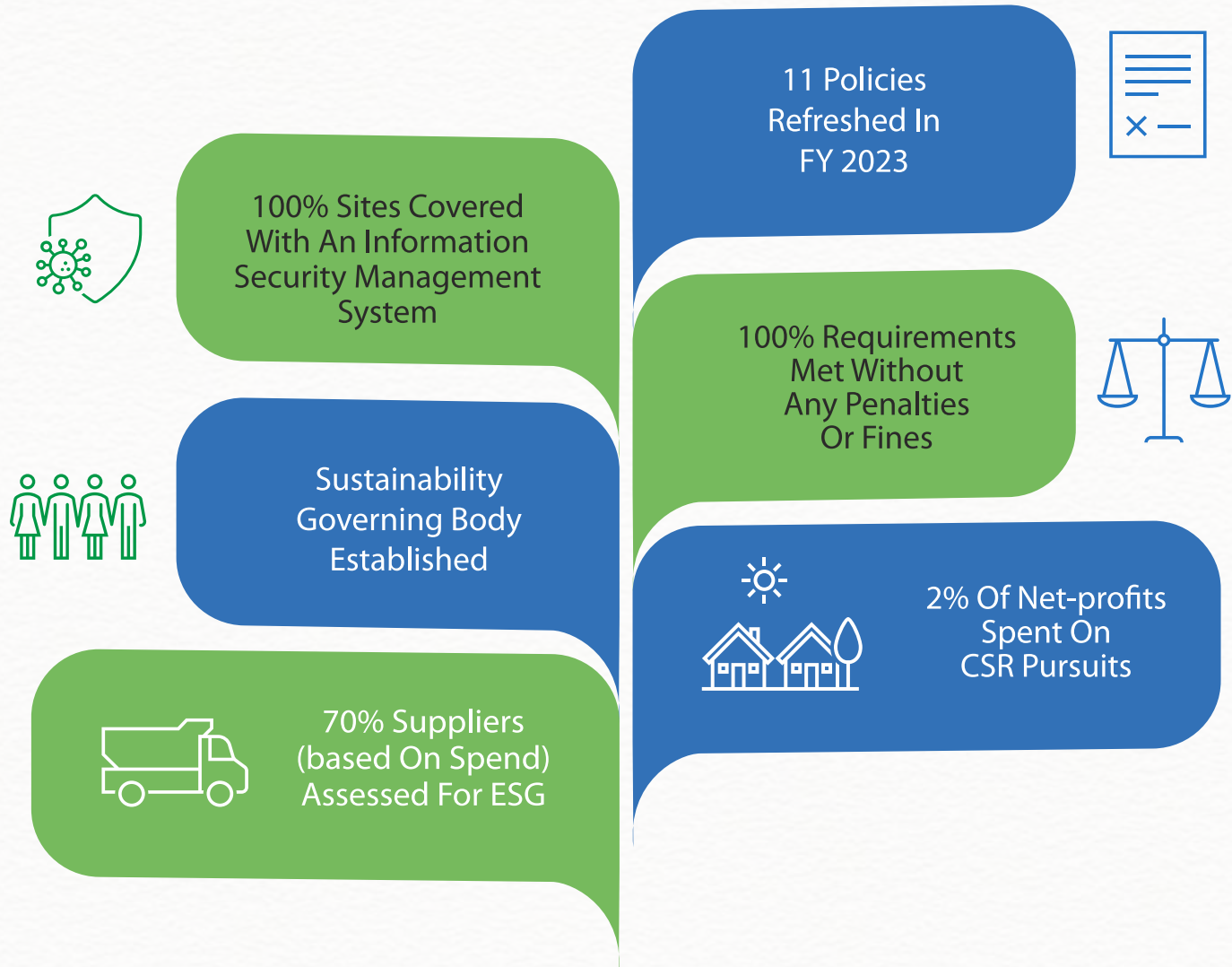
# Our Journey



# Our Journey

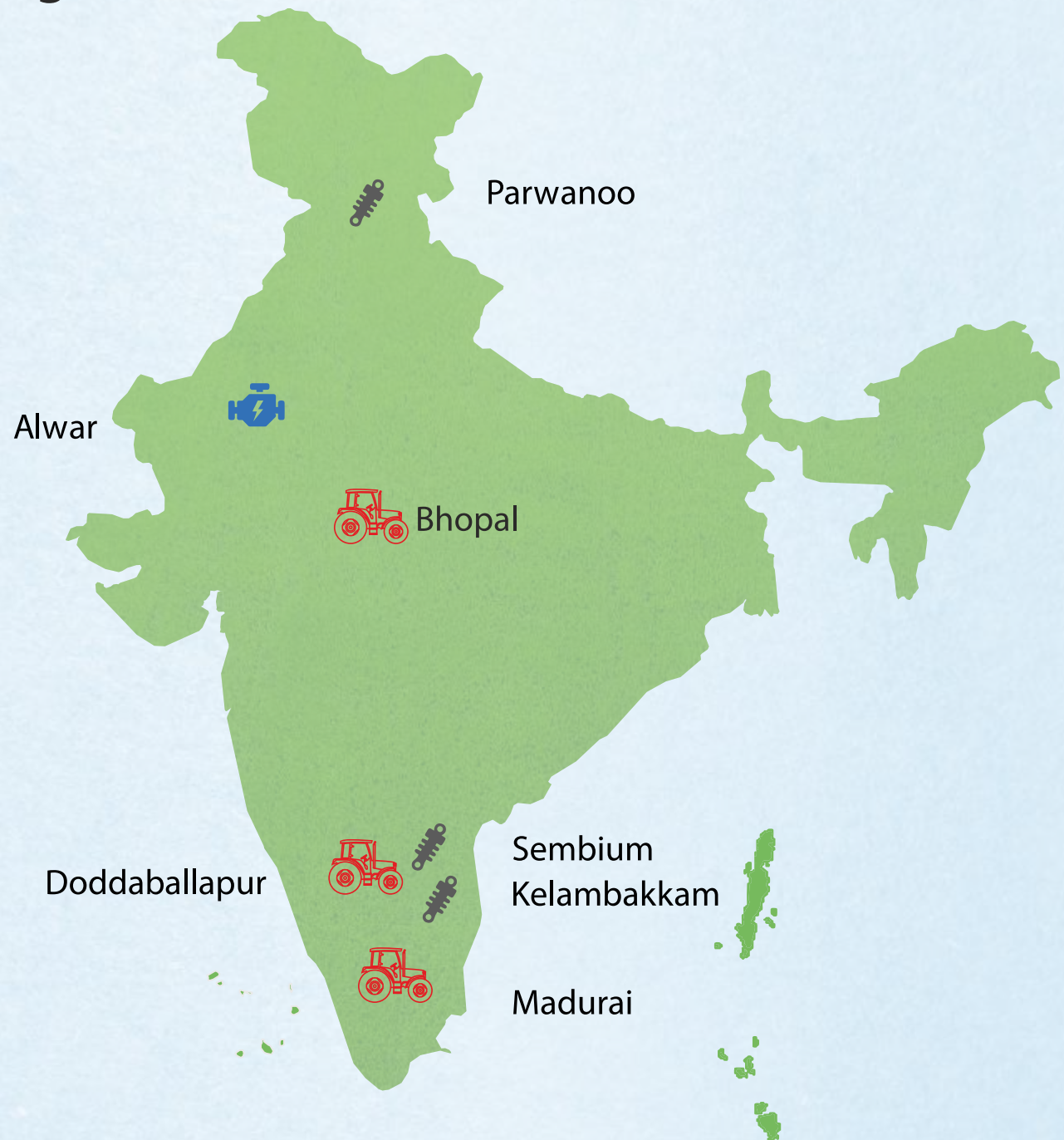


# Highlights of FY24





## Our Manufacturing Locations



Tractors



Engines



Components

## TRACTORS



**MADURAI**



**DODDABALLAPUR**



**BHOPAL**

## COMPONENTS



**PARWANOO**



**SEMBIUM**



**KELAMBAKKAM**

## ENGINES



**ALWAR**

## Our Brief Product Portfolio



MF DYNATRACK  
241 DI



MF  
1035 DI



EICHER  
368



EICHER  
PRIMA G3



MF 8055  
MAGNATRAK



TAFE E 30  
(Electric)

# SUSTAINABILITY STRATEGY

# Our Sustainability Strategy

We are committed to our purpose, “Cultivating the World Sustainably”, through our products and actions. Our commitment to sustainability is at the core of everything we do, driving our efforts towards creating a better, greener future for generations to come. We strive to minimize our ecological footprint while maximizing our contribution to economic growth and social welfare. Our sustainability efforts are guided by a holistic approach that integrates environmental and social responsibility, and economic prosperity.

## Pillars Of Sustainability

As part of this commitment, we have two key pillars for our sustainability pursuits, supported by a few enabling pillars.



### Sustainable Manufacturing

By adopting eco-friendly practices across our operations, we continuously strive to:

- Reduce the overall carbon footprint by integrating energy-efficient technologies and the use of renewable energy across business operations
- Minimize water consumption in operations and ensure water security and quality
- Incorporate a 3R approach towards waste generation
- Manage and mitigate supply chain risks while creating a positive impact on the environment and society
- Promote innovation in our core business, as well as invest in low-carbon technologies in product design to reduce our ESG footprint



### Sustainable Agriculture

By promoting sustainable farming solutions and responsible agricultural land cultivation, we will continue to:

- Conduct agricultural research through JFarm to support food security
- Support farmers by providing farm advisory services, disseminate knowledge through advisory services, symposiums, and support/collaborate with academic institutions.
- Create meaningful and strong relations with farmers to promote healthy, equitable, and inclusive



### Enabling Functions

By empowering our workforce, engaging local communities, and upholding ethical standards, we will

- Attract the right talent while supporting employee learning & development and catering to their well-being.
- Participate in local community activities to provide access to essential services related to healthcare, employment, and education
- Ensure responsible and ethical business conduct to create value for all stakeholders

# Governance at TAFE

[GRI 2-11, 12, 13, 14]



We understand that strong governance is essential for achieving our sustainability goals and maintaining the trust of our stakeholders. Our board comprises eight directors, including executive, non-executive, and independent directors, of whom two are females. From the board of directors to our management teams, we are committed to upholding the highest standards of corporate governance guided by our principles of integrity, fairness, and responsibility, as well as all applicable laws. Through effective governance, we strive to reinforce stakeholder confidence, mitigate risks, and drive sustainable value creation for all.

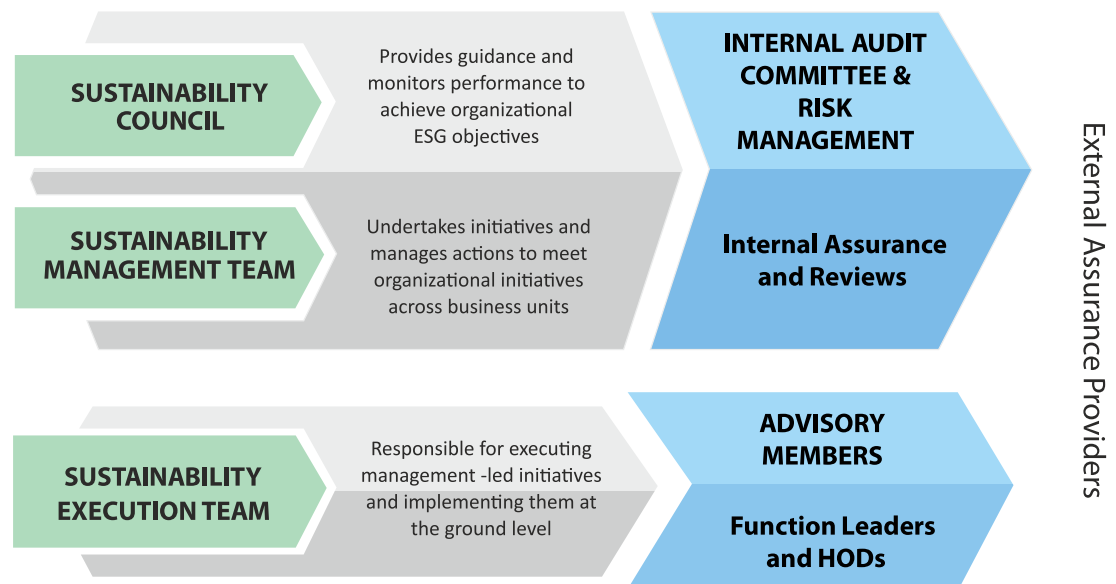
Our sustainability governance structure is led by a committee responsible for overseeing ESG aspects within the organization. This committee, overseen by the CEO, ensures accountability and provides strategic direction.

At the core of this governance framework is the Sustainability Council, comprised of top management, which orchestrates efforts to meet our ESG objectives. This Council leads sustainability initiatives guided by a sustainability management team and supported by a sustainability execution team. The management team includes plant heads, department heads, and their respective managers, who execute sustainability plans and initiatives

## SUSTAINABILITY GOVERNING BODY

Accountability to stakeholders for ESG oversight

Chairman & Managing Director & Independent Directors



Operating in parallel, the internal audit committee and risk management team provide crucial internal assurance and conduct rigorous reviews to ensure compliance and enhance effectiveness. Additionally, an advisory panel comprising key executives—such as the CFO, HR, Legal, and Corporate Communications—offers strategic guidance and expert insight to inform our decision-making processes.

Our governance structure is designed to facilitate seamless responsibility allocation at all operational levels, driven significantly by performance incentives tied to employees' Key Result Areas (KRAs). This framework is reinforced by our Performance Management Plan (PMP), which supports the achievement of TE20 and Vision to Reality Plan (VTRP) objectives. Within our PMP, we have implemented incentives aimed at promoting environmental and green goals, thereby ensuring their seamless integration into our corporate expectations.

Individual and team objectives originate from the VTRP, reflecting organization-wide goals achieved through Critical Success Factor (CSF) projects and individual KRAs. Under this system, each employee undergoes objective setting, cascading from the VTRP and corporate objectives.

Performance is assessed through mid-year and annual reviews, evaluating achievements against agreed objectives as well as competencies built and exhibited during the year. This process helps us measure performance and identify and fulfill individual training and development plans.

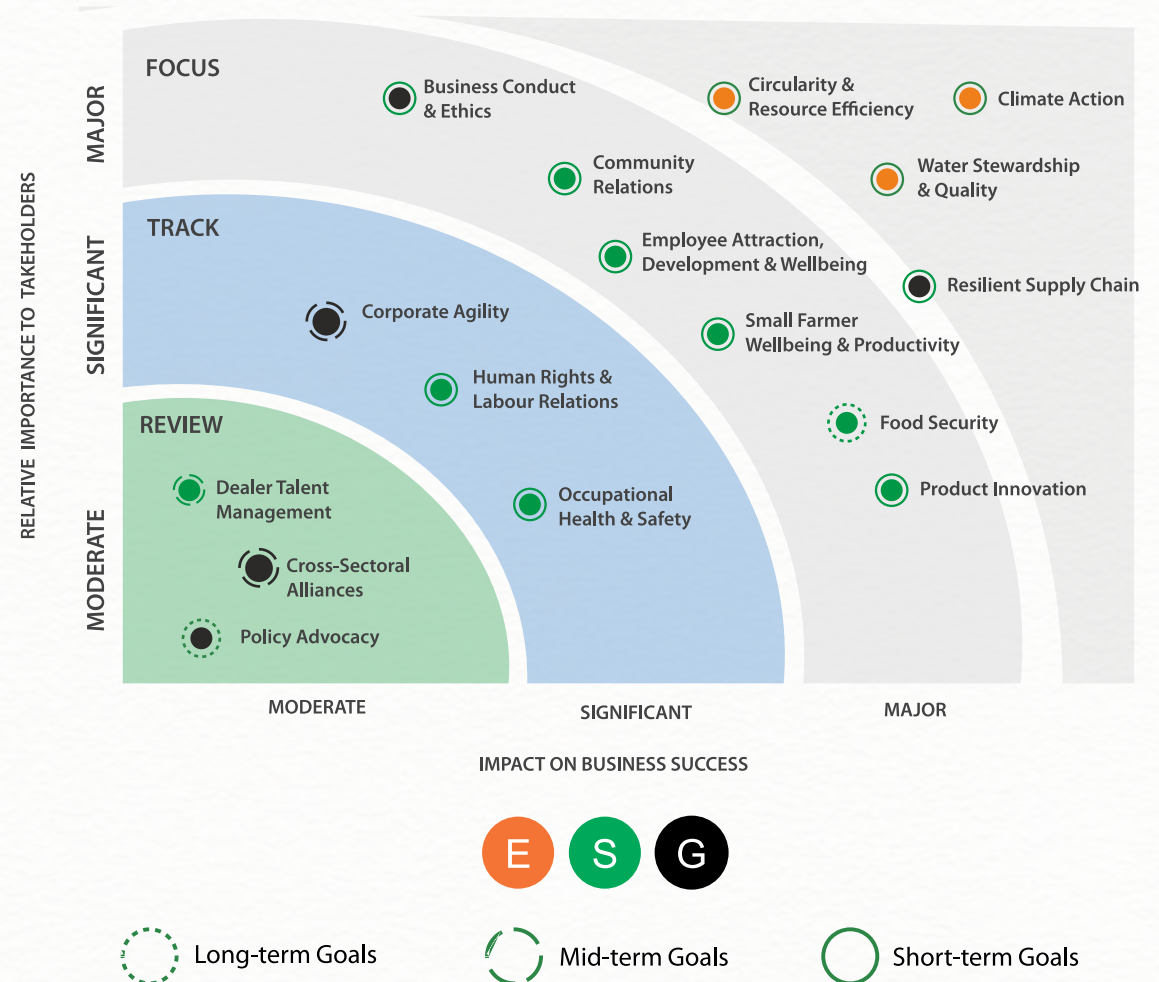
# Prioritizing Our Sustainability Focus Areas

(GRI 3 – 1, 2)

Sustainability awareness on ESG topics, has become increasingly important for organizations from a regulatory and stakeholder perspective. We conducted a comprehensive materiality assessment to identify key sustainability priorities that can directly or indirectly impact our business success. We considered standards and frameworks such as DJSI, MSCI, and SASB to identify topics that are material to our industry.

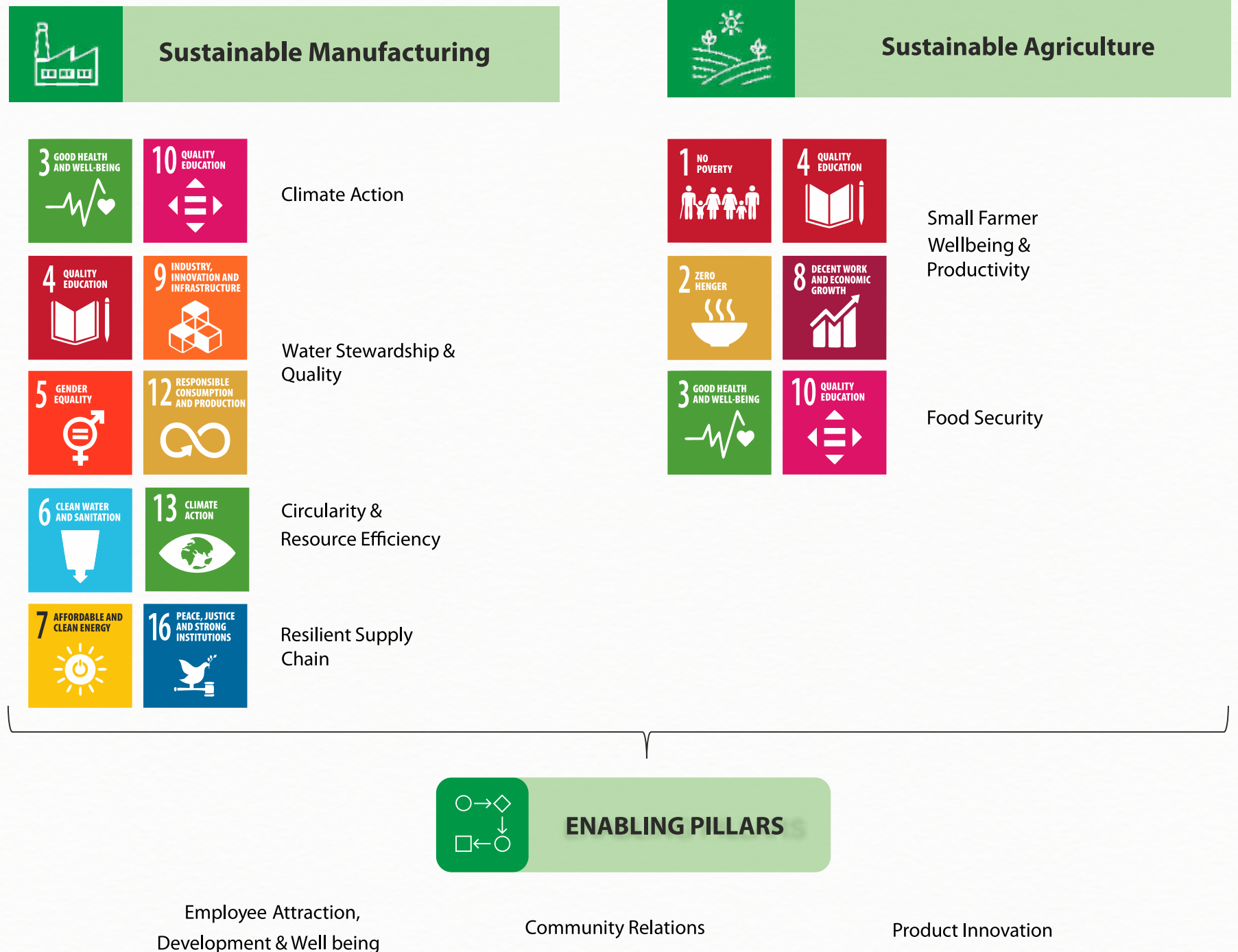
We also considered the perspective of our senior management and top leadership to ascertain the impact these topics can have on our business success. This enables us to focus our resources and initiatives where they can have the greatest impact. By aligning our actions with these expectations, we aim to further improve sustainability, mitigate risks, and create long-term value for all stakeholders.

At the core of our strategic planning lies a commitment to integrating materiality considerations. This ensures sustainability is not just a goal, but a fundamental driver of our actions. By harmonizing these elements, we orchestrate a resilient path forward.





Based on the material topics, issues and priorities are classified under two pillars of sustainable manufacturing and sustainable agriculture, in addition to the enabling pillars comprising employees, community, and ethics as illustrated below.



# Managing Sustainability

(GRI 3 – 3)

We acknowledge the importance of addressing the material issues identified through our material matrix as they can either pose risks or present opportunities to our operations and reputation. By evaluating potential impacts of these issues, we aim to develop proactive strategies to mitigate risks and capitalize on opportunities, ensuring our continued commitment to responsible business practices and sustainable growth.

Material Issues Identified	Risk or Opportunity	Rationale and Approaches to Mitigate or Seize them	Financial Implications
<b>Climate Action</b>	Opportunity	By proactively addressing climate action through implementation of sustainable practices such as reducing GHG emissions, adopting renewable energy sources, and promoting eco-friendly products and services, we can enhance our brand reputation, attract environmentally conscious customers, and capitalize on emerging green markets.	Positive financial implications are anticipated through cost savings from energy efficiency measures, enhanced brand reputation leading to increased customer loyalty and market share, and potential access to green financing and incentives for sustainable initiatives. Investing in climate action can future-proof us against regulatory changes and volatile energy prices.
<b>Water Stewardship &amp; Quality</b>	Opportunity	By prioritizing water conservation, efficient usage, investing in water efficient technologies, and pollution prevention measures, we can enhance its environmental performance, minimize operational disruptions, and foster community goodwill.	Positive financial implications are expected through reduced water usage and costs, improved operational efficiency, and enhanced brand reputation. By mitigating water-related risks, we can avoid potential regulatory fines, litigation costs, and reputational damage associated with water pollution incidents.
<b>Circularity &amp; Resource Efficiency</b>	Opportunity	Embracing circularity enables us to optimize resource use, minimize waste generation, and create value from by-products or waste streams. By adopting innovative approaches such as product redesign, material recycling, and remanufacturing, we can reduce costs, enhance operational efficiency, and differentiate ourselves in the market.	Positive financial implications are anticipated through cost savings from reduced resource consumption, waste disposal, and raw material procurement. Generating revenue from recycled materials or refurbished products can create new revenue streams for us
<b>Resilient Supply Chain</b>	Risk	By adopting a proactive approach to supply chain management involving conducting risk assessments, diversifying supplier networks, and developing contingency plans to address potential disruptions. Collaborating closely with suppliers, implementing robust monitoring systems, and investing in digital can enhance supply chain visibility and resilience.	Negative financial implications may arise from supply chain disruptions, including increased procurement costs, production downtime, and lost sales opportunities. Reputational damage resulting from failed deliveries or quality issues can lead to customer attrition and loss of market share

Material Issues Identified	Risk or Opportunity	Rationale and Approaches to Mitigate or Seize them	Financial Implications
<b>Product Innovation</b>	Opportunity	We prioritize research and development efforts aimed at creating sustainable, high-quality products that deliver value to customers. This involves engaging with customers to understand their needs and preferences, conducting market research to identify emerging trends and opportunities, and leveraging technological advancements to develop cutting-edge solutions	Positive financial implications are anticipated through increased revenue from innovative products, improved market share, and enhanced brand reputation. By delivering products that address customer needs and preferences, we can command premium prices and capture additional market share.
<b>Small Farmer Wellbeing &amp; Productivity</b>	Opportunity	We adopt a holistic approach that addresses the diverse needs and priorities of small farmers. This involves providing access to training, capacity-building programs, and agricultural extension services to enhance farmers' skills, knowledge, and productivity.	Positive financial implications are anticipated through increased market access, product diversification, and brand loyalty. By supporting small farmer wellbeing and productivity, we can access new sources of agricultural produce, and penetrate emerging markets.
<b>Food Security</b>	Opportunity	We adopt a multi-dimensional approach that addresses the root causes of food insecurity and builds resilience across the agricultural value chain. This involves investing in agricultural research and development, technology transfer, and extension services to enhance productivity, reduce post-harvest losses, and improve market access for smallholder farmers	Positive financial implications are anticipated through increased market opportunities, brand reputation, and stakeholder engagement. By addressing food security, we can access new markets, diversify our product portfolio, and enhance our competitive advantage in the agriculture sector.
<b>Employee Attraction, Development &amp; Wellbeing</b>	Opportunity	By adopting a comprehensive approach that addresses the diverse needs and aspirations of its workforce. This involves implementing talent acquisition strategies that emphasize diversity, equity, and inclusion, and providing competitive compensation, benefits, and career advancement opportunities to attract and retain top talent.	Positive financial implications are anticipated through improved employee productivity, morale, and retention rates. By investing in employee attraction, development, and well-being, we can enhance organizational performance, reduce turnover costs, and increase employee loyalty and commitment.
<b>Community Relations</b>	Opportunity	We adopt a proactive approach that emphasizes transparency, accountability, and meaningful engagement with local stakeholders. This involves conducting stakeholder mapping and needs assessments to identify community priorities, interests, and concerns, and developing tailored initiatives that address those needs.	Positive financial implications are anticipated through enhanced brand reputation, stakeholder trust, and market access. By investing in community relations, we can build strong relationships with local communities, gain a social license to operate, and differentiate ourselves from competitors.
<b>Business Conduct &amp; Ethics</b>	Risk	By adopting a comprehensive approach that emphasizes ethical leadership, robust governance, and a culture of integrity and accountability, we establish clear policies, codes of conduct, and compliance programs to guide employee behavior and ensure adherence to legal and ethical standards.	Negative financial implications may arise from ethical misconduct or non-compliance, including legal fines, penalties, litigation costs, and reputational damage. Ethical lapses can lead to loss of customer trust, investor confidence, and employee morale, resulting in decreased revenues, market share, and shareholder value.

# Engaging with our Stakeholders

(GRI 2-16, 25, 26, 29)

In our commitment to sustainability, we actively engage with a diverse range of stakeholders to gather insights, perspectives, and feedback. This collaborative approach fosters open dialogue, strengthens relationships, and provides invaluable guidance for our strategic decisions and sustainability initiatives. By embracing this robust engagement model, we ensure that our actions reflect the shared values and priorities of our stakeholders, driving forward our commitment to sustainable practices.



Stakeholder	Relevant Priorities	Engagement Mechanism	Engagement Frequency
<b>Farming Community</b>	We engage with the farming community to address their needs, build their capabilities on sustainable farming techniques, enhance their productivity, and create shared value. Through this, we also aim to attain constructive feedback and build strong relationships.	<ul style="list-style-type: none"> <li>• Farmer Survey</li> <li>• CSG Meetings</li> <li>• Door-Step Installations</li> <li>• 5-in-1 Camps</li> <li>• Customer Clinics</li> <li>• Customer Group Visits to TAFE</li> <li>• Customer Meets</li> <li>• CFG Interactions</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing</li> <li>• Need-basis</li> </ul>
<b>Shareholders</b>	We engage with shareholders to provide accurate and comprehensive information about our business performance and material events promptly.	<ul style="list-style-type: none"> <li>• Board Meetings</li> <li>• Company Website</li> <li>• Press Release</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly</li> <li>• As and when required</li> </ul>
<b>Employees</b>	We engage with our employees to foster an organizational culture of trust, mutual respect, and a shared vision. Learning and development are among our top priorities, and we aim to address their concerns, support their well-being, and work towards building their capacity	<ul style="list-style-type: none"> <li>• Company Intranet</li> <li>• Internet Emails</li> <li>• Employee Engagement Program</li> <li>• Open Forums</li> <li>• People Development Initiatives</li> <li>• Training Programs</li> <li>• Bachelor's Degree Programs</li> <li>• Strategic Workforce Planning</li> <li>• Capability Assessments</li> <li>• Capability Improvement Programs</li> <li>• Rewards &amp; Recognitions</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing</li> <li>• As and when required</li> </ul>
<b>Suppliers</b>	We engage with our suppliers to ensure continuous supply for production and improve our time-to-market capabilities. We also strive to help our suppliers transition towards more sustainable practices while undertaking ethical and responsible business practices.	<ul style="list-style-type: none"> <li>• Strategic Supplier Council</li> <li>• Regional Supplier Meets</li> <li>• Supplier Conferences</li> <li>• Supplier Engagement Survey</li> <li>• Quality Audits</li> <li>• Quality Performance Reviews</li> <li>• Goal Alignment Sessions</li> <li>• NPD Alignment Meets</li> <li>• Supplier Training Programs</li> <li>• Supplier Reward Programs</li> <li>• Technology Day</li> <li>• Supplier Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing</li> <li>• Annual Audits</li> <li>• As and when required</li> </ul>

Stakeholder	Relevant Priorities	Engagement Mechanism	Engagement Frequency
<b>Dealers or Distributors</b>	As frontrunners to enhance customer experience, we engage with our dealers and distributors to improve our service quality and support dealers in building strong customer relationships.	<ul style="list-style-type: none"> <li>• Dealer Meetings</li> <li>• Dealer Task Force Meets</li> <li>• Star Dealer Meets</li> <li>• Dealer Salesperson Engagement Forums</li> <li>• Dealer Training Programs</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing</li> <li>• As and when required</li> </ul>
<b>Community</b>	We are committed to promoting sustainable development in the communities we operate. We undertake societal efforts to improve their quality of life by providing access to better health, education, and livelihood opportunities.	<ul style="list-style-type: none"> <li>• CSREvents</li> <li>• Interaction through health camps</li> <li>• JFarm Services Portal</li> <li>• JFarm App</li> <li>• JRehab</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>
<b>Academic Institutions</b>	To build new technologically advanced capabilities that support the livelihood of small and marginal farmers, we build alliances with academic institutions for research and development on sustainable practices, hire top talent, and validate new interventions	<ul style="list-style-type: none"> <li>• Campus recruitments</li> <li>• Factory Visits</li> <li>• In-plant training programs</li> <li>• Interaction meets with academia.</li> <li>• Technology workshop</li> </ul>	<ul style="list-style-type: none"> <li>• Annual recruitments</li> <li>• As and when required</li> </ul>
<b>Industry &amp; Trade Associations</b>	We engage with industry associations to understand current industry trends, raise company visibility through advocacy, and connect with other industry leaders.	<ul style="list-style-type: none"> <li>• Industry consultation meetings</li> <li>• Industry association events</li> </ul>	<ul style="list-style-type: none"> <li>• As and when required</li> </ul>
<b>Government &amp; Regulators</b>	We engage with government and regulators to understand new policies and regulations, build capabilities for the farming community, and discuss emerging geo-economic issues related to the industry	<ul style="list-style-type: none"> <li>• Programs, discussions, and collaboration with governments and regulators</li> </ul>	<ul style="list-style-type: none"> <li>• As and when required</li> </ul>

# Our Aspirations

To achieve our purpose of 'Cultivating the World Sustainably,' we actively integrate ESG (Environmental, Social, and Governance) considerations and set ambitious targets in both manufacturing and agricultural pursuits, guiding u



## SUSTAINABLE MANUFACTURING

Priorities	Targets
Climate Action	Achieve zero emissions from operations (across Scope 1 & 2) by 2050
Water Stewardship & Quality	Achieve net-water positive by 2035
Circularity & Resource Efficiency	Achieve zero waste to landfill by 2030
Resilient Supply Chain	Assess 100% Tier-1 suppliers on sustainability parameters
Employee Attraction, Development & Wellbeing	Achieve zero major and minor injuries YoY increase in sustainability training
Community Relations	YoY increase in beneficiaries from CSR
Product Innovation	Continue to develop tractors & implements that enhance efficiency, and sustainability, in Indian conditions for small and marginal farmers



## SUSTAINABLE AGRICULTURE

Priorities	Targets
Small Farmer Wellbeing & Productivity Food Security	Champion sustainable agricultural practices through JFarm in small and marginal farms Champion 'access to mechanization' in small and marginal farms in India

**TAFE** 

**TAFE** 



**YEARS**



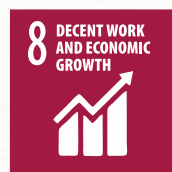
**CELEBRATING 65 YEARS OF CULTIVATING THE WORLD**

**DESH. DHARTI. TAFE.**



# Our Targets

Zero Emissions (Scope 1 & 2) from Operations	Net Water Positive	Zero Waste to Landfill	Assess 100% Tier 1 suppliers on ESG
by <b>2050</b>	by <b>2035</b>	by <b>2030</b>	by <b>2025</b>



Contributing to the Sustainable Development Goals (SDGs) of the United Nations aligns seamlessly with our vision, purpose, and values. As a leading manufacturer in the agricultural sector, we recognize our responsibility to minimize environmental impact and promote sustainable farming practices. By supporting 12 of the 17 UN SDGs, we actively engage in initiatives to enhance sustainable manufacturing, agricultural productivity, ensure food security, and mitigate climate change.

# Cultivating the World Through Sustainable Manufacturing

Sustainable manufacturing lies at the heart of our commitment to environmentally friendly and responsible production. By employing cutting-edge and innovative practices, we strive to reduce material wastage, carbon emissions, and energy consumption while maximizing operational efficiency, guided by our Environmental Policy.

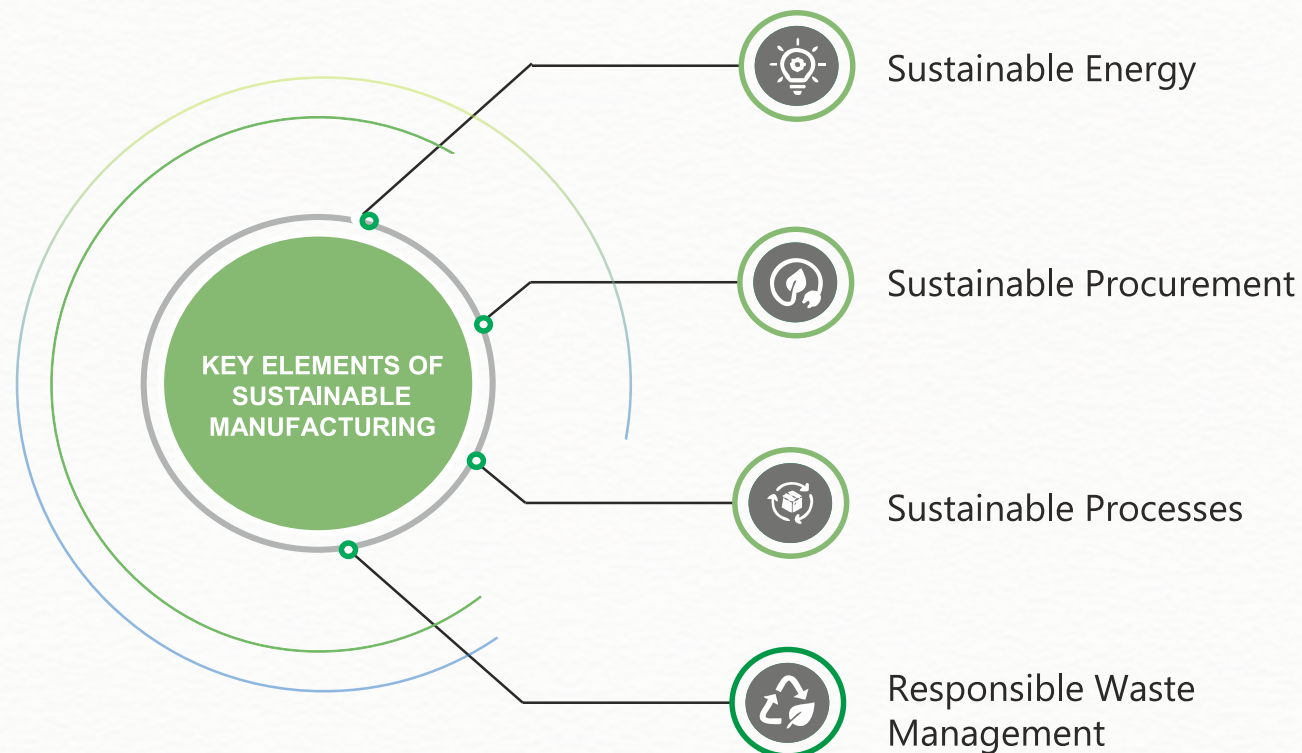
As a leading manufacturer of farm equipment, we prioritize 'Design for Sustainability' by integrating principles of sustainable development across our value chain. This includes focusing on design optimization, material property characterization, and the implementation of efficient manufacturing processes.

We conduct thorough supplier due diligence to ensure our partners adhere to fair and environmentally friendly business practices, including transportation. Sustainable

solutions are integral to our efforts in resource and asset optimization in manufacturing, resulting in emission reductions, waste minimization, and increased profitability. This commitment also extends to the production of fuel-efficient tractors, contributing to an overall reduction in carbon footprint.

This endeavor involves fostering process innovations across our value chain to optimize the usage of raw materials, energy, water, and other resources.

Throughout our manufacturing processes, we prioritize circular economy practices, striving to minimize waste and maximize recycling within our supply chain. Our commitment to sustainable manufacturing is comprehensively addressed in the relevant sections of this report.



# Climate Action



Climate change poses one of the greatest challenges of our time, demanding urgent and decisive action from industries worldwide. We recognize the critical role we play in mitigating climate change and are committed to taking proactive measures to reduce our greenhouse gas emissions and build resilience to its impacts. Our climate action plan involves optimizing energy use, reducing GHG emissions, and maintaining air quality standards.

## Our Commitments

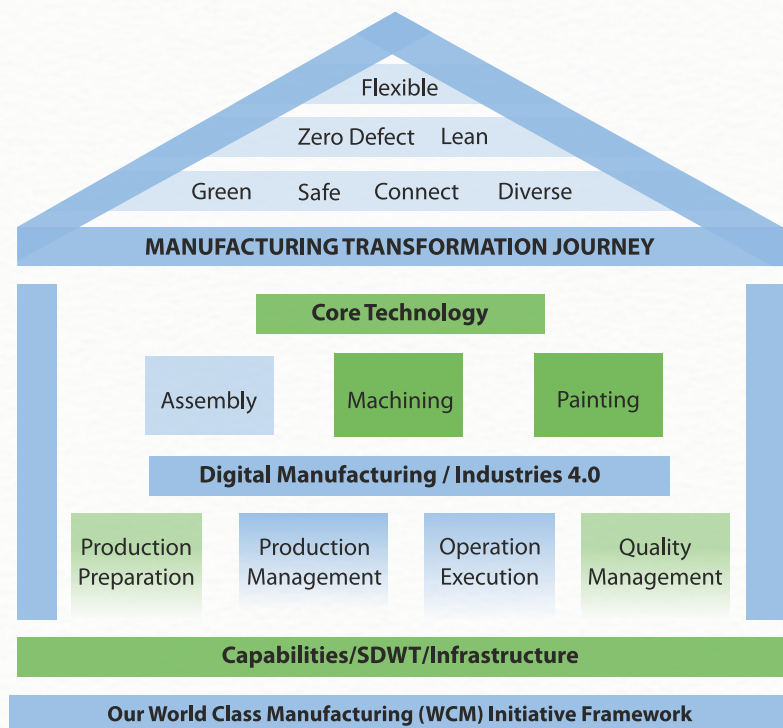
- Reduce operational energy consumption through efficient production processes such as installing energy-efficient technologies and retrofits and developing eco-friendly ways of production
- Reduce greenhouse gas emissions and other pollutants emitted from production processes.
- Prioritize renewable energy sources through strategic power purchasing agreements, and on-site renewable energy generation, in line with national goals
- Invest in pollution mitigation technologies and introduce processes to control air pollutants well within the legal limit
- Implement supplier engagement programs and assessments to reduce emissions and energy consumption across the entire supply chain
- Ensure energy-efficient methods for the transportation and distribution of inbound and outbound materials
- Regularly monitor and manage energy consumption, GHG emissions, and other air pollutants
- Raise awareness of energy-saving and emission-reduction initiatives among stakeholders

# Energy and Carbon Emissions

[GRI 302 – 1, 2, 3, 4, 5 & 305 – 1, 2, 3, 4, 5, 6, 7]

We are continuing to implement various projects across our plants to reduce energy consumption and emissions, while increasing the utilization of renewable energy. We prioritize the adoption of energy-efficient rail transportation for outbound goods and optimize container spaces in vehicles for both inbound and outbound transportation to minimize trips, consequently saving fuel and energy. We use reusable metal crates and pallets, minimizing the use of energy-intensive corrugated packaging whenever feasible. Moreover, our continuous improvement programs diligently target energy reduction and waste elimination initiatives across operations.

The 'Lean' pillar under our World Class Manufacturing (WCM) initiative helps us to optimize resources. Projects under WCM–Lean are instrumental in enhancing energy efficiencies, mitigating energy wastage in power and fuel, and consequentially reducing GHG emissions. Similarly, the WCM - Zero Defects pillar focuses on minimizing material wastages by curbing defects, thus averting associated production inefficiencies. The Green Pilar of our WCM covers green strategy, environment management, green project execution and green sustenance, thereby helping us improve the energy efficiencies as well as transition towards green power wherever feasible. Our dedication to environmental stewardship is evident as we consistently review our green initiatives on a weekly basis, fostering awareness and implementing green projects horizontally across our organization. All our sites are have conducted environmental risk assessments.



Our continuous improvement programs, including Total Quality Management (TQM), Total Productive Maintenance (TPM), and Six Sigma, provide robust support for these endeavors. In tandem with optimizing manufacturing processes, we venture to enhance fuel efficiencies in our products. We actively pursue programs aimed at reducing the weight of both metal and non-metallic components, thereby fostering reduced fuel consumption and emissions throughout the life cycle of our products.

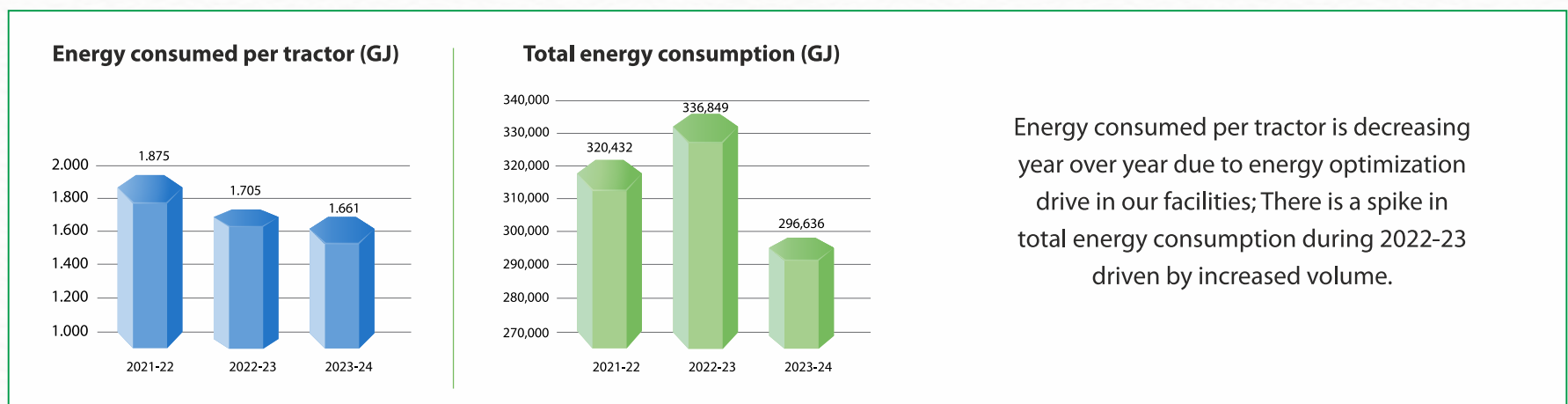
# Energy Consumption within the Organization

We regularly measure our energy consumptions to identify and pursue energy-saving opportunities in our operations. Saving energy also helps us to minimize GHG emissions.

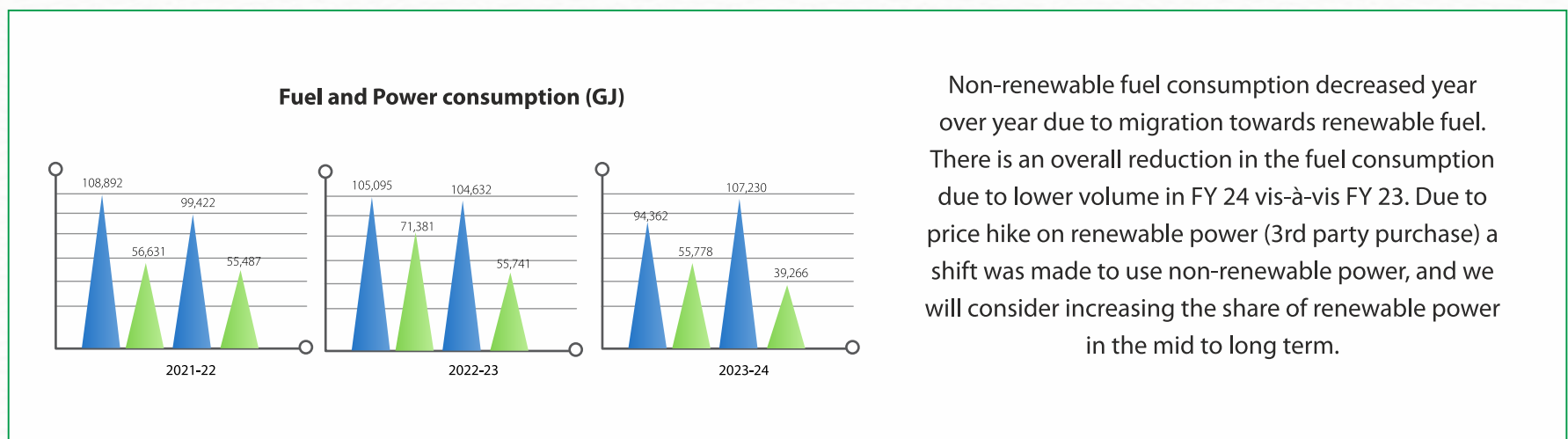
We focus on increasing the contributions of renewable fuel sources. A major upgrade is in the case of LDO and HSD consumptions, which have now dropped by significantly

compared to the previous usage as shown in the figures below. We have also conducted energy and carbon audits which provide us insights into optimizing energy usage and reducing carbon emissions.

By implementing the recommendations from the audits, we continue to enhance operational efficiency and lower energy costs.



Energy consumed per tractor is decreasing year over year due to energy optimization drive in our facilities; There is a spike in total energy consumption during 2022-23 driven by increased volume.



Non-renewable fuel consumption decreased year over year due to migration towards renewable fuel. There is an overall reduction in the fuel consumption due to lower volume in FY 24 vis-à-vis FY 23. Due to price hike on renewable power (3rd party purchase) a shift was made to use non-renewable power, and we will consider increasing the share of renewable power in the mid to long term.

27%

Average Renewable Power through internal solar power generation and 3rd party PPAs

37%

Average renewable fuel used in the last three years (FY 22 to 24)

6%

Emission intensity reduction in FY24

We recognize the importance of efficient energy management in reducing costs, minimizing environmental impact, and ensuring operational resilience. We use energy intensity as a critical KPI for evaluating and managing energy performance, guiding decision-making processes, and driving continuous improvement efforts toward greater energy efficiency and sustainability.

A few examples of such projects include the usage of energy-efficient air-conditioners, chillers, fans, motors (with IE3 rating), replacement of stat-delta drives with VFDs, usage of a few numbers of HVLS fans instead of several wall-mounted fans, LED lamps, reduction of compressed air requirement (through leakage elimination, and conversion to hydraulics), etc. We also recover heat

from flue gases to pre-heat input air for firing our boilers, thereby reducing fuel consumption and associated emissions.

Our energy intensity has consistently decreased over the years due to various energy-efficient technologies implemented. We have installed 740 KW solar panels at three of our major manufacturing units and increased the in-house generation of renewable power in addition to purchase of green power through Power Purchase Agreements (PPA).

Furthermore, the renewable energy component in the grid power supply is approximately 50% in the states of TN and Karnataka, while the states of Rajasthan and Madhya Pradesh have an average of around 25%, where our major manufacturing sites are located

Apart from electricity consumption, we have developed various measures including converting our LDO / furnace oil-fired heating ovens and boilers to using biomass. We are also actively focusing on manufacturing renewable fuel-powered tractors.

Type	FY 21-22	FY 22 - 23	FY 23 - 24
LDO	77,916	62,178	56,804
HSD	22,632	33,743	16,877
PNG	-	-	12,677
LPG	4,925	4,727	3,614
Total	105,474	100,648	89,971




Additionally, we continue to develop farm-friendly tractors and suitable implements that enhance efficiency, sustainability, and usability in Indian conditions for small and marginal farmers. Beyond our manufacturing operations, we constantly optimize our packaging configurations to load more inbound materials in vehicles. We also pursue similar initiatives to load more tractors in a container for CKD shipments. Such programs help us reduce the number of inbound and outbound vehicular trips, thereby reducing fuel usage and emissions.




## MANUFACTURING

- Installed energy-efficient technologies and retrofits in daily operations.
- Installed 740 KW solar panels at 3 manufacturing units.
- Purchases renewable energy from the grid through PPAs.
- Converted LDO/Furnace Oil-Fired heating ovens and boilers to use biomass



## LOGISTICS

- Increasing usage of energy-efficient rail transportation for outbound goods.
- Optimizing container spaces in vehicles for both inbound and outbound transportation.
- Using reusable metal crates & pallets to avoid energy-intensive packing.
- Eliminated unwanted shipments by scrapping damaged parts at service centers.



## ENGINEERING

- Constant focus on reducing fuel consumption and emissions through Fuel Economy Cell (FEC)
- Focus on tractors powered by RE fuels.
- Continue to develop farm-friendly tractors and suitable implements that enhance efficiency, sustainability, and usability in Indian conditions for small and marginal farmers.

Focus Areas	Tractor Engines	Generator Engines
Reduction of fuel consumption in products	It is widely accepted in the industry that MF tractors provide maximum fuel efficiency by optimized design of engine, transmission, and hydraulics. Our continuous pursuits in engine design improvement and compliance with the latest regulations – TREM III, TREM IV, and TREM V – helped us to reduce fuel consumption by around 4.9% compared with the products prior to the year 2010	As we progressed from CPCB-II to CPCB-IV+ norms., we reduced fuel consumption by 4.0% compared with the products prior to the year 2010
Reduction of PM and Nox emissions in products	We have also reduced Particulate Matter (PM) by 84%, and NOx emissions by 87% compared with the products prior to the year 2010	We have reduced NOx emissions by 63% for gen-sets less than the 19 kW power range and reduced Particulate Matter (PM) by 90% for gensets higher than the 19 kW power range compared with the products prior to the year 2010

## Establishment of FE Cell

The establishment of a Fuel Economy Cell underscores our commitment to innovation, efficiency, and sustainability in tractor manufacturing processes. This dedicated department focuses on optimizing the fuel consumption and enhancing the overall fuel economy of our tractors, aligning with the company's extensive goals of reducing environmental impact and operating costs for farmers.

The Fuel Economy Cell is tasked with researching, developing, and implementing innovative technologies and strategies aimed at improving fuel efficiency across tractor models. This involves rigorous testing and analysis of various engine components, transmission systems, and operating parameters to identify the opportunities for optimization. By leveraging advanced engineering techniques and cutting-edge technologies, the Fuel Economy Cell aims to enhance the performance of our tractors while minimizing fuel consumption and emissions.

Furthermore, the Fuel Economy Cell collaborates closely with other departments, including Research and Development, Engineering, and Quality Assurance, to ensure seamless integration of fuel-saving innovations into the tractor manufacturing process. Continuous monitoring and evaluation of fuel economy performance metrics allows us to fine-tune designs and processes persistently, driving ongoing improvements in tractor fuel efficiency.





## Direct (Scope 1) & Energy Indirect (Scope 2) GHG emissions

Greenhouse gas (GHG) emissions stand as a critical consideration within our sustainability endeavors, profoundly impacting both environmental welfare and business operations. These emissions, encompassing carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), pose substantial challenges, mainly manifested in climate change repercussions, compromised air quality, and ecosystem disturbances. Climate change, induced by GHG emissions, manifests in rising temperatures, erratic weather patterns, and elevated sea levels, posing imminent risks to biodiversity and ecosystem stability. In tandem with environmental concerns, GHG emissions also exert significant ramifications on business operations.

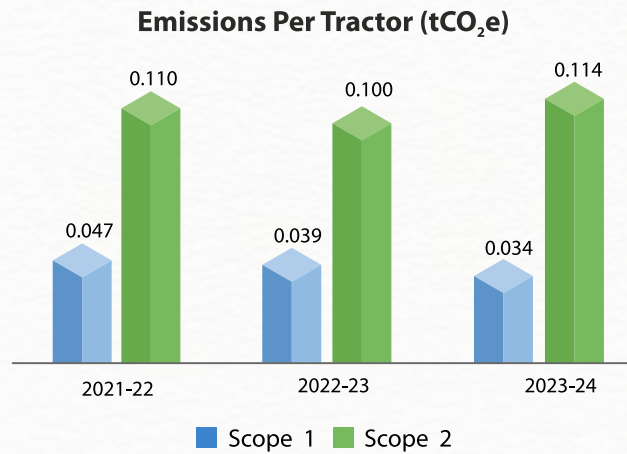
Regulatory mandates necessitate compliance with emissions reporting obligations, emissions reduction targets, and carbon pricing mechanisms, imposing legal and financial obligations upon enterprises. Operational costs burgeon, encompassing expenses related to energy consumption, carbon levies, and emissions decline measures. Our proactive management of emissions serves not only to mitigate costs but also to fortify our reputation and stakeholder relationships. Stakeholders, increasingly adapt to sustainability, expect us to demonstrate concerted efforts toward emissions reduction, positioning us favorably in the eyes of customers, investors, and communities.

We methodically calculate and transparently report emissions, providing stakeholders with reliable insights into our environmental performance. By integrating emissions accounting into our sustainability framework, we demonstrate our commitment to responsible business practices and contributes proactively to global climate change mitigation efforts.

In FY 2023-24, we have witnessed a decrease in Scope 1 greenhouse gas (GHG) emissions by 28% due to concerted efforts to curtail direct emissions while addressing challenges associated with indirect emissions.

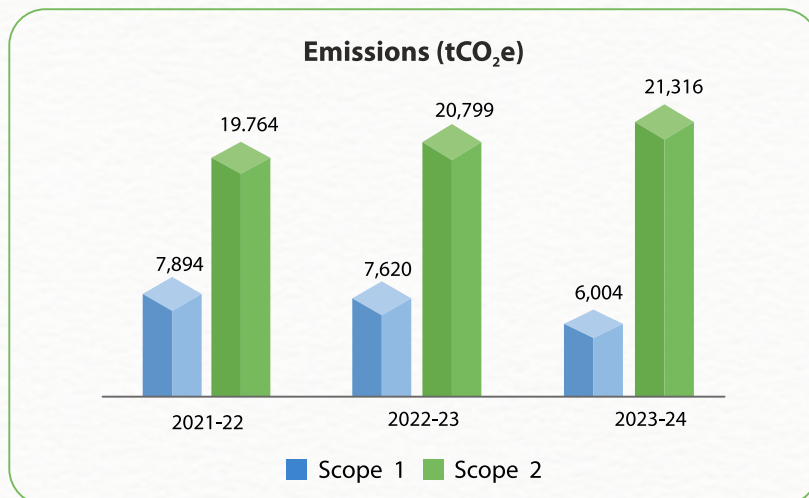
Despite the slight increase in Scope 2 emissions, we remain committed to our sustainability goals, aiming to further reduce overall emissions and enhance environmental performance in the coming years.

Ensuring optimal air quality is a paramount concern for us, reflecting our commitment to environmentally friendly practices, employee health, and community well-being. Recognizing the profound impact of air pollution on human health, ecosystems, and overall quality of life, we prioritize comprehensive measures to mitigate air quality impacts across our operations.



We adhere to stringent environmental standards and regulations, striving to minimize emissions of air pollutants from our facilities and operations. Through the adoption of advanced pollution control technologies, regular maintenance, and stringent operational protocols, we work diligently to limit emissions of particulate matter, nitrogen oxides, sulfur dioxide, volatile organic compounds, and other harmful pollutants.

Moreover, we invest in continuous monitoring and assessment of air quality to ensure compliance with regulatory requirements and identify areas for improvement. We deploy state-of-the-art monitoring equipment and systems to measure air pollutant concentrations, assess ambient air quality, and proactively address any deviations from established standards. All our new air conditioners do not use ozone-depleting substances (ODS), and our old air conditioners that use ODS are being phased out gradually.



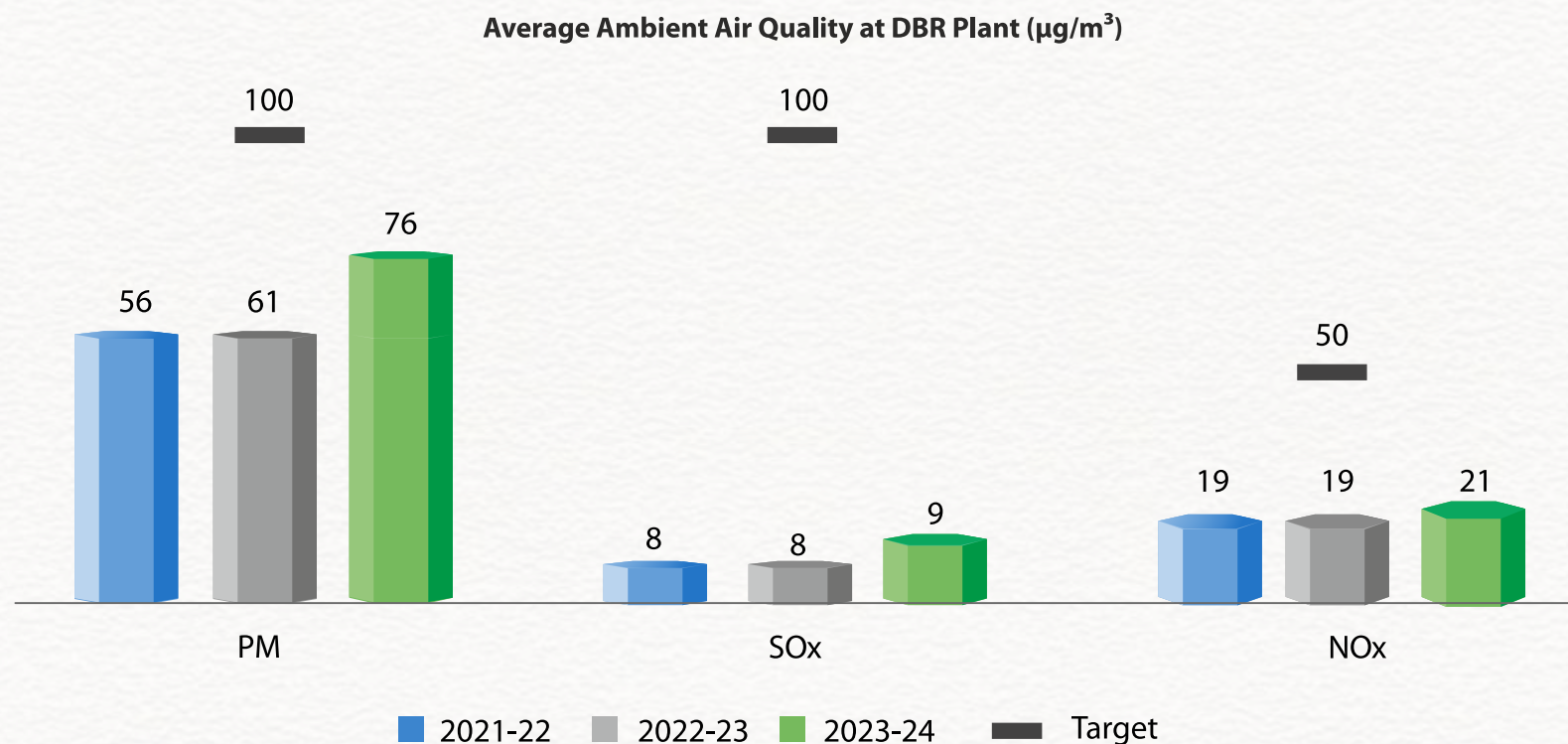
In addition to regulatory compliance, we actively engage in initiatives to enhance air quality beyond legal obligations. We collaborate with local communities, government agencies, and industry partners to develop and implement best practices for air pollution prevention and control. Furthermore, we invest in research and innovations to explore alternative technologies, cleaner fuels, and sustainable practices that minimize air emissions and promote cleaner air.

We are dedicated to maintaining high standards of air quality management, integrating environmental considerations into our

**While scope 1 emissions decreased, the scope 2 emission has been trending upwards mainly due to reduction in the purchase of green power, and we will consider increasing the share of renewable power in the mid to long term**

daily operations, and collaborating with stakeholders to promote cleaner air for present and future generations. Through proactive measures, continuous monitoring, and stakeholder engagement, we remain committed to safeguarding air quality and fostering a healthier, more sustainable environment for all. The air pollutant emissions showcase our strides in ensuring that air quality is well within the targets prescribed by the regulatory bodies (various State Pollution Control Board), as shown in the figure below (for DBR plant). We are in the midst of converting R22 gasses to R32 and will complete the full conversion over a period of time.

We implement advanced technology and maintenance practices to minimize emissions and noise levels, conducts regular inspections, and employs sound insulation measures. Additionally, odor control systems and vibration mitigation techniques are utilized to reduce environmental nuisances. Sustainable transport practices and energy-efficient lighting systems further contribute to mitigating road and light emissions.



## Initiatives for Energy Consumption and GHG Emissions Reduction

#	Plant	Initiatives	Sub-Initiatives	Outcomes
1	All plants	Energy Measurement & Monitoring	Daily power consumption is measured and monitored through metering and logbooks, the potential savings opportunities are identified, and projects are initiated. We have completed 140 such energy savings projects across our plants so far, and more projects are on the anvil.	Power consumption savings of 1,090,000 kWh per year across our plants.
		Fuel Reduction through Logistics Optimization	The parts inbound transportation trips are reduced by increasing the loading density with the help of special crates and containers, which reduces the fuel consumption of the trucks.	Fuel & cost savings, emission reduction.
2	ETB	Energy Conservation Through Energy-Efficient Process	<p>Several energy conservation projects are undertaken; A few examples:</p> <ul style="list-style-type: none"> <li>• Replaced older motors with energy efficient IE 3 motors during replacements as well as new installations.</li> <li>• VFD for all critical motors to reduce power consumption.</li> <li>• 100% uses of LED lights for shop floor and street lighting.</li> <li>• Duration of motors done to optimize power consumption.</li> <li>• Cascading of compressors done to optimize power consumption.</li> <li>• HVLS fan installed to reduce the power consumption.</li> <li>• LED lamps installed to reduce the power consumption.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced power consumption.</li> <li>• 1,188 tons of CO2 emission per year reduced.</li> </ul>
		Renewable Energy	84% of the plant's day power is procured from renewable energy sources through 3rd party power purchase agreements.	<ul style="list-style-type: none"> <li>• 82 tons of CO2 emission per year reduced.</li> </ul>
		Low-Emission Alternate Fuel	Heat recovery system put in place in thermo pack to conserve LDO.	<ul style="list-style-type: none"> <li>• LDO saving of 30 kL per year and corresponding emission reduction</li> </ul>

#	Plant	Initiatives	Sub-Initiatives	Outcomes
3	DBR	Energy Conservation through Energy Efficient Process	<p>Several energy conservation projects are undertaken; A few examples:</p> <ul style="list-style-type: none"> <li>BEE-certified products were procured for the A/C, Chiller, and Fans.</li> <li>Energy efficient motors procured (IE3) (new installations &amp; replacements).</li> <li>VFD provided for 10 KW+ motors to optimize the energy which helped save electric power.</li> <li>HVLS fan Installed to reduce the power consumption.</li> <li>LED lamps Installed to reduce the power consumption.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction of power consumption by 1000 kWh / day,</li> <li>Corresponding emission reduction</li> </ul>
		Renewable energy	<ul style="list-style-type: none"> <li>90% of the plant's power is procured from renewable energy sources through 3rd party power purchase agreements.</li> <li>390 kW roof solar system installed in FY 2022-23 which generates 1800 units/day.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction of power consumption by 1,800 kWh / day, and corresponding emission reduction</li> </ul>
		Low-emission alternate fuel	<p>A biomass-based hot water generator was installed for the paint shop requirements, and 45% of the heat load has been converted from fossil fuel (LDO/ Furnace oil) to Biomass, which reduced CO2 Emission drastically.</p>	<ul style="list-style-type: none"> <li>Reduction of fossil fuel usage, and</li> <li>Reduction of CO2 emissions by 850 tons/year</li> </ul>
4	MDU	Energy Conservation through Energy Efficient Process	<p>Several energy conservation projects are undertaken; A few examples:</p> <ul style="list-style-type: none"> <li>Installed 13 numbers of HVLS fans.</li> <li>250 W MV lamps converted into 80 LED lamps.</li> <li>PO4 Heating system Heat exchanger optimized.</li> <li>Compressor usage optimized by plugging air leaks.</li> <li>Star-delta drives converted to VFD for higher efficiency.</li> <li>CED jig density improved from 6.02 to 5.38 jigs per tractor</li> </ul>	<ul style="list-style-type: none"> <li>330,000 kWh/year of power saved.</li> <li>14,625 Litres LDO saved.</li> <li>400+ tons of CO2 emission per year reduced</li> </ul>
		Renewable Energy	<p>A considerable portion of our power is purchased from renewable energy sources through third-party power purchase agreements</p>	<ul style="list-style-type: none"> <li>Green power and reduction in emissions</li> </ul>
		Low-Emission Alternate Fuel	<ul style="list-style-type: none"> <li>WDO, PB O1&amp;O2, and Top Coat Oven burners converted to Thermic fluid Heater.</li> <li>HSD Boiler converted to Biomass boiler.</li> </ul>	<ul style="list-style-type: none"> <li>512,000 Litres LDO saved.</li> <li>955+ tons of CO2 emission per year reduced.</li> </ul>

#	Plant	Initiatives	Sub-Initiatives	Outcomes
5	EBU	Energy Conservation through Energy Efficient Process	<p>Several energy conservation projects are pursued; A few examples:</p> <ul style="list-style-type: none"> <li>• Thyristor switch for heaters for washing machine, oven &amp; paint booth.</li> <li>• Usage of Energy saver air-conditioning units</li> <li>• Installation of VFDs for High spray pumps of washing machines.</li> <li>• Optimization of compressed air pressure from 6 to 5.6 bar, controlling area-wise air distribution through demand sensors &amp; PLC.</li> <li>• Interlocking of engine test room exhaust (30 nos.) with engine cranking to reduce energy.</li> <li>• Interlocking cooling tower with water temperature to reduce power.</li> <li>• Replacement of high-power consumption pump with energy-efficient pump.</li> </ul>	<ul style="list-style-type: none"> <li>• 257,000 kWh/year of power saved.</li> <li>• 25+ tons of CO2 emission per year reduced</li> </ul>
		Renewable Energy	<ul style="list-style-type: none"> <li>• 6.4% of the plant power is generated from 400 KW solar system as well as corresponding emission reduction</li> </ul>	<ul style="list-style-type: none"> <li>• 456,250 kWh/ year of power saved.</li> <li>• Corresponding emission reduction</li> </ul>
6	GBU	Energy Conservation through Energy Efficient Process	<p>Several energy conservation projects are undertaken; A few examples:</p> <ul style="list-style-type: none"> <li>• Energy efficient motors (IE3) in new installations and replacements.</li> <li>• VFD provided for the 3 KW + Motors runs continuously to optimize the energy.</li> <li>• BEE-certified products were procured for the air-conditioners, Chiller, Fans, etc.</li> <li>• LED lamps Installed to reduce the power consumption.</li> <li>• Compressor power consumption is reduced by arresting air leakages.</li> <li>• Furnace maintenance optimized to increase productivity</li> </ul>	<ul style="list-style-type: none"> <li>• 330,000 kWh/year of power saved.</li> <li>• 14,625 Litres LDO saved.</li> <li>• 400+ tons of CO2 emission per year reduced</li> </ul>
		Renewable Energy	<ul style="list-style-type: none"> <li>• A considerable portion of our power is purchased from renewable energy sources through third-party power purchase agreements.</li> <li>• 150 kW rooftop solar panels were installed in FY 2021-22 to generate green power</li> </ul>	<ul style="list-style-type: none"> <li>• Generation of around 500 kWh/day of power through in-house solar panels</li> </ul>

#	Plant	Initiatives	Sub-Initiatives	Outcomes
7	TGD	Energy Conservation through Energy Efficient Process	<ul style="list-style-type: none"> <li>All the CFL lamps have been changed to LED lamps.</li> <li>HVSL fans have been installed.</li> <li>Transvector nozzles installed to conserve.</li> <li>Heat Treatment process optimized through various initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>Energy conservation</li> <li>60+ tons of CO2 emission per year reduced.</li> </ul>
		Renewable Energy	<ul style="list-style-type: none"> <li>A considerable portion of our power is purchased from renewable energy sources through third-party power purchase agreements and our windmill.</li> </ul>	<ul style="list-style-type: none"> <li>Emission reduced</li> </ul>
8	SBM	Energy Conservation through Energy Efficient Process	<ul style="list-style-type: none"> <li>BEE-certified products were procured for the air-conditioners, chiller, fans, etc.</li> <li>Energy-efficient IE3 motors were procured for the new installations and replacements.</li> <li>VFD provided for the 10KW+ Motors to conserve energy.</li> <li>Conventional lamps replaced with energy-efficient LED lamps.</li> <li>Compressor efficiency improved.</li> <li>Hydraulic power pack switched off through sensors when not in use</li> </ul>	<ul style="list-style-type: none"> <li>Power conservation</li> <li>235+ tons of CO2 emission per year reduced.</li> </ul>
		Renewable Energy	<ul style="list-style-type: none"> <li>A considerable portion of our power is purchased from renewable energy sources through 3rd party power purchase agreement.</li> <li>150 KW rooftop solar panels installed in FY 2021-22, which generate around 500 kWh/day.</li> </ul>	<ul style="list-style-type: none"> <li>500 kWh/day in-house generation of green power</li> <li>2000+ tons of CO2 emission per year reduced.</li> </ul>

## Case Studies



### Fuel Reduction in the Heating Process for Paint shop Assembly Pants

Due to the substantial energy consumption associated with electric motors, particularly given the presence of numerous motors within our plants, we have transitioned to employing energy efficient IE3 premium efficiency motors in various installations throughout our facilities. These IE3 motors typically operate with an energy efficiency rating of 93.6%, representing an improvement of 1.5 to 2% compared to the efficiency of previous-generation motors.



### Reduction in Energy Consumption Plant: EBU

In our efforts to diminish the power consumption of our air compressor, we've implemented several modifications. These include adjusting the air distribution layout, substituting butterfly valves with pneumatic valves, and integrating demand sensors. Through these initiatives, we've successfully slashed our annual energy consumption by 75,000 kWh, while simultaneously resolving any issues about air pressure drops. Furthermore, we've enhanced operational control by consolidating the management of total air distribution through centralized PLC programming from a single location.



### GHG Reduction through Renewable Power Plant: DBR

Through our ongoing commitment to sustainability initiatives, we have transitioned from purchasing non-renewable power to procuring renewable power (such as solar and wind) through agreements with third-party power generation entities. This strategic shift has enabled us to fulfill 85% of our power requirements from renewable sources, resulting in a significant reduction in greenhouse gas (GHG) emissions.



### Usage of Energy-Efficient Products Plants: DBR, MDU

Pedestal fans on the shop floor were limited in their ability to distribute air beyond localized areas, exhibited excessive noise levels, and consumed higher amounts of power.



### Optimization of Compressor Plants: Bhopal

The paint shop and assembly lines rely on compressors to generate the necessary air, a process that demands substantial power. To enhance efficiency, we've implemented pressure boosters and intelligent control devices, effectively optimizing compressor running hours and resulting in reduced power consumption.



## Case Studies



### **Unwanted Shipment Elimination Warranty Parts Returns**

Due to the substantial energy previously, damaged or used parts replaced under warranty were transported to a central location for scrapping. To streamline this process, we have now authorized our service centers to handle the scrapping of these parts onsite. This initiative resulted in significant savings, including the elimination of 216 truckloads, a reduction of 95,000 liters of diesel consumption, and a decrease in CO2 emissions by 260 tons during FY 2022-23



### **Environment Friendly Transportation Outbound Shipments**

Due to the substantial energy previously, damaged or used parts replaced under warranty were transported to a central location for scrapping. To streamline this process, we have now authorized our service centers to handle the scrapping of these parts onsite. This initiative resulted in significant savings, including the elimination of 216 truckloads, a reduction of 95,000 liters of diesel consumption, and a decrease in CO2 emissions by 260 tons during FY 2022-23



### **Fuel Migration from Fossil Fuel to Renewable Biomass Plants: DBR, MDU**

For a move towards sustainability and cost-effectiveness, we transitioned from using Furnace Oil (FO) or Light Diesel Oil (LDO) fuels to biomass in our paint shop ovens. Biomass, being renewable and emitting lower levels of greenhouse gases (GHGs), not only helps in reducing emissions by 393 tons per year but also results in significant cost savings. We have further projects underway to extend this initiative, with plans to modify the burners of various ovens (such as WDO, PBO 1&2, Topcoat) and the HSD boiler to utilize biomass fuel

## Water Management And Quality

We promote responsible and sustainable management of water as a resource throughout our operations and supply chain. It goes beyond mere compliance with regulations and aims to address the social, environmental, and economic aspects of water use and foster a comprehensive water management strategy.

### We strive to

- Adopt a diverse comprehensive water sourcing strategy - combining the utilization of groundwater from bore wells with the active collection and use of rainwater for operations.
- Assess water-related risks in operation and make efforts to reduce water intensity.
- Implement practices to recharge groundwater through rainwater collection and harvesting.
- Treat wastewater by installing Effluent Treatment Plants (ETP) and Sewage Treatment Plants (STP) across all facilities and ensure zero liquid discharge practices.
- Adopt continuous improvement programs supporting water conservation efforts in operations.
- Promote and raise awareness of water conservation practices among the stakeholders.
- Engage with suppliers to conduct assessments, reduce water-related risks, and improve water conservation practices across the supply chain.
- Regularly monitor water-related data through flow meters to enable data-led water management planning and reporting.

### Water and Effluents

Water usage and discharge of treated effluent are material to us, as these factors have significant impacts on the communities where our plants are located, which are mostly in areas of water scarcity.

Most of the water for our operations is taken from groundwater from our own or third-party bore wells. We also collect rainwater which is also used for our operations when available.



## 11% Reduction in water intensity per tractor in FY 2023-24 from FY 2021-22



The usage of water is constantly optimized through several drives to cut down consumption in industrial and domestic usage.

The effluents are well treated to meet or exceed the norms prescribed by the agencies (central and state pollution control boards). Furthermore, we have deployed a robust ISO Integrated Management System which includes ISO 14001:2015 relating to environmental systems which strengthens our pursuits in this area.

Projects taken under the Lean and Green pillars from the WCM program helps us to increase our water conservation and reduce effluent discharges. Our continuous improvement programs comprising TQM, TPM, Six Sigma, etc., also support these pursuits. We continuously conserve water used for our process and domestic needs through various improvement projects. In our plants, rainwater is collected from the roofs and surface, which is directly used for process needs after filtration, and to recharge the groundwater level.

### **Management of water discharge-related impacts [GRI 303 – 2]**

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## Water Positivity

Because of the comparatively low consumption and thorough treatment of effluent that adheres to regulatory standards, the effect on local water quality from our operations is none. Nonetheless, we consistently engage in initiatives aimed at optimizing water usage. The adoption of solar panels for self-generated power and the procurement of renewable energy from the grid led to a notable decrease in the water necessary for power production. Additionally, we disclose our methodologies for maintaining the quality of discharged effluent.

### ETB Plant is Water Positive

per CGWA guidelines, made possible through significant rainwater harvesting measures.

### Water Consumption Reduction Program

Water consumption within our plants is monitored using flow meters at the point of consumption. Collecting the usage data from flow meters enables us to pinpoint areas with unusual water consumption and promptly rectify anomalies. Water consumption per tractor has decreased noticeably during recent years, reflecting our commitment to sustainability and efficiency.

Several factors contribute to this healthy trend including monitoring as mentioned above, auto-cutoffs to prevent rundowns in process, water optimization measures in our paint shops, implementation of low flow taps to reduce domestic water consumption, minimizing wastages in canteen, usage of rainwater collection ponds to store rainwater which is later on used for industrial and domestic purposes, usage of RO reject water for domestic purposes, and usage of the treated water from ETPs and STPs for toilet flushing, and horticultural purposes to maintain the extensive terrain we have in each of our plants.



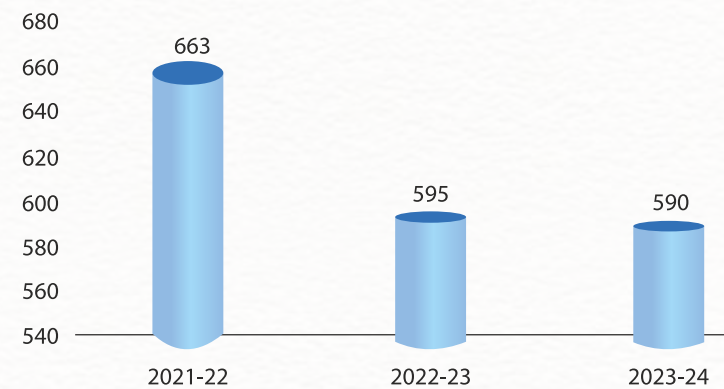
# Water Withdrawal

(GRI 303 – 3)

We have recently conducted a comprehensive water stress assessment to identify potential water-related risks across our operations. By analyzing water availability, quality, and usage patterns, we gained valuable insights into areas of vulnerability and exposure to water stress, which enabled us to proactively implement initiatives such as rainwater harvesting, water conservation, etc., to remain resilient against water-related challenges.

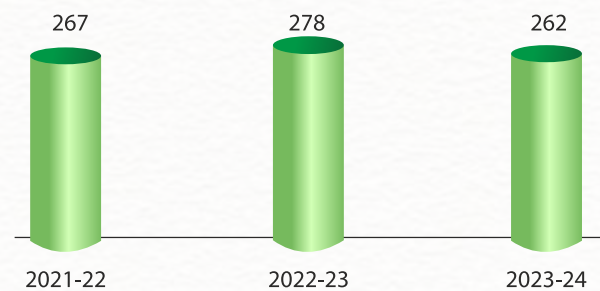


**Water Consumed Per Tractor (Liters)**



Water consumption per tractor reduced due to several water reduction program including reduce, reuse & recycle, across the plants.

**Water Withdrawal (ML)**



There is a spike in total water withdrawal during 2022-23 driven by increased volume; However, water consumed per tractor is decreasing year over year due to water optimization drive in our facilities.

## Water Discharge

(GRI 303 – 4)

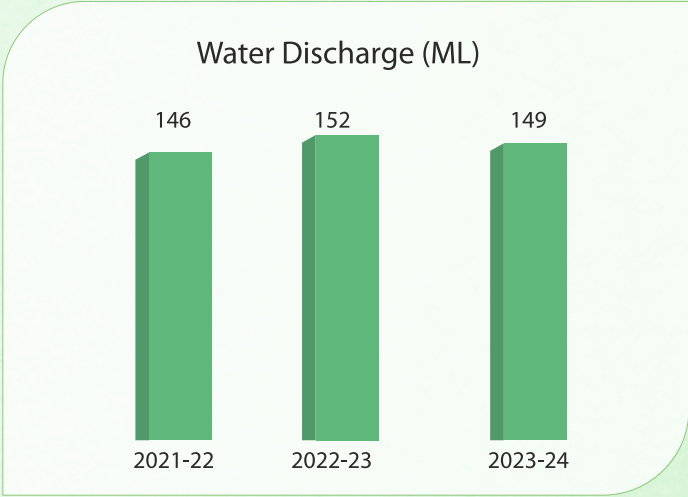
We have conducted a water quality assessments across our manufacturing sites to ensure adherence to Pollution Control Board (PCB) norms. By analyzing parameters such as pH levels, contaminant, and microbial presence we determine the treatment required at our ETPs and STPs. The water discharged after treatment by our ETPs and STPs meet the stringent requirements of Pollution Control Boards for cleanliness and is reused.

One of the **idyllic rainwater storage ponds** at SBM provides a habitat for several species



**11%**  
Water intensity  
reduction  
in FY 24

**149 ML**  
Waste water  
treated &  
reused in FY 24



There is a spike in total water discharge during 2022-23 driven by increased volume, even as we fully treat reuse all our discharged water, and all our facilities are zero discharge facilities.

# Initiatives for Water Consumption Reduction

The following table provides a detailed listing of all our initiatives for water consumption reduction

#	Plant	Initiatives	Sub-initiatives	Outcomes
1	All Plants	Water Consumption Monitoring & Conservation	<ul style="list-style-type: none"> <li>Daily water consumption is measured and monitored through digital metering, the potential savings opportunities are identified, and projects are initiated. Awareness sign boards are displayed at various locations on plant premises to sensitize employees on the importance of water conservation.</li> </ul>	Judicial usage of water through active monitoring of consumption
2	ETB	Reuse of Water	<ul style="list-style-type: none"> <li>Reject water from the RO plant is reused in the paint booth.</li> <li>Reduced freshwater consumption from water rinse of PT process of sheet metal component.</li> <li>Treated water used for horticultural purposes.</li> </ul>	7,720 kL of water saved per year
		Usage Efficiency Improvement	<ul style="list-style-type: none"> <li>Auto cut-off valves installed in all overflow water tanks.</li> <li>DM water reduction by using more efficient nozzles and optimization of spray pressure.</li> </ul>	1,715 kL of water saved per year
		Rainwater Harvesting and Usage	<ul style="list-style-type: none"> <li>Constructed 10 pits with 100 feet deep borewell shafts to recharge groundwater, and one charging pond for water harvesting, resulting in 100% water positivity. We overcame groundwater scarcity.</li> </ul>	115,000 kL of water per year recharged to the ground
3	DBR	Reuse of Water	<ul style="list-style-type: none"> <li>Reuse of wastewater from MGF vessel to DM plant process.</li> <li>Reuse of wastewater from SBA vessel to chassis pit.</li> <li>Reuse of spent water from the RCDM tank to the chassis sludge pit.</li> </ul>	5,850 kL of water saved per year
		Usage Efficiency Improvement	<ul style="list-style-type: none"> <li>Low flow taps - Aerator nozzles installed in all hand washing areas to reduce domestic water usage by 50%.</li> <li>Electric booster pump installed in RO system to increase the permeate output by 7.5%.</li> <li>Daily inspection at the canteen to eliminate water wastage.</li> </ul>	1,950 kL of water saved per year
		Rainwater Harvesting and Usage	<ul style="list-style-type: none"> <li>Use a water storage pond with a capacity of 900 kL; Convert unused sludge pit to harvest rainwater.</li> </ul>	Use of 1,100 kL per year of rainwater for the process

## Initiatives for Water Consumption Reduction

The following table provides a detailed listing of all our initiatives for water consumption reduction

#	Plant	Initiatives	Sub-initiatives	Outcomes
4	MDU	Reuse of Water	<ul style="list-style-type: none"> <li>CED DM fresh spray wastewater reused after treatment through ETP-RO-DM.</li> <li>DM Spray wastewater is used for raw water blending with a proper filtration process.</li> <li>Water Rinse-4 dumping frequency changed from once a week to once a month, without any compromise in performance.</li> </ul>	7,500 kL of water saved per year
		Rainwater Harvesting and Usage	<ul style="list-style-type: none"> <li>Created a pond to harvest rainwater.</li> </ul>	Rainwater charged to the ground
5	EBU	Reuse of Water	<ul style="list-style-type: none"> <li>Reject water from the RO plant is reused in the paint booth.</li> <li>Reduced freshwater consumption from water rinse of PT process of sheet metal component.</li> <li>Treated water used for horticultural purposes.</li> </ul>	Solvent usage reduction
		Usage Efficiency Improvement	<ul style="list-style-type: none"> <li>Reduction in water wastage by several initiatives and a few of them are listed below.</li> <li>Tank overflow issue was eliminated through interlocking systems.</li> <li>Connecting the overflow line of the overhead tank to the underground water reservoir.</li> <li>Proper maintenance of DM water plant and DG cooling towers to ensure lower water consumption.</li> </ul>	511 kL of water saved per year
		Rainwater Harvesting and Usage  Reuse of Water	<ul style="list-style-type: none"> <li>Enhancement of water pond capacity by adding nine recharge shafts in three ponds.</li> <li>Reuse of treated water from ETP in toilets during rainy season &amp; water requirement is lesser at gardens.</li> </ul>	45,000 kL per year recharged to ground



## Initiatives for Water Consumption Reduction

The following table provides a detailed listing of all our initiatives for water consumption reduction

#	Plant	Initiatives	Sub-initiatives	Outcomes
6	GBU	Usage Efficiency	<ul style="list-style-type: none"> <li>New Sealed Quenching Furnace installed with oil cooling system replacing water cooling system, thus eliminating one cooling tower.</li> <li>Water consumption is reduced by providing low-flow nozzles at wash basins and toilets.</li> </ul>	425 KL of water saved per year
7	SBM	Reuse of Water	<ul style="list-style-type: none"> <li>Water usage is reduced by increasing coolant life through purification systems.</li> <li>Water usage reduction by reusing RO wastewater in toilet flushing, leading to a reduction in the usage of freshwater.</li> </ul>	2,130 kL / year of water consumption reduced
		Usage Efficiency Improvement	<ul style="list-style-type: none"> <li>Water usage reduction by implementing aerators in washrooms &amp; canteen.</li> </ul>	
		Rainwater Harvesting and Usage	<ul style="list-style-type: none"> <li>Huge rainwater ponds in Sembium are designed to capture the rainwater overflow from the entire campus and recharge the groundwater.</li> </ul>	Rainwater charged to the ground
8	TGD	Reuse of Water	<ul style="list-style-type: none"> <li>CED DM fresh spray wastewater is being reused after treatment through the ETP-RO-DM project, leading to a reduction in borewell water extraction.</li> <li>DM Spray wastewater used for raw water blending with proper filtration process.</li> </ul>	1,650 kL / year of water consumption reduced
		Usage Efficiency Improvement	<ul style="list-style-type: none"> <li>Water Rinse-4 dumping frequency changed from weekly once to monthly once.</li> </ul>	
		Rainwater Harvesting and Usage	Rainwater is harvested through the pond	Rainwater charged to the ground

## Case Studies



### **DM Wastewater Recycling and Reuse Plant: MDU**

A significant amount of water is rejected in the treatment process while making DM water. The wastewater is collected and processed through the iron filter where iron particles get removed and oil absorbing filters remove oil content, thus enabling us to use this water. The yield of the DM plant increased from 75% to 95% through this initiative



### **Water Positivity Through Rainwater Harvesting Plant: ETB**

To improve the groundwater table, we created recharge pits near the borewells. Around 10 such pits have been established and are recharged with water collected from the roof and surface areas during rains.

We also made a pond with a capacity of 150 kL to store rainwater. These efforts have helped us recharge more water than withdraw and become water positive per CGWA guidelines.



### **Reduction of Water Consumption Plant: DBR**

Our water supply relies primarily on groundwater. A pond has been constructed to capture rainwater in the plant. This water, after adequate filtration, is used for the manufacturing processes, thereby helping us avoid around 8000 kL of groundwater consumption.

## Circularity and Resource Efficiency

We aim to tackle the challenges of waste and material consumption in our operations by optimizing resource use and implementing circular practices. We ensure waste disposal complies with hazardous waste authorizations and permits from the respective states' pollution control boards. Additionally, we make significant efforts to reduce material consumption throughout the value chain.



## We are committed to...

- Adhere to all laws and regulations related to waste management, handling, and disposal.
- Optimize use of natural resources by implementing sustainable practices in operations.
- Adopt a holistic waste reduction strategy encompassing the 3R Approach (Reduce, Reuse, Recycle) to improve the waste reduction program.
- Optimize material consumption and weight reduction through continuous improvements.
- Minimize waste generation through the removal of unnecessary parts in product.
- Adopt sustainable packaging methods such as returnable crates and pallets to reduce waste generation in the supply chain.
- Improve resource reuse by promoting the use of recycled materials in manufacturing.
- Ensure responsible handling and disposal of hazardous and non-hazardous waste through authorized agencies and recyclers.
- Implement engagement programs and supplier assessments to reduce waste generation across the entire supply chain.
- Raise awareness on waste recovery and recycling among stakeholders to ensure proper disposal of waste products.
- Regularly monitor waste-related data for continuous improvement in tracking, planning, and reporting.

## Materials and Wastes



Material usage and waste reduction are crucial to us, as they significantly impact our competitive success and that of our upstream material suppliers, who consume water and energy and discharge effluents and emissions.

In pursuit of continuous improvement, we are committed to minimizing material consumption through various initiatives, including optimizing metal weights and machining allowances in castings, streamlining parts production, substituting metal components with recyclable plastics, reducing parts proliferation, and diligently minimizing defects to reduce rejected materials. Additionally, we minimize single-use packaging materials by utilizing returnable crates and pallets from suppliers. By reducing material usage, we not only cut down on waste but also avoid the environmental impacts associated with producing raw materials.

### Materials Consumption & Recycled Inputs [GRI 301 – 1 / 2]

There is a spike in total water discharge during 2022-23 driven by increased volume, even as we fully treat reuse all our discharged water, and all our facilities are zero discharge facilities.

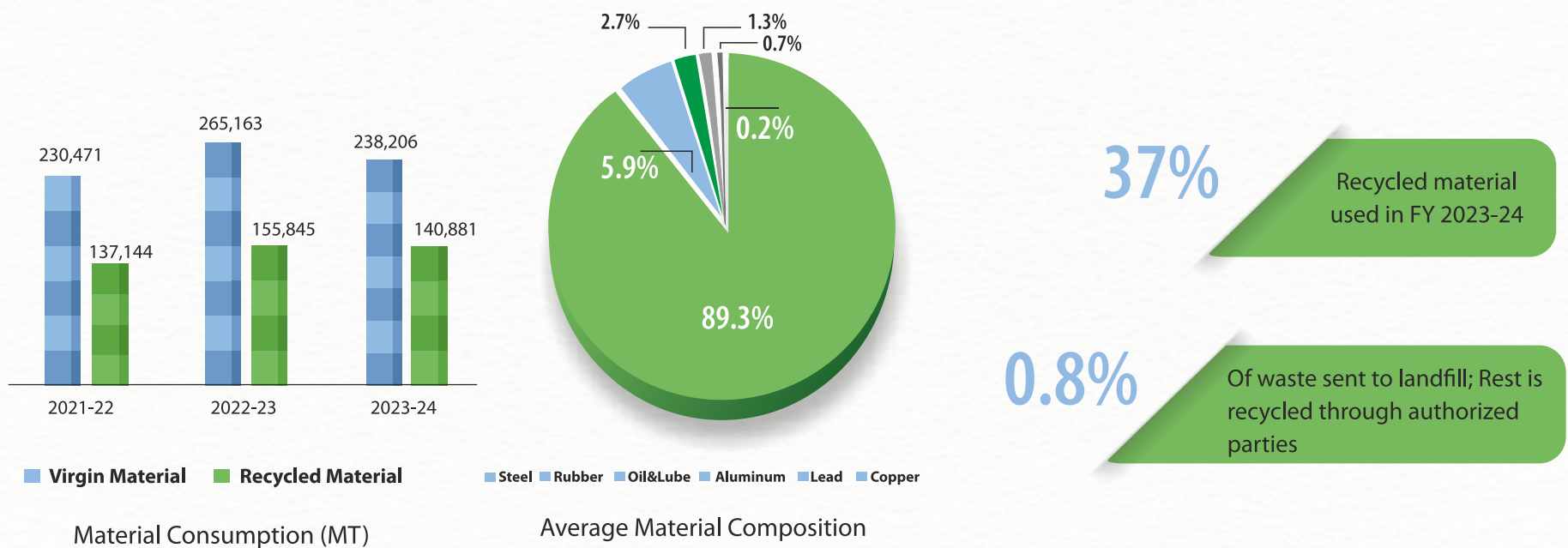
There is a spike in total water discharge during 2022-23 driven by increased volume, even as we fully treat reuse all our discharged water, and all our facilities are zero discharge facilities.

# Materials and Wastes

Hazardous waste is managed through authorized agencies, while non-hazardous waste, such as rejected parts and metal turnings, is sent to recyclers.

Our WCM-Lean and WCM-Zero Defects teams focus on reducing material wastage by addressing defects and preventing unnecessary consumption during production. These efforts are supported by continuous improvement programs such as TQM, TPM, and Six Sigma. Furthermore, we have implemented a robust ISO Integrated Management system, including ISO 14001:2015 for environmental management, which strengthens our commitment to sustainability and the environment.

We also conduct awareness programs to train our employees on waste reduction and sorting procedures.



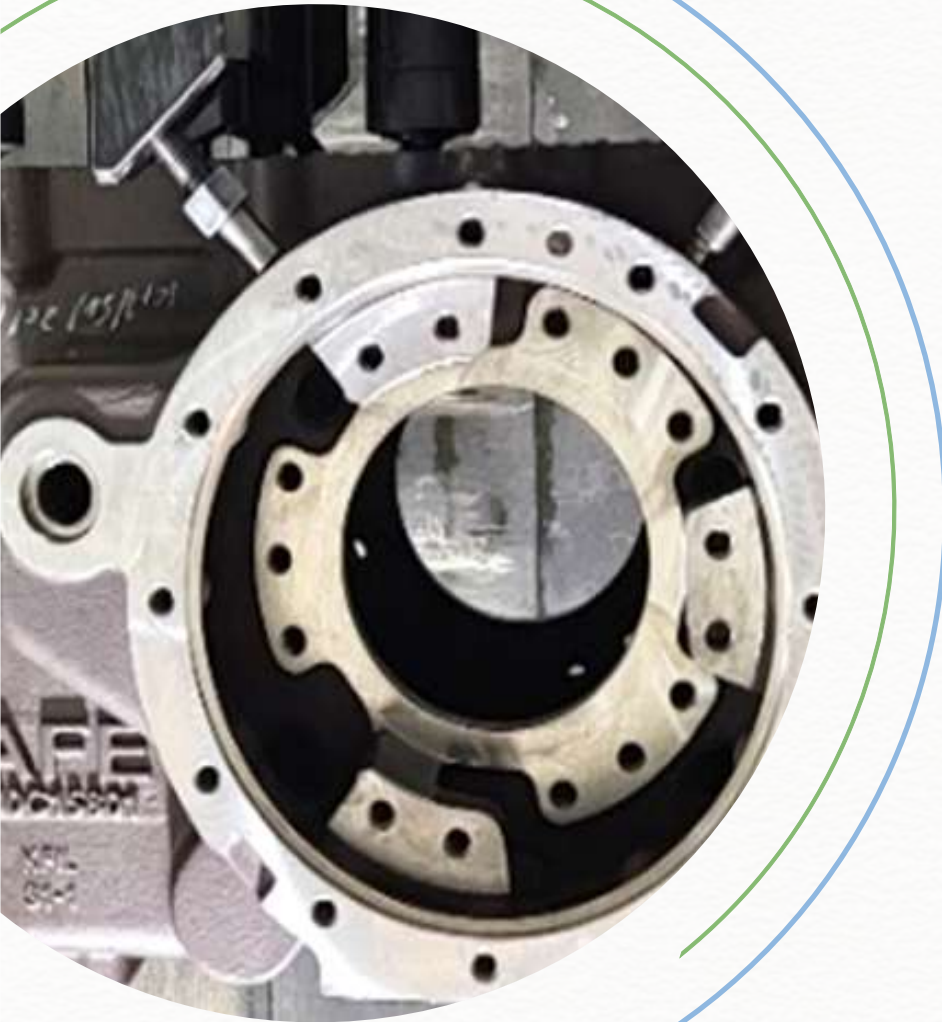
## Material Consumption Reduction Initiatives

We continually strive to minimize component weights without compromising quality. This includes converting castings to lighter sheet metal or polymers wherever feasible.

Our approach extends to optimizing machining allowances for castings and transitioning metal parts to recyclable plastics. Dry-cut technology is employed for machining parts without coolant wherever applicable. A few additional examples include projects aimed at eliminating or reducing packaging waste, utilizing returnable metal crates and reusable pallets from providers like CHEP and VINSUM to minimize wood waste, and transitioning tractor front weights from steel to less processed iron ore.

In our quest for sustainability, hazardous asbestos gaskets have been replaced with foam gaskets and hexavalent passivation has been substituted with trivalent passivation. Lead-free paints are now standard in our products. Continuous engine design improvements focus on reducing engine weight, thereby decreasing material usage, and enhancing efficiency.

Similarly, efforts to minimize oil content and optimize oil replacement cycles in engines have led to significant savings in engine and transmission oils.



**A typical casting where machining allowances are optimized to reduce weight**

## Case Studies



### **Casting Weight Optimization Plant: DBR & MDU**

To optimize the usage of input materials, we have initiated a cross-functional team under the Prospero Program run by our materials team.

This team has reduced the machining allowances in several casting components, resulting in the reduction of the weights.



### **Environmentally Friendly Processes Plant: DBR & MDU**

Wherever possible, we converted machined parts to cold forged parts to reduce the material usage and machining requirements.

In one scenario, this initiative resulted in a 33% reduction in input raw material



### **Removal of Unwanted Parts from Tractors Plant: BR & MDU**

We focus on reducing the material requirement in the design stage itself while ensuring the robustness of our products.

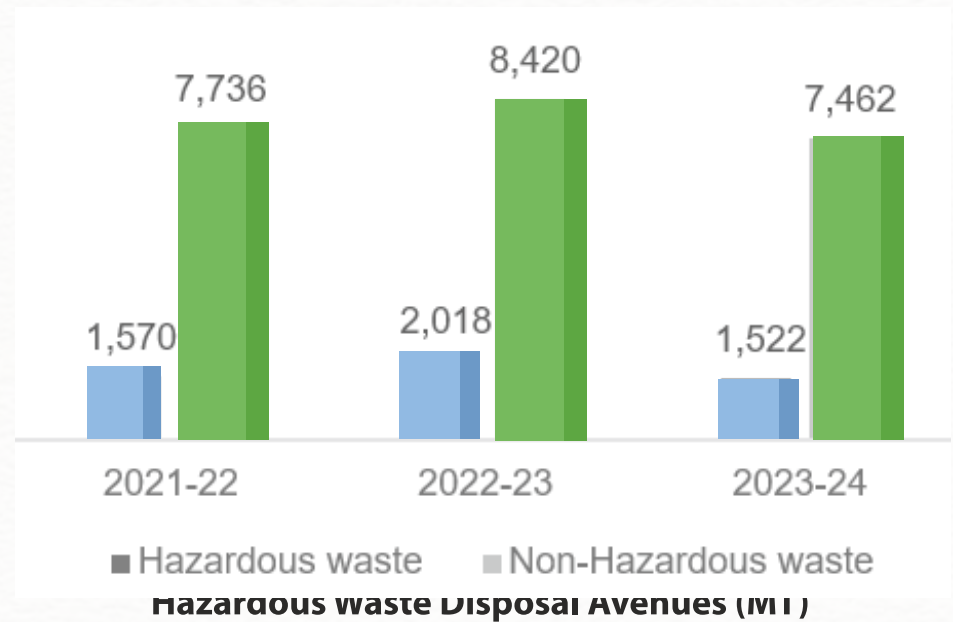
For the case of the brake assembly, we reduced the number of brake discs from 4 pieces to 3 pieces, while ensuring the efficiency of the braking.

# Waste Management

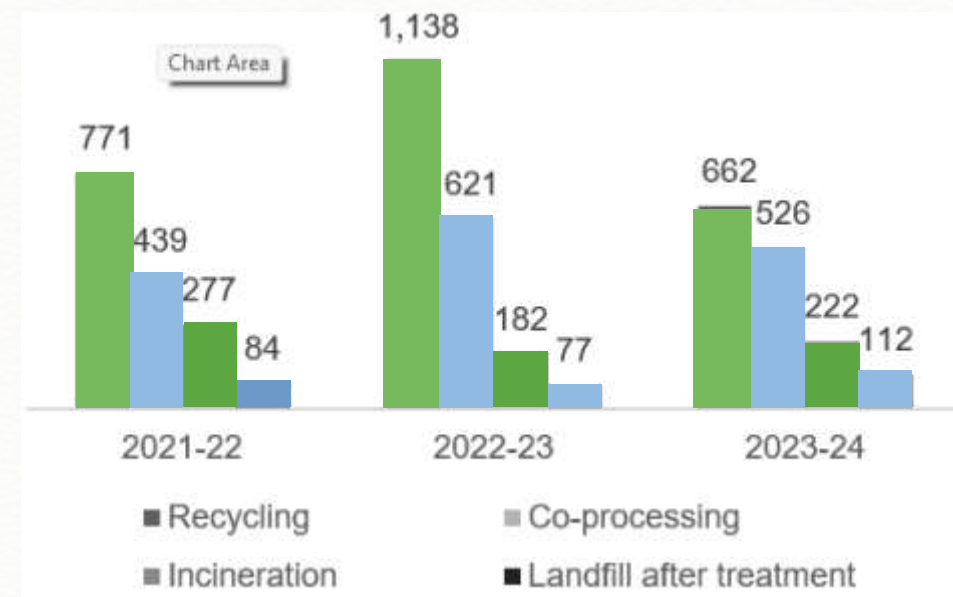
We embrace the principle of "prevention is better than cure" in waste management. This guides our efforts to eliminate waste generation by avoiding the use of non-recyclable packaging materials. We have implemented the 3R concept - "Reduce, Reuse, Recycle" - in our solid waste reduction program. Both hazardous and non-hazardous wastes are managed in strict compliance with guidelines from pollution control boards.

This adherence is upheld not only within our premises but also with our recycling partners who handle the waste we generate. Gaseous emissions from our plants are stringently monitored according to directives from pollution control boards, utilizing authorized service providers for periodic air ambient surveys and stack

### Total Waste Generated (MT)



### Hazardous waste Disposal Avenues (MT)





## Waste Diverted From Disposal [GRI 306 – 4]

We successfully recycle a significant portion of our waste through authorized recyclers, along with some co-processing and incineration. Only a minimal portion of the waste is sent to a secured landfill after thorough treatment, and we are exploring options to eliminate this by increasing co-processing.

Through these waste elimination and recovery processes, we demonstrate our commitment to sustainable waste management and circularity by conserving natural resources and reducing greenhouse gas emissions.



**Recuperator to recover heat from flue gas to heat incoming air in ETB**

# Initiatives for Waste Reduction

The following table provides a detailed listing of all our initiatives for waste reduction

#	Plant	Initiatives	Sub-initiatives	Outcomes
1	ETB	Reduction of Hazardous Waste	New equipment, "Kremlin - France make 2K paint supply," has been installed in the chassis paint line to reduce paint wastage and avoid flushing the entire system while ensuring quality.	Reduction of paint sludge by 108 tonnes Saving Rs 8.6 lakhs per year
			Electrostatic gun is used instead of conventional gun, leading to 80% higher transfer efficiency, and reduction of wastages and sludge generation	Reduced paint wastage
			Paint sludge co-processed in cement industries, and diverting from wastage.	Savings of Rs. 8 lakhs per year
		Reduce/ Reuse / Recycle Based Projects	Saving in packaging waste by using recyclable packaging box	80% of packing is recyclable
2	DBR	Reduction of Hazardous Waste	Highly efficient ES gun implemented for all colours for both chassis and sheet metal line. More efficient 2K paint process introduced for sheet metal lines. 2K auto mix system implemented for Paint & Hardener mix. Paint sludge weight reduction through solar heat evaporation and higher ventilation.	5 tonnes/year reduction of hazardous waste generation and disposal
		Reduction of Non-Hazardous Waste	Non-hazardous waste reduction by reducing the machining allowance in the raw castings which in turn helps to reduce the scrap generation and machining time. The scrap yard is converted to a "Value" yard, and all scraps are segregated and stored in designated covered locations which facilitates better recycling by the third parties, and higher scrap value for the organization	1800 kg reduced
		Reduce/ Reuse / Recycle Based Projects	Reuse of packaging materials to pack child parts.	157 tonnes of wood waste reduced per year
			Recycling of wood pallets through pallet reuse firms (CHEP); "Reuse" of hood covers for engines	10 tons of carton box wastage reduced per year
			Packing materials including wood, carton boxes, and plastic wrappers are recycled through agencies authorized by pollution control board.	17 tons of plastic waste reduced per year

# Initiatives for Waste Reduction

The following table provides a detailed listing of all our initiatives for waste reduction

#	Plant	Initiatives	Sub-initiatives	Outcomes
3	MDU	Reduction of Hazardous Waste	Highly efficient ES gun implemented for all colors for both chassis and sheet metal lines. More efficient 2K paint process introduced for sheet metal lines	12 tonnes/year reduction of hazardous waste generation and disposal
			Reuse of waste oil after filtration	1.5 kL saved per year
		Reduction of Non-Hazardous Waste	Carton packs replaced with reusable bins	Reduced carton box wastage significantly
		Elimination of Waste by Alternate Methods	Solar dryer installed for chemical sludge drying process - Wet to Dry process.	12 tonnes/year reduction of sludge generation and disposal
4	EBU	Reduction of Hazardous Waste	Coolant oil life extension by filtration system every 3 months.	Reduction of 0.72 tonnes of coolant usage per year
		Reduction of Non-Hazardous Waste	Elimination of primary packing boxes by implementing reusable customized plastic bins.	Elimination of 5.8 tonnes per year of cartons.
			Reduction in machining allowance of cylinder blocks.	Elimination of 12.5 tonnes per year of metal
		Elimination of Waste by Alternate Methods	Elimination of corrugated box packaging for component supplies through usage of reusable plastic bins.	Elimination of 3.1 tonnes per year of cartons
5	SBM	Reduction of Non-Hazardous Waste	Carbide cutting tool life extension by the usage of latest generation inserts.	Reduction of 5 kg of carbide cutting tool inserts
			Wooden pallets are reused.	1.5 tons of wooden pallets are reused
		Reduce/ Reuse / Recycle Based Projects	Wooden pallets received from inbound unfinished castings are reused for finished castings delivery to plants.	Reduction of pallets used
6	TGD	Elimination of Waste by Alternate Methods	Carbide cutting tool life extension by the usage of latest generation inserts.	Reduction of 6 kg of carbide cutting tool inserts
7	GBU	Reduce/ Reuse / Recycle Based Projects	Reuse of supplier packing strips to pack outbound parts.	Reduction of packing strips by 1%

# Case Study



## Reduction of Cutting Tools Plant: SBM

We use carbide tools and inserts for machining castings. We pursued several initiatives to prolong the life of these tools and inserts. A few initiatives are listed below:

- Solid carbide drill replaced with steel body drill with indexable insert.
- Replaced single-edge inserts with multi-edge.
- Replaced two separate drills with a combination drill.

These efforts helped us reduce the consumption of cutters, thereby resulting in cost savings and reduction of material usage in the plant.



## Paint Process Optimization Plant: DBR

Conventional paint guns with a lower transfer efficiency of around 35% were replaced with more efficient ES guns for chassis and sheet metal painting lines, resulting in a transfer efficiency of around 75%.

The loading density of the jigs in the paint shops was also increased to load additional parts. These efforts helped us reduce paint wastage and paint sludge generation.



## Oil Consumption Reduction Service Function

We increased our engine oil replacement frequency from 300 hours to 500 hours while ensuring that the engines performed well.

This effort helped us reduce around 850,000 liters of oil and 1,963 tonnes of CO2 emissions per year



## Reduction of Paint Wastage Plant: ETB

PU paints were previously mixed manually for all colors in our sheet metal painting line. This manual process was inefficient and resulted in paint and thinner waste during color change flushing. We have replaced the manual process with an automated system using 2K mixers. This change has helped us reduce waste, as 2K mixers allow for precise quantity mixing.

## Resilient **Supply Chain**

We prioritize partnerships with suppliers and subcontractors who share our values and ESG goals, underscoring our commitment to sustainability and reducing environmental impact. By collaborating with entities that share our eco-friendly ethos, we promote responsible sourcing and work towards minimizing our carbon footprint. This approach not only resonates with our environmental values but also bolsters our reputation and meets the expectations of environmentally conscious customers.

Our Supplier Code of Conduct and Sustainable Procurement Policy acts as a crucial guideline for both suppliers and internal procurement teams. The Supplier Code of Conduct outlines our expectations regarding ethical behavior, environment, and compliance with laws and regulations. Suppliers commit to upholding high standards of integrity, transparency, and social responsibility, ensuring trust-based relationships and a sustainable supply chain.

The Sustainable Procurement Policy integrates sustainability principles into procurement decisions, guiding internal teams to prioritize factors such as environmental performance, social responsibility, and economic viability when selecting suppliers and products. Our procurement teams make informed decisions that

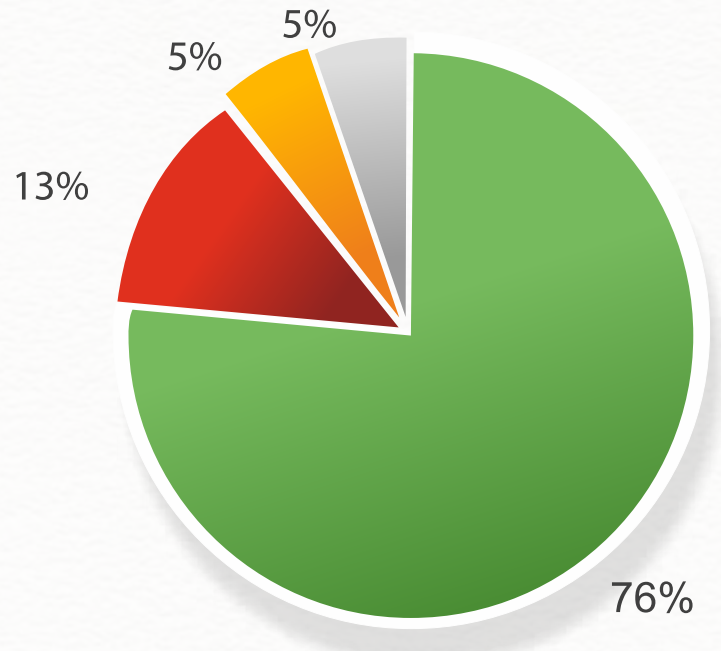
balance economic, environmental, and social considerations, driving value creation and risk mitigation across the supply chain.

Through adherence to these guidelines, we foster responsible, sustainable, and ethical practices among suppliers and internal procurement teams, contributing to the company's long-term success and positive impact on society and the environment. Our targeted supplier assessment fosters sustainable practices, aligning suppliers with our standards and promoting responsible manufacturing. This approach contributes to sustainable value chain management and underscores our dedication to environmental responsibility.

## Proportion of Spending on Local Suppliers [GRI 204-1]

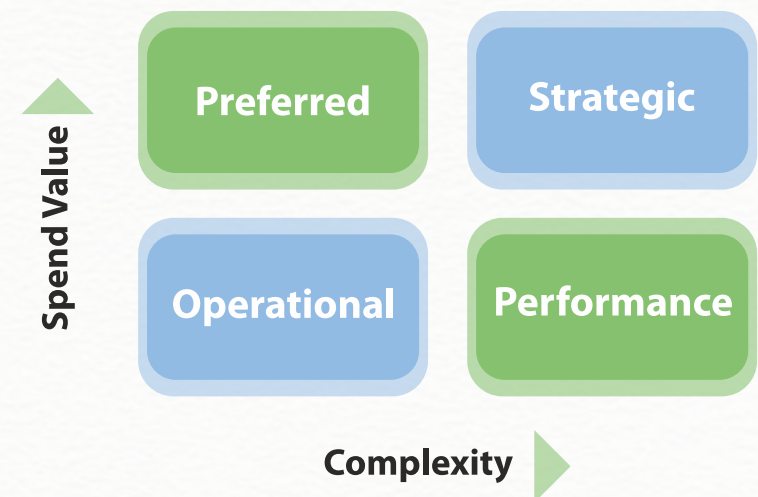
We source 97% of our input materials within India. Of this amount, 9% are sourced from the immediate vicinity of each site. These measures help us promote local suppliers and create jobs within the region. Furthermore, localizing materials helps drastically reduce emissions related to transportation.

### Spend Proportion for Supplier Categories



- Strategic
- Preferred
- Performance Focus
- Operational

Grouping suppliers into the categories mentioned above helps prioritize resources, manage risks, and develop appropriate strategies for supplier relationships and supply chain management. Supplier ESG assessments are crucial components of our supply chain management strategy, ensuring alignment with the company's sustainability goals and ethical standards. These assessments involve a systematic evaluation of suppliers' performance across various ESG criteria to gauge their commitment to responsible business practices and sustainability principles. The process begins with the identification of key ESG risk areas relevant to our supply chain, such as environmental impact, labour practices, human rights, ethics, and governance. We utilize a combination of tools, frameworks, and evaluation criteria to assess suppliers' ESG performance. This includes questionnaires, surveys, on-site audits, and third-party assessments to gather information and data on suppliers' ESG practices.



## New Suppliers that were Screened using Social Criteria (GRI 414 – 1)

200+

Major Direct  
Material Suppliers

60+

Major Indirect  
Material Suppliers

During assessments, all of our suppliers are evaluated based on their adherence to our Supplier Code of Conduct, relevant industry standards, and regulatory requirements. Key ESG indicators, such as carbon footprint, energy efficiency, waste management, labour standards, diversity and inclusion, and corporate governance practices, are analyzed to measure suppliers' performance and identify areas for further improvement.

The findings of the ESG assessments are used to inform decision-making processes related to supplier selection, engagement, and development. Suppliers that demonstrate strong ESG performance are prioritized and encouraged to maintain their efforts, while those with deficiencies are provided with guidance and support to enhance their ESG practices.

## Negative Social Impacts in the Supply Chain and Actions Taken (GRI 414 – 2)

We maintain a zero-tolerance policy towards violations and expect strict adherence from our suppliers to all applicable laws, regulations, and rules. Within our Supplier Code of Conduct, we emphasize the importance of corporate responsibility principles, including environmental and climate action, human rights, workplace health and safety, responsible sourcing, taxes and customs, and the handling of information.

We employ a robust supplier audit system called iMaRQ Audit, which evaluates suppliers on several assessment parameters covering aspects such as quality, delivery, cost among others.

We strongly encourage our suppliers to obtain ISO 14001 certification, which focuses on environmental management systems. Now we are integrating sustainability criteria into the audit systems. We also did a detailed ESG audit of our top 23 suppliers who contribute towards 70% of the spend, and these suppliers were trained on ESG aspects during the audit.

Based on the scores, corrective actions are triggered. This ensures that suppliers consistently produce high-quality products, minimizing waste generation. We ensure that all suppliers fully comply with our Supplier Code of Conduct as of March 2024.





## **ADHERING TO ISO 14001 STANDARDS HELPS OUR SUPPLIERS AS NOTED BELOW:**

- ISO 14001 emphasizes the importance of supply chain transparency and encourages organizations to consider their environmental aspects and impacts throughout the entire value chain. By mapping out the supply chain and conducting environmental assessments, organizations may uncover social issues, such as labor violations or human rights abuses, that can be addressed.
- ISO 14001 requires organizations to conduct risk assessments related to environmental impacts. During this process, organizations can identify potential risks associated with social impacts, such as violations of labor standards or unsafe working conditions. This awareness allows organizations to take proactive measures to prevent or mitigate negative social impacts.
- ISO 14001 emphasizes engaging with stakeholders to understand their concerns and expectations. This includes both internal and external stakeholders, such as employees, suppliers, customers, and local communities. Through stakeholder engagement, organizations can gather valuable information about social impacts within the supply chain and take appropriate actions to address them.
- ISO 14001 promotes a culture of continuous improvement. This involves setting objectives, and targets, and implementing corrective and preventive actions. We have recently established Supplier Performance Evaluation Standards and Supplier Checklists.

## Resilient Supply Chain



All procurement personnel undergo comprehensive training on ESG principles and sustainability. This training is conducted through a variety of methods including workshops and e-learning systems, facilitated by both internal experts and external specialists.

Our Sustainable Sourcing Policy underscores adherence to our Supplier's Code of Conduct and advocates for the adoption of best practices to minimize environmental impact across the entire supply chain while generating societal value. As part of our sustainable procurement approach, all critical suppliers receive training on ESG best practices through targeted sessions

and practical overviews. Additionally, all critical suppliers undergo on-site audits to evaluate their adherence to ESG practices, ensuring alignment with our sustainability objectives.

We have recently conducted a global suppliers meet to further foster communication, collaboration, and alignment between the company and the suppliers. During the event, suppliers gained insight into our extensive product portfolio and were briefed on the company's sustainability initiatives and expectations.

## Supplier Social Assessment

Initiatives	FY 2023-24
Percentage of new suppliers that were screened for social criteria	100%
Number of suppliers assessed for social impacts	100% of critical suppliers
Number of suppliers identified as having significant actual and potential negative social impacts	0
Percentage of 23 critical suppliers with whom improvements were agreed upon as a result of assessment	30%
Percentage of suppliers with whom relationships were terminated as a result of assessment	0%
Percentage of targeted suppliers that have signed the sustainable procurement charter/supplier code of conduct	100%
Percentage of targeted suppliers with contracts that include clauses on environmental, labour, and human rights requirements	100%
Percentage of our employees across all locations who have received training on sustainable procurement	100%

## Adherence to Human Rights

(GRI 407-1, 408-1, 409-1)

We adhere strictly to all labour laws in the regions where we operate, encompassing 29 legal requirements. Specifically, we fully comply with legislation such as the Factories Act of 1948 and the Child Labor (Prohibition and Regulation) Act of 1986. All of our shop floor employees are entitled to rights, including "freedom of association," "collective bargaining," and other privileges afforded by these laws. To ensure ongoing compliance, we maintain a robust audit mechanism.

In line with our commitment to ethical practices, our Supplier Code of Conduct (SCoC) unequivocally states that we do not tolerate any violations and expect our suppliers to adhere diligently to all applicable laws, regulations, and rules. Furthermore, our SCoC includes provisions designed to safeguard the rights of our suppliers' workforce. Importantly, we have no operations or suppliers at significant risk for incidents of forced or compulsory labor.



**Our Global Supplier Meet**



**Our Personnel Conducting Sustainability Awareness Training For Our Key Suppliers**

## Innovation

We are committed to minimizing the environmental footprint of our products through continuous enhancements and technological interventions.

### We strive to...

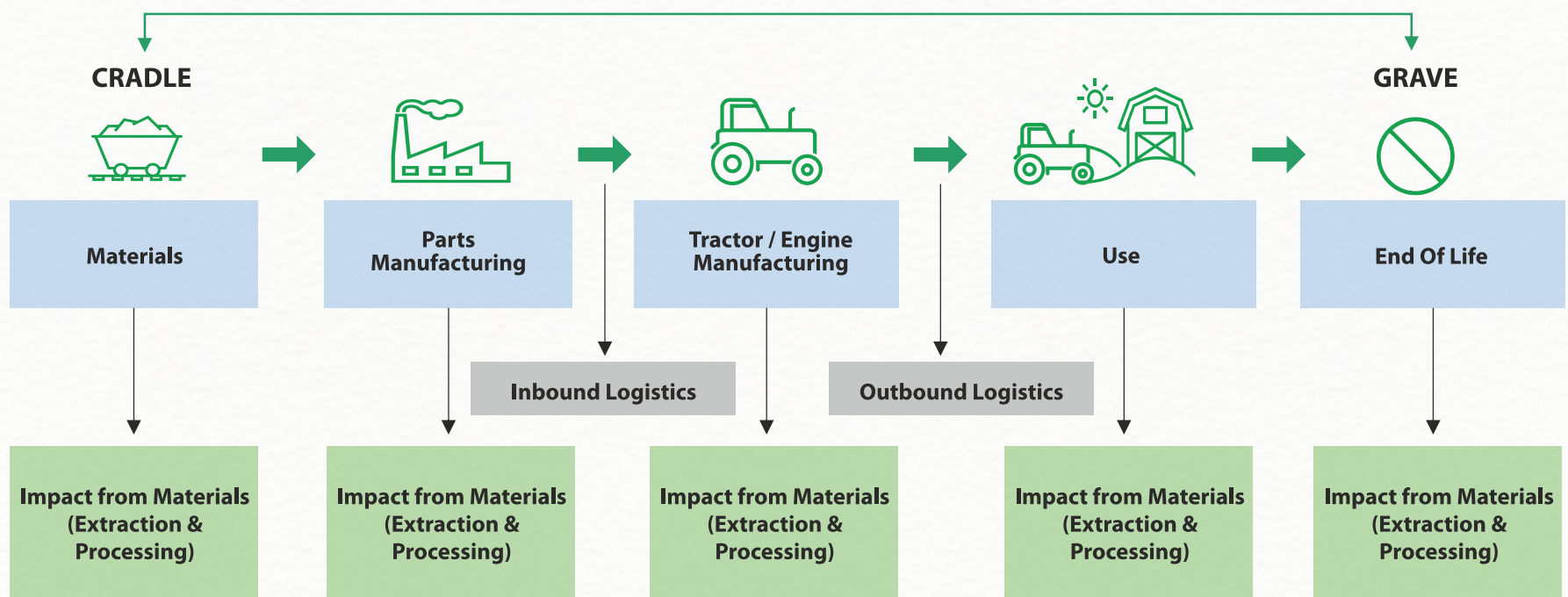
- Develop sustainable tractors and farm equipment that help in fuel efficiency, emission reduction, and optimized use of raw materials.
- Design and manufacture products in an environmentally safe and responsibly design and development stage.
- Conduct lifecycle assessment to assess the potential environmental impact of products across their lifecycle as shown in the figure below.
- Actively engage with suppliers during the design, planning, and development phases to ensure a reduction in environmental impact.
- Promote the use of renewable, alternative, or low-carbon fuels in products.
- Work towards reduction of product weight to reduce the impact on land and soil.
- Increase material recycling through responsible scrap management.
- Optimize product design to maintain and improve soil health and structure.
- Partner with IIT Madras and Harper Adams University, UK through CoEs.



# Our Life Cycle Assessment (LCA) Approach

We conducted a “cradle-to-grave” life cycle assessment for products from all of our business streams using the ReCiPe 2016 – Midpoint methodology in alignment with ISO14040 and ISO14044. The LCA helped us assess the life cycle of the products, and the results of these analyses helped us identify hotspots to minimize the human health impact, resources depletion, and ecosystem quality.

## Our LCA Approach From Cradle To Grave



## Cultivating the World Through Sustainable Agriculture



Agriculture is not only the backbone of our country but also a vital pillar of our organization. We prioritize various ESG issues in sustainable agriculture such as climate change, water scarcity, land use, pollution, farmer income level, food security.

We promote sustainable and forward-thinking agricultural practices through various initiatives aimed at educating farmers. These initiatives cover essential aspects of sustainable farming, including crop rotation, soil conservation, nutrient and crop protection management, water management, and more. This support empowers farmers to cultivate more sustainable crops, resulting in environmental benefits and improved economic returns.

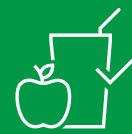
Innovation is central to our development, and we strive to address food security through adaptive agricultural research via JFarm. Additionally, we support farmers by providing advisory services and participating in seminars and symposiums conducted by government institutions.

We don't just prioritize economic and environmental sustainability but also emphasize the importance of structured CSR programs to address societal needs. We are fully committed to promoting sustainable development within the communities we operate. The CSR initiatives are aligned with both national sustainable development goals and the United Nations Sustainable Development Goals (UN-SDGs). Through these efforts, we aim to enhance the quality of life and build stronger relationships with the communities we serve.



## Farmer Income

- Improving agricultural productivity by adapting farm mechanization for small and marginal farmers in India holding small land parcels for cultivation.
- Supporting farmers generate additional revenue by digitalizing tractor rental through JFarm Services App (₹ 800+ Crore revenue generated since inception in 2017).
- Connecting farmers for training through the JFarm digital platform.
- Fostering entrepreneurship in rural areas of India.



## Food Security

- Disseminating the knowledge of production, protection, mechanization, and processing technologies for 170+ crops digitally through JFarm Agri Portal.
- Producing, retailing, and demonstrating 50+ types of organic vegetables & fruits in JFarm.
- Supporting farmers grow high yielding rice and other crops through JFarm research initiatives (8 lakh acres of rice varieties).
- Improving yield of vegetable cultivation by 3 to 4 times through our adaptive research, trials, and demonstration.
- Researching precision agriculture practices suitable in an Indian context of small farm and limited affordability.



## Small Farmer Well-Being and Sustainable Agriculture Practices



**Mr. A Sivasailam**

Managing Director, TAFE

“The whole concept of JFarm and Agricultural Advisory Service is guided by our conviction that it is not enough just to manufacture the finest agricultural machinery; we believe that it is vital for an organization like ours to be involved totally in the life of the farmer and to contribute to his well-being, no matter how small it is.”

We are dedicated to addressing various ESG issues in sustainable agriculture, including mitigating climate change, managing soil health and fertility, addressing water scarcity, optimizing land use, reducing pollution, enhancing farmer income levels, and ensuring food security. Dr. A. Sivasailam, the former chairman of TAFE, envisioned more than just designing, producing, and selling tractors and farm equipment. From the outset, he was deeply committed to improving the well-being of farmers by empowering them with advanced agricultural technologies to boost productivity, meet India's growing food demands, ensure the financial sustainability of small and marginal farmers, and promote environmental sustainability.

### Community Engagement (GRI 413-1) **JFarm**

This vision of our former Chairman led to the establishment of JFarm in 1964, spanning 200 acres of barren, marginally rain-fed scrubland near Chennai. JFarm was created to demonstrate the transition from traditional labor-intensive, low-productivity farming to situation-relevant, cost-effective, viable, and sustainable farming. In addition to JFarm in Chennai, similar operations are also established at Madurai (Tamil Nadu), Bhawani Mandi (Rajasthan), and at PJTSAU campus in Rajendranagar, Hyderabad (Telangana), to serve the farming community across India. An additional JFarm is also being set up at Parbhani (Maharashtra). JFarm, managed by experienced scientists and professionals in agronomy, entomology, seed technology, and agricultural engineering, serves as an adaptive research and agricultural extension center, meeting the needs of farmers in India and African countries through collaboration with governments and NGOs.

The Jfarm's mandate crop includes perennial plantations such as coconut, mango, sapota, aonla, custard apple, acid lime, jack, guava, jamun, and approximately 26 other fruit species, alongside seasonal field crops like rice, black gram, groundnut, banana, and fodder, as well as around 35 different types of seasonal tropical and subtropical vegetables. These diverse cultivation practices serve as a foundation for knowledge acquisition, with JFarm leveraging this expertise to provide training and demonstrations.

In addition to providing training on crop plantations, JFarm also adopts and provides training and demonstrations on integrated farming, organic farming, soil health management, soil and water conservation technologies, and the use of appropriate implements, equipment, and machinery for various agricultural operations. These efforts aim to reduce human drudgery and cultivation costs, ultimately increasing the incomes of farmers significantly.

## JFarm Technology & Saving Benefits to Farmers



**JFarm** & Product Training Center  
in Chennai, Transforming Lives  
Since 1964



## JFarm's Adaptive Agri Research Initiatives

Our JFarm is credited with the development of new varieties of rice, such as white ponni (superfine table rice), J13 (100 days duration superfine rice variety), J18 (organic rice), J66 (80 days duration superfast variety), JR21, and JR22 (155-160 days duration, medium slender, non-lodging & yielding 6-7 t/ha).

Furthermore, the center has experimented with and refined farming techniques for other varieties of rice, including IR 50. These rice varieties cater to the requirements of various growing regions and categories of farmers and are cultivated in lakhs of acres in coastal Tamil Nadu, Andhra Pradesh, and Karnataka.

On the pulses front, our JFarm has demonstrated through its experiments that several varieties of pulses such as black gram T 9, ADT 3, and ADT 5 can be as profitable as rice, even in arid regions, and has developed a comprehensive package of best practices to make pulse farming more lucrative for farmers.

Organic cultivation of a wide range of tropical vegetables using internally produced enriched vermicompost is also a significant activity at JFarm. The center has developed a low-cost modified hydroponics system for cultivating several shallow and deep-rooted vegetables that thrive in the hot humid tropics with minimal investment.

This system supports the cultivation of various crops such as bhendi/okra (*Abelmoschus esculentus*), bitter melon (*Momordica charantia*), bottle gourd (*Lagenaria siceraria*), brinjal (*Solanum melongena*), chilli (*Capsicum annuum*), cluster beans (*Cyamopsis tetragonoloba*), cowpea (*Vigna unguiculata*), cucumber (*Cucumis sativus*), dolichos (*Dolichos lablab*), French beans (*Phaseolus vulgaris*), ridge gourd (*Luffa acutangula*), snake gourd (*Trichosanthes cucumerina*), tomato (*Lycopersicon esculentum*), as well as almost all varieties of amaranthus spp, palak (*Spinacia oleracea*), pak choi (*Brassica rapa* subsp. *chinensis*), and coriander (*Coriandrum sativum*). The crops grown in this system yield 3-4 times more than conventional cultivation methods.

A key highlight of JFarm is our mango orchard. JFarm has identified a mutant strain of mango called 'Yahuti Rumani' from the traditional Rumani mango variety. Spanning 30 acres with approximately 1,500 trees, our model orchard featuring "Yahuti Rumani" with only sparse rains as the source of water continues to demonstrate that mango cultivation can be highly profitable, even in drought-prone areas. Additionally, several other commercial varieties such as Alphonso, Banganapalli, and Himam Pasand are also cultivated on the farm.

### **New JFarm and Product Training Center at Telangana**



**Mango trees at JFarm yielding significant results thriving solely on rainwater.**

## JFarm's Environmental & Resources Conservation Programs

### **Optimized Density and Mechanization Boost Banana Crop Yields.**



### **Modified Hydroponics Techniques Reduces Water Use & Boosts Yield**

Developing suitable carbon sequestration technology is a key research priority for us at JFarm. As a result, we have focused on standardizing and demonstrating the use of various green manure and cover crops tailored to different agroclimatic zones. This initiative not only helps mitigate climate change by sequestering carbon dioxide from the atmosphere but also improves soil health and fertility, leading to increased crop yields and sustainable agricultural practices.

We cultivate perennial green leaf manure crops such as Agathi and Gliricidia to facilitate the fixation of atmospheric nitrogen in the root nodules of plants, thereby enhancing soil fertility and reducing/eliminating the need for chemical fertilizers. Additionally, these plants serve as valuable cattle feed in our farm, further optimizing resource utilization. We have developed methods for managing insect pests by utilizing neem seed and pungam seed kernel extract, along with employing bio fungicides to control soil and foliar pathogens. We have experimented with and standardized the planting geometry of banana and vegetable crops to accommodate the movement of tractors and matching implements, ensuring adequate inter-row spaces. Through this optimization, we have fine-tuned the crop density to enable tractor and implement movement while simultaneously boosting yield, profitability, mechanization, and reducing drudgery.

With our in-house dairy comprising 65 cows provided with proper care, adequate shelter, fodder, and water, we integrate crops and livestock primarily to minimize risk and maximize resource utilization rather than solely focusing on recycling resources. In this integrated system, crops and livestock interact synergistically, facilitating the optimal use of available resources and enhancing the productivity and profitability of small farmers.

Vermicompost, a nutrient-rich organic fertilizer and soil amendment produced through composting organic materials using earthworms, is produced at JFarm using organic waste materials generated within the farm, such as garden trimmings, canteen scraps, and manure from the cattle farm on-site. Earthworms consume these organic wastes and then excrete nutrient-rich vermicompost, which is a valuable source of organic matter containing microorganisms and essential nutrients like

nitrogen, phosphorus, and potassium. This vermicompost, known for its ability to enhance soil structure, fertility, and water retention, is utilized in JFarm's plantations, offering an excellent natural alternative to chemical fertilizers. Visiting farmers are provided with demonstrations of vermiculture techniques. Our efforts in developing adapted, low-cost modified hydroponics technology for high-temperature and high-humidity areas in open fields have proven to significantly increase the yield per unit area of land for vegetables and greens throughout the year, all while minimizing water usage. We have successfully implemented micro-irrigation techniques enhanced with mobile-based automated soil moisture sensor technology. This innovation allows farmers to irrigate their crops based on the soil's moisture level, resulting in minimized water consumption and increased yield for horticultural and plantation crops. We continuously showcase these techniques to farmers to highlight their potential benefits and effectiveness.

We have effectively demonstrated the use of chisel plough implements (also known as subsoilers) to break the hard subsurface of the soil and facilitate the infiltration of rainwater into the ground, thereby increasing the water table. Moreover, runoff water during the rain is collected and utilized to recharge the water table. The outcome of these initiatives is reflected in the higher water table observed in our farm, ensuring consistent water availability for our plants throughout the year including peak summer seasons. We have introduced zero-power solar dryers as well as zero-power cooling chambers to preserve farm produce. We have fortified the low-lying areas of our farm by planting vetiver plants (*Chrysopogon zizanioides*), whose roots intricately bind the soil together, spreading horizontally and vertically up to 4 meters, thereby preventing soil erosion during heavy rains.



**Groundwater Recharging Keeps Jfarm's Well Full Even in Peak Summer.**

## JFarm's Knowledge Dissemination Contributions



**Rice Planter Demonstrations  
Enhance Farm Mechanization  
for Farmers.**

Launched in 2000, JFarm's unique knowledge portal offers exhaustive and customized information for 170 crops on crop production, protection, and processing technologies across 18 states, encompassing major and minor crops, in English, Hindi, and Tamil, supported with ample pictures. Additionally, the portal provides extensive coverage on various allied topics related to agriculture, including changing trends in the use of farm implements, equipment, and machinery. These resources aid farmers in increasing their yield.

Our training and outreach programs provide instruction to farmers, agriculture students, and urban populations on advanced crop production technologies, integrated farming, organic farming, soil and water management, and micro-irrigation systems. Over the past couple of years, approximately 100,000 farmers from 12 states (Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Odisha, Punjab, Rajasthan, Tamil Nadu, and Uttar Pradesh) have digitally registered for our knowledge-sharing program.

At JFarm, we also conduct training sessions on region-specific farm mechanization for state agricultural department officials and provide instruction to field staff from the Petroleum Conservation Research Association (PCRA) and other agencies on methods of fuel conservation in agriculture. Additionally, we offer in-house training to TAFE staff to better support farmers' needs regarding mechanization.

Our frontline demonstrations conducted on farmers' fields in selected villages have transformed the lives of farmers and enhanced crop productivity by imparting knowledge on advanced crop production technology and the application of drones, among other methods.



**Drones used for spraying crop protection and nutrition solutions.**

Every year, we organize farmers' days at various locations across India. We invite eminent scientists from nearby agricultural institutes to deliver lectures on current, relevant topics. Additionally, we explain new government policies and farmers' schemes beneficial to the farmers. We also host several farm mechanization competitions for the participating farmers.

We have signed Memoranda of Agreement (MoAs) with several Indian universities and research institutes to develop low-cost technologies aimed at improving production, productivity, mechanization levels in Indian farms, and advancing precision agriculture. Several research projects, conducted in close partnership with institutions such as Tamil Nadu Agricultural University (TNAU) in Tamil Nadu, Chennai Institute of Technology (Tamil Nadu), and Professor Jayashankar Telangana State Agricultural University in Telangana, are currently underway.



**Farmers' Days: Science, Policy, and Mechanization.**



## JFarm's Services App for Tractor Hailing to Support Farmer Prosperity

Smart and easy way to rent a tractor



The JFarm Services App is a TAFE initiative aimed at enhancing access to farm mechanization solutions through the rental of tractors and farm equipment. It caters to both small and large farms in India, where more than 80% of land holdings are owned by small and marginal farmers, making it financially challenging for everyone to own tractors or implements. JFarm Services addresses this challenge by facilitating connections between these farmers and tractor/equipment owners via its Farmer-2-Farmer platform. Farmers can easily explore and book nearby equipment through the app or a toll-free helpline. This platform ensures a fair and transparent rental process, emphasizing quality, dependability, and timely delivery. JFarm Services offers a wide range of options for hiring and renting farm equipment, connecting users directly to negotiate and fulfill their requirements.

Since its inception in 2017, JFarm Services has positively impacted the lives of over 12.5 million farmers and facilitated over INR 800 crore of additional business across 16 states in India. The platform currently operates in Rajasthan, Gujarat, Madhya Pradesh (MP), Uttar Pradesh (UP), Haryana, Punjab, Maharashtra, Bihar, Odisha, Jharkhand, Chhattisgarh, Telangana, Andhra Pradesh, Tamil Nadu, Karnataka, and Assam, making farm mechanization accessible and affordable to all. Additionally, JFarm Services is driving digital empowerment among Indian farmers and fostering the emergence of new rural entrepreneurs, thereby creating significant job opportunities and employment.

During the challenging period of the second wave of the COVID-19 pandemic and subsequent lockdown, our Free Tractor Rental Scheme provided vital assistance to small and marginal farmers in Tamil Nadu. Within just 60 days, the initiative supplied over 155,000 hours of free tractor and farm implement rental services to more than 64,000 farmers, covering a vast expanse of 103,000 acres of land. We had generously made available an extensive fleet of Massey Ferguson and Eicher tractors, alongside various implements, at no cost to farmers with two acres of land or less. This initiative ensured the uninterrupted continuation of agricultural activities, with essential implements like cultivators and plows being widely utilized. This CSR endeavour supported the livelihoods of several small and marginal farmers during crucial harvest and preparation seasons.

Be a #FarmDost is an initiative aimed at raising awareness about the vital role farmers play in our world. It encourages urban and semi-urban communities to experience life from a farmer's perspective, fostering a deeper appreciation and reintegrating farmers into social consciousness.

## Sustainability & Affordability Through Tractor Exchange Program



We have developed a comprehensive system for managing tractor lifecycles and facilitating exchange programs. This system involves a network of dealerships and TAFE Exchange Partners (TEPs) who play a pivotal role in the exchange process, determining the value of used tractors and facilitating transactions. The process begins with sellers exchanging their old tractors for new ones through dealers, who then engage with buyers.

Our involvement in this ecosystem encompasses both physical and digital domains. In the physical realm, we incentivize top-performing TEPs and support new dealers to ensure their financial sustainability. In the digital sphere, we introduced the TAFE Bazaar App, allowing efficient management of tractor stock by dealers, buyers, and TEPs.

This integrated approach ensures smooth transactions and fosters transparency and efficiency throughout the exchange process. Central to TAFE's exchange program is our commitment to sustainability and affordability in the agricultural sector. By making tractors more accessible and fostering enduring relationships between buyers and sellers, we contribute to economically sustainable practices while promoting environmental preservation through reuse and recycling.

## Biodiversity

We place the highest priority on preserving biodiversity, recognizing its critical role in maintaining ecological balance. Our commitment to environmental stewardship is a core aspect of our corporate ethos.

At our manufacturing facilities, we focus on habitat preservation, acknowledging their importance as vital nesting grounds for migratory birds and domestic animals. We are dedicated to safeguarding biodiversity by conserving all flora and fauna on our premises. By understanding the interconnectedness of species within the ecological cycle, we protect habitats for insects, reptiles, and birds. Through these efforts, we contribute to the natural balance and renewal of nature's cycle.

## Habitats Protected or Restored (GRI 304-1 304-3)

The decline in biodiversity poses significant challenges to addressing climate change, sustainable agriculture, clean water access, pandemic prevention, and ensuring a better future for generations. Diminished biodiversity disrupts ecosystems, reducing their ability to absorb and store carbon dioxide, thereby worsening climate change. Furthermore, disrupted pollination processes hinder the growth of healthy crops.

Biodiversity loss also directly impacts water quality and availability, while preserving it is crucial for preventing disease outbreaks and safeguarding human health. Even though none of our sites are adjacent to protected areas, we actively address these challenges by creating greenbelts populated with native trees and plants, fostering a nurturing environment for birds and animals. This initiative restores habitats and supports essential pollinators, contributing to broader goals such as combating climate change, promoting sustainable agriculture, ensuring clean water access, preventing pandemics, and securing a brighter future for all.



**Biodiversity Stakeholders  
in Action at our Plant**

Plant	Total Area (M2)	Green Coverage (M2)	# of Trees
ETB	226,626	78,000	4,831
DBR	75,838	26,386	1,025
MDU	267,092	80,937	3,850
EBU	70,800	28,320	1,316
GBU	49,528	35,028	952
SBM	79,845	20,050	656



**DBR Plant Nestled in Lush Greenery**

## Case Studies



### Green Cover at Our Facilities

- All our facilities have extensive green coverage providing habitat for various species of birds and animals.
- Ongoing plantation initiatives help us constantly increase this green cover.



### Paperless Initiative Across the Value Chain

- Our ZOHO system for CRM greatly eliminated paper-based processes. Our warranty claims system alone eliminated usage of 101 tonnes of paper per year (equivalent to 835 trees)
- Similarly, SAP is used predominantly throughout our value chain, from planning to fulfillment, enabling us to significantly reduce paper use.

Plant	Initiatives	Sub-initiatives	Outcomes
<b>All plants</b>	Improve Green Belt & Habitat	<ul style="list-style-type: none"> <li>• All our plant premises have several fruit-bearing trees (mango, coconut, guava), and other tropical (neem, banyan, etc.) that provide excellent green cover and habitat for several species of birds and animals. These trees are well maintained by providing nutrition, water, pruning, etc.</li> <li>• Some of our plant premises have vermicompost decomposition facility using various species of worms to create compost from leftover vegetables, food waste, dry leaves and biomass.</li> <li>• To further enhance the green cover, tree plantation drives are conducted during special events such as dignitary visits, employee birthdays, Environment Day, Earth Day, Water Day, Ozone Day, Fresh Air Day, etc.</li> <li>• Water treated in our ETPs and STPs are used to water these habitats.</li> </ul>	<ul style="list-style-type: none"> <li>• Green serene environment in all our plants.</li> <li>• Produce fruits and vegetables.</li> <li>• Habitat for species.</li> <li>• Natural manure which is used in place of chemical-based fertilizers.</li> <li>• Usage of treated water in place of fresh water for watering trees.</li> </ul>
	Reduce Pollutant	Pollution-reducing species planted inside the plant premises as per the guidelines of the state pollution control boards.	<ul style="list-style-type: none"> <li>• Pollution levels maintained well within the norms set by regulatory authorities.</li> </ul>



**MDU Plant: A Thriving Habitat for Diverse Species**

## Sustainable Agricultural Practices in Our Tea Estates

Our Estates in Nilgiris where tea plantations coexist with native trees

In TAFE owned Manjoor Tea estates as well as the estates of the group company UNITEA, parts of the tea gardens adjoin forestland with virgin jungle native to the Nilgiris hills. With this fragile and precious eco-system co-existing with the tea estates, great care is taken to ensure harmful pesticides do not enter the forest soil and water. All water needed for the estates is from natural spring sources. Water is harvested from these springs without pumping and hence protecting the water table for posterity. Rainwater harvesting is another diligent focus area. We also use only natural crop protection substances such as neem and avoid chemical pesticides.

The original forests are preserved in their pristine condition in certain sections of the estates. The benefits of this are two-fold where these trees form a natural barrier against the harsh winds that damage the tea, while providing a sanctuary for wildlife. Efforts have been commissioned to change traditional habits that harm the environment. Usage of firewood as the fuel source for cooking at home (estate employees) has been replaced with the usage of cooking gas. This has not only resulted in protecting the forests being felled to fuel homes, but also cooking time at home has been drastically cut down, and the bonus is the elimination of smoke from the firewood that poses a health hazard. A win-win situation for the environment, and the people.

As we strive to be 'green' in all our processes, packaging is one area where we have started to make small changes that bring in a big impact to the environment and our customers. Traditionally tea has always been packed in tea chests made of plywood. We have switched our packaging to eco-friendly and biodegradable paper sacks.

UNITEA is certified by Fairtrade, which is an international organization that works with farmers and workers across 70 countries to improve their living standards, invest in their communities, and protect the environment. UNITEA receives a Fairtrade Minimum Price as well as a Fairtrade Premium for its trees. The workers at the estates spend the premium on direct benefits for them and their families, such as educational bursaries or credit services, as well as empowerment projects. UNITEA is certified by Rainforest Alliance that ensures that the tea is produced using methods that are environmentally sustainable, socially equitable, and economically viable. The customers who purchase tea with the Rainforest Alliance

## Cultivating the World Through Enabling Pillars

We cultivate the world through sustainable practices, prioritizing environmental and social responsibility. With a commitment to sustainable agriculture, we integrate eco-friendly solutions and innovative technologies to foster a greener and more resilient future. By promoting sustainable farming methods, conserving natural resources, and empowering communities, we aim to nurture a thriving and sustainable global ecosystem. We consider robust corporate governance as a strong enabling pillar and essential driver for our sustainable performance. Implementation of our sustainability strategy includes a strong governance framework including responsible practices and commitment to business ethics, compliance, quality, transparency, and anti-corruption. Our prudent governance practices, coupled with our dedication to CSR and fostering positive societal impact, help us to meet long-term corporate goals and enhance stakeholders' value.

### Our Sustainability Governance

We place a strong emphasis on sustainability governance, ensuring that sustainability considerations are integrated into our decision-making processes and operations. We have established dedicated structures and processes to oversee and manage sustainability initiatives effectively.

At the helm of our sustainability governance is the Sustainability Governing Body, comprised of key executives and experts across

various functions. This committee sets the strategic direction for sustainability efforts, oversees the implementation of sustainability policies and initiatives, and monitors performance against established targets and benchmarks. We also conduct regular sustainability assessments and audits to evaluate our performance, identify areas for improvement, and ensure compliance with relevant regulations and standards. These assessments cover environmental impact, social responsibility, ethical business practices, and governance structures.

Through robust sustainability governance mechanisms, we demonstrate our commitment to creating long-term value for stakeholders while minimizing our environmental footprint and contributing positively to the society.

### Business Conduct & Ethics

We prioritize ethical conduct and data security through comprehensive policies and initiatives. Our Code of Conduct Policy encompasses guidelines on conflict of interest, gifting, monetary transactions, and the employment of relatives. We have also implemented Information Security and Data Privacy Policies to safeguard sensitive information. Our employee code of conduct prohibits any practice that restricts or impedes fair competition in the marketplace.

Employee training programs cover various aspects of compliance, including the code of conduct, human rights, information security, and confidentiality. We are committed to fostering a culture of integrity and accountability, ensuring our workforce is well-equipped to handle security breaches and data protection.

To enhance transparency and accountability, we are in the process of establishing a whistle-blower mechanism. Furthermore, we have Collective Bargaining Agreements (CBA) with employee representatives to uphold fair labor practices and promote harmonious industrial relations.

Security measures are in place to safeguard third-party data, and regular audits are conducted to ensure compliance with data protection regulations. External assurance of financial and sustainability reporting data further reinforces our commitment to transparency and reliability. We have a POSH Committee and a Sustainability Governance Framework to address workplace harassment and environmental concerns. Our adherence to industry norms and regulations underscores our dedication to responsible business practices.

Recognizing the risks posed by climate change, we have implemented a Risk Management framework as outlined in the following section to monitor and mitigate associated risks. Moreover, robust internal controls are in place to ensure tax compliance, with regular audits conducted to identify and address any discrepancies.

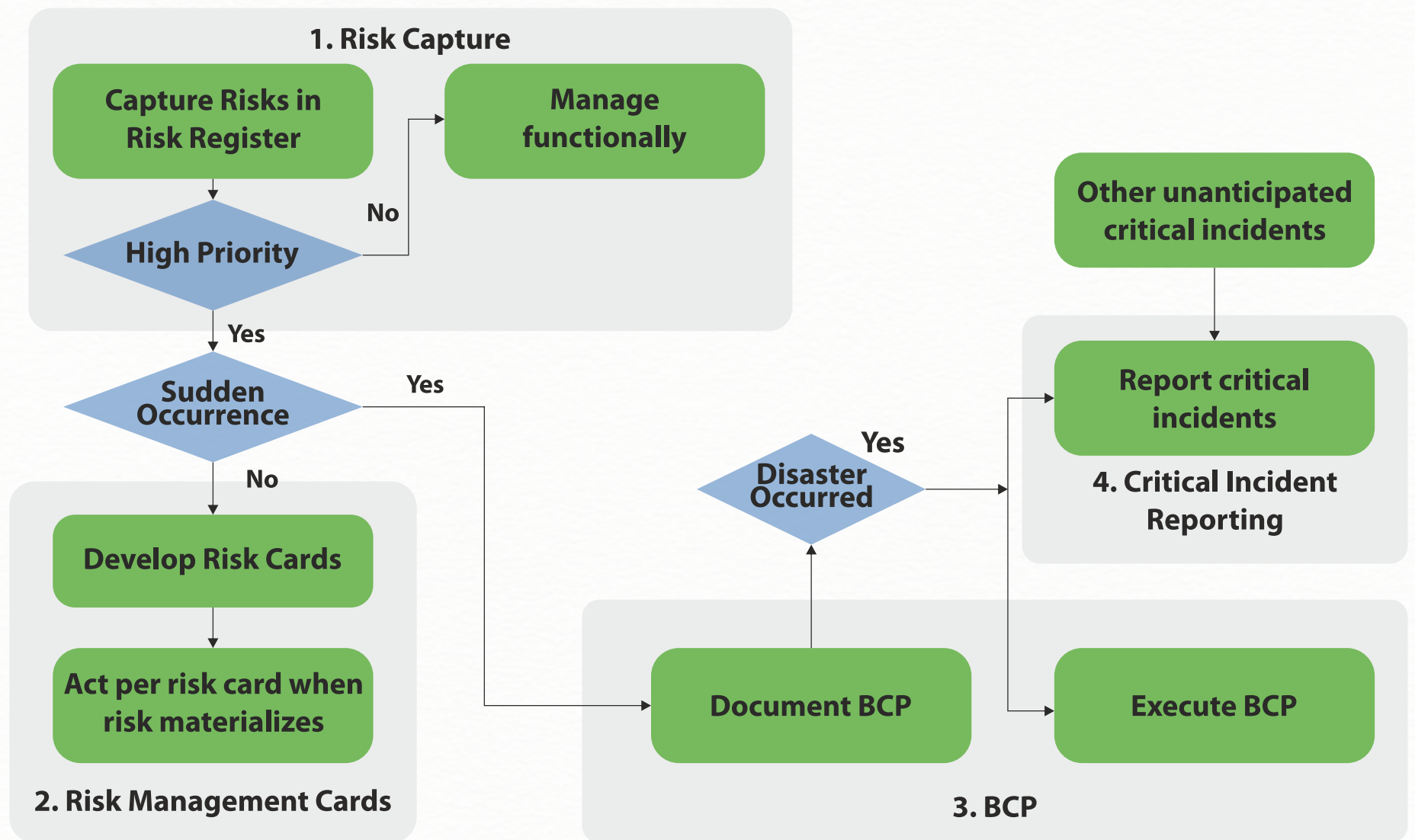
We are unwavering in our commitment to maintaining the highest standards of ethical conduct, data security, and regulatory compliance across every facet of our operations. We understand the paramount importance of integrity and trust in all our interactions, whether with governments, regulators, customers, partners, or employees. Therefore, regulatory compliance is a cornerstone of our operations, and we consistently strive to adhere to all applicable laws and regulations in every jurisdiction where we operate. By upholding these principles, we demonstrate our dedication to transparency, accountability, and responsible business practices.

## **Risk Management**

Our Risk Management Committee which consists of top management, plant heads, and functional heads is responsible for capturing risks and evaluating the identified risk based on their impact, likelihood, and velocity. The committee undertakes the following processes to capture and treat risks:



# Our ERM System



## Our Risk Management Program

- Proactively identify and capture risks before they escalate and impact.
- Classify risks into various categories including catastrophic, business, environmental, strategic, financial, operational, technical, legal, and human capital-related risks;
- Evaluate their potential effects on market size, share, profitability, investments, and reputation
- Rank risks into major, moderate, and minor groups using Failure Mode & Effects Analysis (FMEA)
- Identify and document risk mitigation measures for major risks in risk cards capturing risk consequences, preventive and responsive controls, residual risks, mitigation plans, management support, and capex requirements.

- Establish Business Continuity Plans (BCP) to mitigate disasters so that recovery and restoration of soft and hard assets are pursued.
- Log all actualized risks and critical incidents in the Critical Incidence Reporting (CIR) portal to disseminate the occurrence of the risks as well as the pursuit of mitigating measures to key stakeholders.

## Human Rights Policies & Principles

Our Human rights policy is built on our commitment to Sustainability as it continues to promote sustainable and people-centered development. It respects and upholds the inherent rights of all human beings. We have laid down seven principles to uphold our commitment to respect human rights. These principles conform to our values and principles of conduct, and cover all business entities, units, and offices, that are under the umbrella of our Group, and are captured under our Human Rights Policy.

We are committed to fostering awareness of human rights issues throughout our operations and value chain. Through training programs and adherence to established processes and standards, we ensure that all stakeholders uphold human rights principles. We also require our suppliers to maintain a zero-tolerance policy towards human rights violations, outlining specific requirements in our Supplier Code of Conduct and Audit templates to ensure compliance across the supply chain. Our Code of Conduct provides guidelines for ethical behavior, fosters a positive work culture, and ensures trust with stakeholders. All employees are given training on aspects such as diversity, discrimination, and harassment among others during the induction phase, and these values are reinforced during our interactions with them.



## PRINCIPLE 1

**Prohibiting Child Labor and Forced Labor:** We refuse to employ anyone below the legal minimum age as required by national laws and regulations. We also refuse to employ or make anyone work against their free will.

## PRINCIPLE 2

**Prohibiting Discrimination and Harassment at the Workplace:** We refuse to tolerate any unacceptable treatment of employees, such as mental cruelty, sexual harassment, or discrimination across our business operations and by our stakeholders. We aim to promote equal opportunities for our employees and fair treatment of our employees irrespective of skin color, race, nationality, social background, disabilities, sexual orientation, political or religious conviction, sex, or age. We prohibit inappropriate behavior including gestures, language, and physical contact, that is sexual, coercive, threatening, abusive, or exploitative.

## PRINCIPLE 3

**Creating a Safe and Healthy Working Environment:** We regularly inspect and maintain our facilities, premises, and plant equipment to create a secure and supportive work environment for our employees. We have a robust occupational health & safety management system that allows us to consistently identify and control risks, reduce incidents, and ensure regulatory compliance.

## PRINCIPLE 4

**Supporting Fair Remuneration and Working Conditions:** Fair Remuneration ensures that all employees are paid at least a minimum wage as per applicable regulations such that they can afford a decent standard of living. We also have in place a defined compensation for extra or atypical working hours.

## PRINCIPLE 5

**Embedding Diversity & Inclusion:** We strive to foster a workplace that values diversity and provides a strong foundation for the success and well-being of the entire workforce. For this, promote and support diversity at all levels including gender, caste, creed, ethnicity, religion, and cultural background. We encourage mutual respect for all our stakeholders to establish a fair and transparent working environment.

## PRINCIPLE 6

**Respecting Freedom of Association and Collective Bargaining:** We recognize, as far as legally possible, the right to freedom of association of employees and neither favors nor discriminates against members of employee organizations or trade unions. Our Collective Bargaining Agreement (CBA) between our management and employee representatives establishes terms and conditions of employment for the covered employees including setting standards for wages, benefits (such as healthcare, retirement plans, leave policies), working hours, working conditions, grievance redressal mechanisms, and other employment-related matters.

## PRINCIPLE 7

**Supporting the Local Community:** We aim to ensure zero violation of the local community's human rights while conducting business.

## Sustainability Advocacy

We have been a key player in advocating for sustainability by proactively leveraging our membership in prominent industry associations such as the Confederation of Indian Industry (CII), Madras Management Association (MMA), and Tractor Manufacturers Association (TMA).

To drive sustainable practices across the sector we actively collaborate with a cross-sector of industry players, participate in events, engage in grassroots interventions with local communities, and focus on research and innovation – globally and locally.

Our recent participation in IIT Madras's CXO celebrations is a testament to our dedication to fostering collaboration between industry and educational institutions, recognizing the pivotal role of such partnerships in advancing innovative research and innovation. To bridge the gap between academia and industry, we also engaged with Bidhan Chandra Krishi Viswavidyalaya (BCKV) to demonstrate our drive to support higher education in critical fields such as Agriculture, Horticulture, and Agricultural Engineering. Through strategic alliances and knowledge-sharing initiatives, it is our endeavor to empower the next generation of leaders and innovators, equipping them with the skills and expertise needed to address pressing sustainability challenges.

Crucial to our sustainability advocacy is our involvement in public discussions endorsing the growth of Small and Medium Enterprises (SMEs) and collaboration between academia and industry research, we catalyze holistic approaches to sustainable development. This multifaceted strategy not only drives economic growth but also nurtures inclusive and resilient societies, laying the groundwork for a more sustainable future.

In line with our commitment to environmental sustainability, we actively support initiatives aimed at building resilient, low-carbon urban environments. Through our involvement in events such as "Building a Resilient, Low Carbon, Vibrant Chennai," we share our zeal to reduce carbon emissions and cultivate sustainable urban development. Joining with government agencies, civil society organizations, and other stakeholders, we strive to accelerate transformative change that promotes environmental sustainability and enhances the quality of life.

By utilizing our expertise in agricultural innovation, we seek to facilitate the adoption of sustainable agricultural practices. Conferences and summits serve as a cornerstone of our sustainability advocacy, providing valuable platforms for knowledge-sharing and collaboration. We also took part in a pivotal conference on "Climate Smart Agriculture" to discuss strategies for mitigating climate change impacts on agriculture while enhancing productivity and resilience. In a session organized by the Federation of Indian Chambers of Commerce & Industry (FICCI) and the German Agribusiness Alliance, we gathered valuable insights into innovative agricultural practices with a particular focus on digital intervention and mechanization.

By supporting the "Crop Diversification Scheme for Sustainable Growth" scheme, we encourage farmers to adopt alternative crops to enhance resilience to environmental pressures. We have participated in India's 9th Maize Summit 2023, promoting maize as a cornerstone for India's sustainable agricultural future. By advocating for the cultivation of maize, we sought to contribute to food security, economic prosperity, and environmental sustainability.

## IT Policies and Digital Initiatives

Our Information Security Management System Manual, in line with ISO 27001 standards provides comprehensive guidelines, delineates roles, and assigns responsibilities to uphold an efficient framework for managing information security. It addresses potential IT disruptions, safeguards against loss of critical business data, ensures compliance with legal requirements, and mitigates risks associated with security breaches. This policy ensures management support for security endeavors, regular assessments of security status, resources for sustaining security measures, and adaptation to evolving security needs and implementation of appropriate information security protocols. Additionally, our Data Privacy Policy governs the collection, usage, maintenance, and handling of information obtained from users of our website to ensure protection of users' information. We regularly provide IT and data security trainings to our employees.

## Digital Initiatives

We have implemented several digital initiatives to streamline customer facing, and operational processes as well as to support our sustainability commitments.

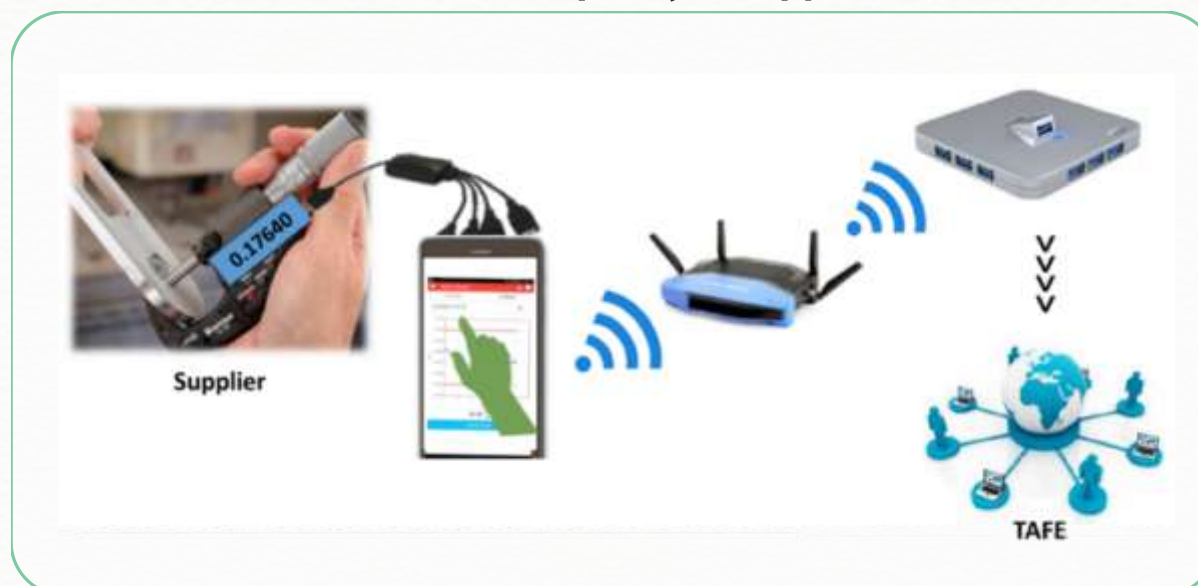
With our JFarm Services App, farmers can easily browse, select, and rent various types of agricultural machinery, including tractors, rotavators, seeders, sprayers, and more. By providing such affordable and convenient access to equipment, the App empowers small & marginal farmers to adopt mechanization, increase productivity, and enhance their overall agricultural sustainability. Equipment owners also greatly benefit from newer streams of revenue.

Tractor Bazaar is an online marketplace platform that enables buyers to find pre-owned tractors of all brands in India and also provides buyer information to sellers, thereby increasing the visibility to all parties. This transparent platform with authentic information for buying used tractors at affordable prices for customers who are typically small/marginal farmers or service providers greatly promotes small farm sustainability.

Our integrated systems, including digitalized ERP, CRM, and DMS, enhance customer relationships, streamline value chain processes, and increase efficiency. Additionally, our analytics-based spend management system enables us to optimize the costs of input materials and services, thereby enhancing resource efficiencies in materials and logistics and promoting sustainability.

Our Digital Quality Management System (DQMS) ensures the assurance of critical quality parameters at supplier facilities and facilitates the shipment of only the correct materials, thereby eliminating non-value-added shipments of non-confirming parts. Process digitalization initiatives across the manufacturing value chain, such as assembly line simulation for new products, pick-to-light systems, and digital PokeYoke, ensure that the products we produce are of superior quality and eliminate process wastes. Our Smart Quality Gate System (SQGS) aids us in maintaining process quality through digitalized checklists, thus preventing wastage, and promoting sustainability.

### DQMS to ensure quality at supplier side



Digital Daily Work Management (DWM) system digitizes key organizational metrics with hierarchical controls and facilitates timely decision-making to optimize operational and environmental parameters. Using an online portal called Idea Bridge, we are digitally capturing employee ideas for improvement and processing those ideas. Certain ideas from associates contribute to optimizing key environmental aspects, such as energy and water conservation.



**Digital PokeYoke:**  
Torque values are captured & compared against spec. The next station tools will not work if the torque level is incorrect



**SQGS to ensure quality at internal processes**

## Economic Performance

Economic performance is material for our operations and our subsidiaries. It measures our ability to generate revenue efficiently and maximize returns on investments. Moreover, profitable operations contribute directly to the economy by generating tax revenues, creating jobs, and fostering economic growth in our operating regions. Creating economic value is essential to us, as it provides a comprehensive understanding of the financial health and status of our organization and the affiliates, facilitating informed analysis and strategic decision-making. Key stakeholders are responsible for ensuring the financial and economic success of the organization.

## Economic Value Generated (GRI 201 – 1)

With an annual turnover of INR 12,917 crores during FY 2023-24, we stand as the world's third-largest tractor manufacturer and the second largest in India by volume, selling tractors in both domestic and international markets. Specializing in manufacturing tractors and farm equipment, our products play a pivotal role in enhancing agricultural productivity by promoting mechanization, especially in emerging nations such as India which requires customization of technologies to suit the local conditions and affordability. By offering efficient and dependable equipment, we empower farmers to boost productivity, reduce manual labor, and achieve higher yields.

Moreover, our global presence and export operations significantly contribute to the country's foreign exchange earnings. By exporting tractors and farm equipment worldwide, we not only earn foreign currency but also bolsters the nation's foreign reserves and trade balance. Furthermore, we prioritize investment in research and development to spur innovation and technological advancements in the agricultural machinery sector. Through our focus on developing and adopting cutting-edge technologies, we foster knowledge transfer and expertise, thereby driving industry-wide growth and contributing to overall economic development.



## Financial implications and other risks and opportunities due to climate change (GRI 201-2)

### Climate change poses both various risks and opportunities

- **Financial Implications and Risks:** We face the potential for increased costs associated with complying with evolving environmental regulations and emission standards. This may necessitate investments in research and development to create eco-friendly and fuel-efficient tractor models.
- **Climate Change Impact:** Extreme weather events have the potential to disrupt supply chains, escalate energy expenses, and impair production efficiency, posing challenges for us. To address these risks and ensure uninterrupted operations, we may need to invest in resilience measures.
- **Changing Customer Demand:** Shifting customer preferences towards sustainable and eco-friendly products could affect the demand for traditional tractors. We must adapt by prioritizing research and development efforts to produce climate-resilient and low-emission tractor models that align with evolving market demands.
- **Opportunities:** Climate change adaptation and mitigation efforts drive the need for climate-smart agricultural practices. We pursue this opportunity by developing tractors powered by electrical or renewable energy sources, supporting precision farming, sustainable farming practices, etc.

### OUR ACTION PLAN

#### Manufacturing

Reducing product material usage and machining requirements to reduce carbon footprint

#### Design & Developments

Investing in technologies to integrate alternative sustainable fuel (CNG, electric, hydrogen) powered and autonomous tractors; Reducing operational emissions to reduce environmental impact on complete lifecycle

#### Logistics

Using reusable metal crates and pallets to avoid energy-intensive corrugated packing; Increasing usage of energy-efficient rail transportation for outbound goods

#### Agriculture

Embedding sustainable practices among Indian farmers through JFarm services



## Employee Benefits and Inclusion (GRI 201-3)

We offer retirement benefit plans to its employees, including the following:

- Employee Provident Fund (EPF): Both the employer and employee contribute a percentage (complying to the applicable laws) of the employee's salary to the EPF account. The accumulated amount, along with interest, provides a retirement corpus for employees.
- Gratuity: We offers a lump sum payment based on the employee's last drawn salary and years of service during retirement.
- Superannuation Plan: Superannuation plans help employees accumulate funds for retirement over their working years. Employers may make regular contributions to the superannuation fund, which grows through investment returns until the employee's retirement.
- Provides job assistance and referrals to retiring employees and re-deployed employees as applicable.

## Ratios of standard entry-level wage by gender compared to local minimum wage (GRI 202 – 1)

We firmly believe in fair and equitable compensation for all employees, irrespective of gender. When determining entry-level wages, we consider factors such as job category and skills, ensuring that both men and women receive at least the common minimum wages or more, as applicable to their roles. We have implemented a robust mechanism for regular review and compliance to ensure that our commitment to equal pay is always upheld. We ensure gender equality in compensation, valuing the skills, qualifications, and contributions of every employee. By fostering an inclusive and supportive work environment, we strive to provide equal opportunities for everyone to thrive and excel, thereby promoting diversity and individual worth across our workforce.

## The proportion of senior management hired from the local community (GRI 202–2)

We ensure equal opportunities by publicizing all positions through relevant media channels. Our selection processes are meticulously designed to be fair, unbiased, and inclusive, allowing candidates from diverse backgrounds to compete on merit. We prioritize internal talent development, affirming and providing opportunities for individuals to progress to higher roles. Regardless of background, all candidates are considered based on their qualifications and abilities. As a result, our senior management team is 100% local, showcasing our commitment to fostering talent from within the country and creating a culture of inclusion and belonging.

## Indirect Economic Impact

We are committed to extending our focus beyond our immediate stakeholders to contribute to the broader economy. We believe that generating indirect economic impacts is crucial as it promotes economic growth for stakeholders, creates a ripple effect throughout the economy, enhances our reputation, and fosters a favorable business environment for long-term success. Through employment generation, increasing agricultural productivity, developing rural communities, and pursuing innovations in farm technology, we strive to drive sustainable growth and prosperity in the agricultural sector.

### Significant Indirect Economic Impacts (GRI 203 – 2)



**Employment Generation:** We directly employ a substantial number of personnel and support employment indirectly through our distribution and dealer networks, creating job opportunities and income for individuals and families.



**Agricultural Productivity:** Our tractors and farm equipment enhance farm mechanization, increasing productivity, reducing manual labor, and enabling higher yields. JFarm provides support with advanced agricultural practices and technologies.

## Infrastructure Investments and Services Supported (GRI 203 – 1)

In addition to JFarm services, we provide essential facilities such as hospitals, roads, schools, and water supply to the public. These contributions span healthcare access, infrastructure development, education support, and ensuring clean water access, all aimed at enhancing community well-being and development.



**Rural Development:** We support rural development by providing training programs, and engaging in community development initiatives, enhancing the socioeconomic well-being of rural communities.



**Technology Transfer and Innovation:** We invest in research and development, driving innovation in the agricultural machinery sector and promoting overall economic growth.



**Value Chain Support:** We collaborate with suppliers, dealers, and service providers, creating a value chain that supports economic activities and sustains growth in the Agri machinery sector.

## Tax Strategy

Contribution through taxes is important for us as it funds public goods, supports economic stability, fosters trust with stakeholders, ensures legal compliance, and contributes to the overall well-being of communities and sustainable development. Furthermore, by paying taxes responsibly, we actively participate in the equitable distribution of resources, thus playing a crucial role in building a fair and just society.

We approach tax payment by ensuring compliance with tax laws, maintaining accurate financial records, seeking professional advice when needed, and demonstrating transparency and ethical behavior in tax practices. Transparency and ethical behavior are paramount in all tax-related dealings, reflecting our commitment to integrity and accountability in our financial practices.

### **Our approach to tax and tax management (GRI 207-1, 207-2, 207-3)**

We place high priority on tax governance, control, and risk management to ensure compliance and mitigate tax-related risks across our operational jurisdictions, including international locations. The organization remains vigilant in staying updated with relevant tax regulations and laws. Accurate financial records maintained through systems like SAP ensure transparency and precise tax liability calculations. We file our tax returns punctually and maintain open communication with tax authorities to address inquiries promptly.

To strengthen tax control mechanisms, we implement robust internal controls, including segregation of duties and periodic tax risk assessments. We employ finance and taxation professionals and engage qualified consultants to ensure compliance with tax laws and regulations. Collaboration between the finance and legal teams, along with other internal and external stakeholders, ensures

alignment, understanding, and timely resolution of tax-related matters.

We maintain vigilance regarding changes in tax laws and regulations, proactively adapting processes, and strategies to maintain compliance. Regular internal and external audits are conducted to evaluate tax compliance, identify risks, and implement corrective measures. External audits by independent auditors provide additional assurance and validation of our tax processes and controls.

These practices collectively establish effective tax governance, control, and risk management. By prioritizing compliance, minimizing tax risks, and maintaining a proactive approach to tax management, we ensure that we operate within legal frameworks while optimizing our tax obligations.

### **Operations assessed for risks related to corruption (GRI 205-1, 418-1)**

As outlined earlier, we have a robust risk management program with risk registers, risk prioritization, business continuity plans, and critical incident reporting mechanisms. We have a Critical Incident Reporting Portal to report any critical developments including corruption, theft, and other such events. Once reported, the portal disseminates information to appropriate stakeholders to keep informed them of the developments and resolutions. We routinely conduct business ethics audit and risk assessment for all our operational sites as well as enabling functions and corporate entities. As a result of these stringent measures, we have remained free from any penalties or fines imposed by regulators or law enforcement agencies throughout the fiscal year 2023-24. Moreover, we have not encountered any complaints or incidents related to data breaches or security breaches, or loss of customer data, underscoring our commitment to maintaining the highest standards of compliance and security within our operations.

100%

Operations covered under risk assessment

27%

Significant risks identified through risk assessment and are monitored

### Critical Incident Reporting

Entry\*

TAFE

Incident Date\*

08 Apr 03:50 PM

Function\*

Operations-Tractor

BLT Incharge\*

Critical Incident Area\*

Thefts/Fraud/Sabotage

Classifications\*

Thefts/Fraud

Intensity\*

High

Definit on

Zero tolerance policy for theft/fraud/inaccurate documentation/or improper assel accounting/including inventory

### Critical Incident Reporting Portal

The Audit Committee plays a critical role in ensuring the integrity and reliability of our financial reporting processes, internal controls, risk management procedures, and adherence to ethical and legal standards. Throughout the reporting period, the committee diligently monitored these aspects of our operations, conducting

thorough reviews and assessments to maintain transparency and accountability. It's noteworthy that no incidents of corruption or breaches of ethical and legal guidelines were reported during this period, indicating the effectiveness of our governance mechanisms and the commitment of our organization to upholding the highest standards of integrity and compliance. r data, underscoring our commitment to maintaining the highest standards of compliance and security within our operations.

## Employee Attraction, Development & Well-Being

Employment is integral to us, serving as the cornerstone of our workforce, driving productivity, customer satisfaction, and organizational culture. Additionally, it fulfills our social responsibility by offering livelihoods to those in need. Through a commitment to fair employment practices, we cultivate a motivated workforce that not only propels our success but also enriches society. We strategically hire skilled professionals to meet business objectives and sustain a competitive advantage, aligning with our social responsibility of fostering employment and community support. Acknowledging the pivotal contribution of our workforce, we emphasize cultivating a nurturing work environment that fosters engagement, satisfaction, and enduring success for all involved stakeholders.

### New employee hires and employee turnover (GRI 401-1)

We comply with the Equal Remuneration Act, of 1976, which mandates equal remuneration and service conditions for men and women for the same/similar work and prohibits any form of discrimination at the time of their recruitment. We have a robust audit mechanism to ensure compliance on an ongoing basis. In FY 2023-24, we have hired a total of 478 employees, with 26 females and 444 males. Additionally, the number of employees who exited during the same year was 461, consisting of 13 females and 448 males.



**SWAGAT – Our new employees orientation program to inculcate personnel with TAFE values**

## Minimum Notice Periods Regarding Operational Changes [GRI 402-1]

Operational changes and updates are communicated transparently to employees through structured monthly communication sessions, ensuring they are well-informed about performance, plans, and significant changes.

Furthermore, we issue a quarterly newsletter titled 'TAFE's Quest for Excellence' which covers key programs that we undertake in the extended organization, and programs, milestones, and accomplishments of our colleagues.

## Employee Training and Education

We prioritize training and education as we highly value the skills and knowledge of our employees. Continuous enhancement of people capabilities is essential to effectively integrate new technologies into our products and processes, enabling us to thrive in a competitive and ever-evolving technological landscape, including emerging disruptive developments. Our philosophy of embracing

lifelong learning is facilitated through platforms such as SLC, the Business Excellence programs, TQM, Six Sigma, and various other learning avenues.

We employ both traditional and digital training methods to develop and enhance the relevant competencies and capabilities of our personnel. Our SLC serves as an innovative hub for both physical and digital training initiatives, dedicated to bolstering the skills and expertise of our workforce across various domains such as design & development, engineering, manufacturing, quality assurance, supply chain management, sales & marketing, customer support, finance, and digital technologies.

In addition to the SLC, we offer formal training programs like LEAD, SLDP, MDP, EDP, LMS modules, Six Sigma, and TQM to further nurture talent within us. Moreover, we allocate significant resources to train our dealers and supplier personnel.

Informal learning is also encouraged within our daily work environment through various forums where employees exchange best practices and share knowledge insights.

## Our Action Plan Empowering Agricultural Sustainability: Training, Innovation, and Collaboration

- Training 600+ farmers annually through JFarm services on sustainable Agriculture
- Conducts training and demonstration on integrated farming, organic farming, soil health management, soil and water conservation technologies, and equipment and machinery for various agricultural operations.
- Established SLC – a zero energy building - to provide personnel training on product, engineering, manufacturing, quality, supply chain, service, finance, and digital aspects.
- Partnering with universities & governments to develop new farming techniques and policies

## Diversity of Governance Bodies and Employees (GRI 405-1)

We foster an inclusive workplace culture that celebrates diversity, advocates for equality, and upholds the dignity of every individual, thereby establishing a solid groundwork for the prosperity and welfare of our entire workforce. Our core values serve as the compass that directs the actions and behaviors of our personnel in all aspects of their professional endeavors. Through our Diversity, Equity & Inclusion (DEI) Policy, we guarantee that every stakeholder, irrespective of their position, receives equitable treatment, acknowledgment, and involvement in the company's achievements and growth.

### Our commitment to DEI



## Benefits Provided to Employees

(GRI 401-2)

We provide other employment benefits to all our employees, including medical insurance, personal accidental insurance, leave benefits, and access to free canteen and transportation facilities. All our salaried employees are provided additional reimbursements for expenses incurred with use of telephones, internet, leave travel, fuel, and vehicle maintenance.

### Parental leave (GRI 401-3)

In compliance with The Maternity Benefit Act, 1961, we ensure fully paid maternity leave for women employees, safeguarding their employment during maternity, and enabling them to care for their child without financial concern.

## The Ratio of Basic Salary and Remuneration of Women to Men

(GRI 405-2, 406-1)

We uphold a steadfast commitment to gender pay parity, ensuring equal compensation and benefits for all employees, irrespective of gender. This approach fosters an inclusive work environment that values fairness and equality, bolstering employee satisfaction, motivation, and engagement. Employee satisfaction surveys, conducted periodically by third-party organizations including AON Hewitt, provide valuable insights for reinforcing strengths and identifying areas for improvement. Our retention rate of 90% and employee satisfaction score of 78% reflect the value we place in our employees and the ongoing investment in their well-being and development.

## Worker participation and training on occupational health and safety

[GRI 403-4, 403-5]

New employees undergo safety induction training programs upon joining while existing staff participate in refresher courses to bolster safety awareness and reinforce adherence to safety protocols. These initiatives aim to equip employees with the knowledge and skills necessary to identify and mitigate safety hazards effectively.

The safety training curriculum encompasses various components such as induction sessions, on-the-job training, mock drills, video-modules, informative banners, safety workshops, and more. Notable examples of these programs include Kiken-Yochi Training

focused on hazard identification, safe handling of hand and pneumatic tools, the importance of personal protective equipment (PPE), familiarity with emergency exits and safety signage, road safety practices, understanding safety sensors in machinery, and more.

Furthermore, our employees actively contribute to enhancing safety within the workplace by providing valuable feedback on potential hazards and near-miss incidents. This input enables us to promptly address risks and cultivate a safer working environment.

Specifically, tractor drivers and mechanics undergo regular training sessions covering safe tractor operations, including road safety practices, proper usage of implements, and appropriate parking procedures. These training efforts ensure that our personnel are equipped to carry out their tasks safely and responsibly.

Mock evacuation drill conducted at our DBR Plant



Mock fire drill conducted at our Sembium Plant





## Training programs and average hours of training per year per employee

(GRI 205-2, 404-1)

We have implemented a comprehensive process for employee training and development to ensure alignment with both present and future organizational capability requirements. This process integrates the needs of the organization with those of individual employees, addressing both current and short-term needs through regular training calendars.

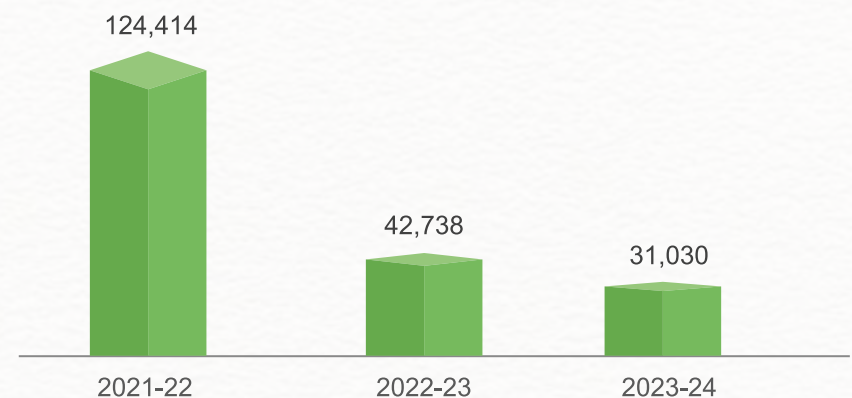
Our focus on technical and functional capability development aims to enhance competencies across all levels within the organization. Various interventions such as SMART, iSMART, ACE, ESEP, SSDP, FLDP, and more are designed to elevate competencies to the next level.

For instance, our SMART initiative comprises multiple training programs tailored to the vision and mission of each department, thus improving functional competencies. The ACE program is dedicated to cultivating in-house experts, particularly in technology, products, and processes. This initiative enhances their abilities to understand current, future, and latent customer needs and translate them into requirements across the value chain, leading to accelerated technology adoption, streamlined problem resolution, reduced lead times, and increased innovation.

Additionally, focused developmental interventions like ESEP and SSDP target specific groups, create enhanced opportunities for internal growth. Moreover, we foster a culture of continuous learning and career advancement, providing ample opportunities for personnel to expand their skills and pursue professional

growth. Through a variety of training programs, skill-building initiatives, and career pathways, we empower our employees to realize their full potential, ensuring a talented and motivated workforce capable of meeting the dynamic demands of the industry. We prioritize the cultivation of a robust leadership pipeline through meticulously crafted development initiatives, including the Executive Development Program (EDP), Managerial Development Program (MDP), Senior Business Leadership Program (SBLP), and Functional Leadership Development Program (FLDP). The Executive Development Program (EDP) is tailored to empower operating executives to excel in their roles, equipping them with effective managerial skills and fostering self-management and team

**Total Functional Training Hours**



### **During COVID-19**

**in FY 2021-2022, we offered increased training opportunities to our personnel to leverage their increased availability as they worked from remote. In subsequent years, we transitioned to a more standard training schedule.**

Targeting junior and mid-level managers, the Managerial Development Program (MDP) offers a comprehensive awareness of diverse business functions, instilling a forward-looking perspective to navigate the world that is getting increasingly Volatile, Uncertain, Complex and Ambiguous (VUCA).

The Senior Business Leadership Program (SBLP) is strategically designed to align with our global aspirations, fostering entrepreneurial skills and cultivating second-level leadership potential for the future. The Functional Leadership Development Program (FLDP) is dedicated to identifying and nurturing individuals capable of assuming functional leadership roles within the organization. Unlike other programs that focus on managerial levels, the FLDP targets leadership roles, enhancing functional capabilities to drive organizational success.

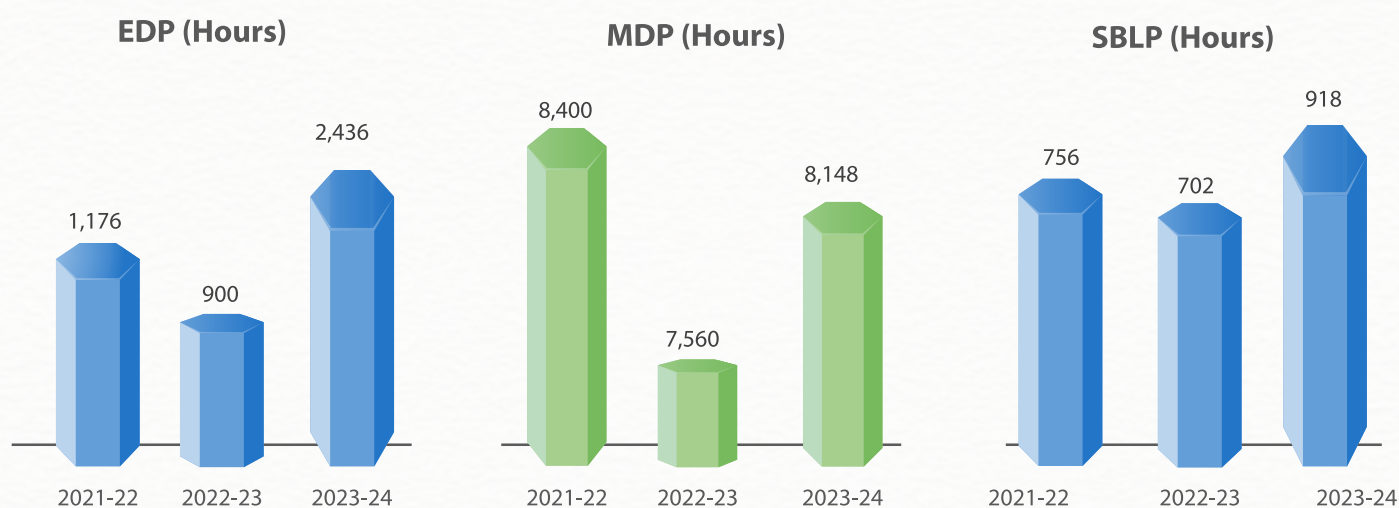
The Leadership Excellence and Development Program (LEAD) is our premier initiative designed to cultivate the future senior leadership pipeline through contemporary pedagogy and tailored learning interventions.

We prioritize comprehensive training for personnel across the entire value chain. We operate a fully equipped Product Training Centre (PTC) dedicated to advancing the product knowledge of our staff, dealership technicians, after-market technicians, university students, and other pertinent stakeholders.

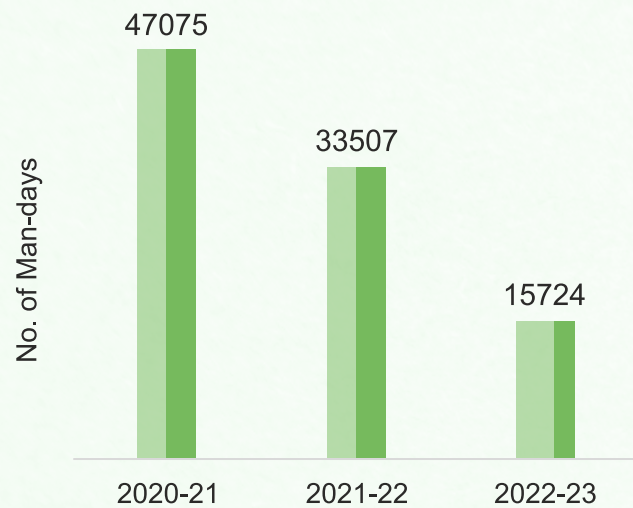
Within our Sales & Marketing function, emphasis is placed on enhancing the capabilities of our personnel in crucial areas such as sales forecasting and development, sales planning, and monitoring, as well as dealer selection and management.

Similarly, our Customer Support function is geared towards enhancing the proficiency of service personnel to better understand and service our products, while also keeping them informed about new product functionalities.

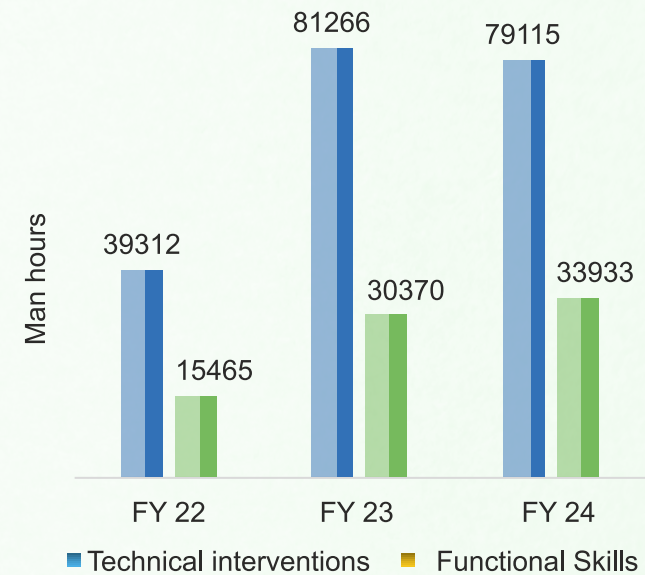
Number of People Covered	FY 2023-24	FY 2022-23	FY 2021-22
EDP	203	75	98
MDP	97	90	100
SBLP	17	13	14
FLDP	43	-	-
LEAD	19	19	-



### Training at Product Training Centre



### Customer Support Training



Recognizing the significance of skill development at all levels, we are committed to providing comprehensive training to our workforce, equipping them with the necessary skills to perform their duties effectively and efficiently. All our employees engaged in plant operations are trained on performing environmentally critical activities and the associated environmental aspects. Our training initiatives encompass a wide range of functional and interpersonal skills, incorporating various interventions such as behavioural programs, Total Productive Maintenance (TPM), Quality Control Circles (QCC), 5S methodology, and Skill Development Workshops and Training (SDWT) across our locations.

We've provided comprehensive environmental training to our key personnel across all our plants through GreenCo of CII. These training sessions encompass a wide range of topics including energy efficiency, renewable energy, GHG emissions, water conservation, waste management, material conservation, recycling, recyclability, green supply chain, product stewardship, life cycle aspects, innovation, green infrastructure, and green ecology.



**Product Training at PTC**



**Virtual training in spray painting using VR at MDU**



People getting trained as tractor mechanics at PTC

## **Programs for upgrading employee skills and transition assistance program [GRI 404-2]**

To thrive and succeed in today's challenging and competitive landscape, it is imperative to enhance our efficiencies and transition towards a flatter and more agile organizational structure.

For employees whose current roles are no longer viable, we proactively identify suitable functional roles within the organization and offer re-deployment opportunities based on their skills and suitability. For those individuals for whom suitable roles are not available internally, we collaborate with consultants and placement agencies to assist them in finding external job opportunities.

Additionally, employees who are nearing retirement but are willing to continue working outside the organization are provided with job assistance support and referrals. Our HR representatives and consultants help in resume preparation, conduct mock interviews, and provide valuable interview tips to ensure a smooth transition for these employees.

Training needs for employees are identified through Performance Management Plans (PMP) and other assessments, taking into consideration their future potential. These needs are then addressed through various training programs aimed at enhancing their skills and capabilities, including, but not limited to the following:

# Training Initiatives

#	Area	Key Training Initiatives	Highlights
1	Classroom	<ul style="list-style-type: none"> <li>• Technical training programs anchored by external knowledge partners (SMART) and internal subject matter experts (iSMART)</li> <li>• Functional experts (ACE) developed in technical areas including sheet metal, Engine, Gears, Castings, and Metallurgy</li> <li>• Supervisors to manage cells developed through the Supervisory Skill Development Program (SSDP)</li> <li>• Diploma engineers developed to fill vacancies caused by resignations or newly approved positions and to encourage internal growth through the Engineer Skill Enhancement Program (ESEP).</li> </ul>	<ul style="list-style-type: none"> <li>• Improved engagement driver score (organization actively supports the learning and development of our employees)</li> <li>• Development of internal subject matter experts to train employees.</li> <li>• Certified experts to act as SPOC for technology &amp; process related matters,</li> <li>• Understanding customer needs (current, future, and latent) and translating the requirements across the value chain.</li> </ul>
	E-Learning	<ul style="list-style-type: none"> <li>• LA Café, KBC, Knowledge Nuggets, T100.1 Webinars, teach for TAFE and Flashback, Collaborative spaces on PROTeam, gamified knowledge mgmt., PALL, MOOC picks, Young@TAFE, Kaleidoscope, Product knowledge assets repository, XR and 360-degree experiences, SnS 21 habit cycles, KBC Digital+, social threads, wellbeing (Yoga), Functional knowledge sharing and learning circles</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced growth from within; Improved digital Learning adoption from 46% in FY 2014-15 to 80% in FY 2021-22.</li> <li>• Increased internal knowledge assets from 20 in FY 14 -15 to 230 in FY 2021- 22 through process improvements and technology interventions.</li> </ul>
2	Product Training Centre	<ul style="list-style-type: none"> <li>• Digital content made available for all the scheduled training programs.</li> <li>• Smart screen classes /demonstration from PTC to all, specifically on the critical settings.</li> <li>• Skill level-based training for the Dealership technicians at PTC Chennai, PTC Bhawanimandi, PTC Telangana, and RTC Pune.</li> <li>• DDU GKY Training and Placements</li> </ul>	<ul style="list-style-type: none"> <li>• Improved engagement of trainers on the training schedule, content updating, train the trainer on new products, /new technologies.</li> <li>• Development of training program specific to the job profile, and the development of subject matter experts to train employees. LMS portal utilization for the enrolment, pre-read training material</li> </ul>
3	Customer Support	<ul style="list-style-type: none"> <li>• Product Technical training - Negotiation and soft skills</li> <li>• Functional Skills- CRDI, SAR, Parts</li> <li>• Digitalization -Basic, Zoho</li> <li>• Service Excellence</li> <li>• Financial aspects of customer support</li> </ul>	<ul style="list-style-type: none"> <li>• Increased Customer Satisfaction, Loyalty, and Retention.</li> <li>• Improved customer service skills -MTTR</li> <li>• Improved responsiveness to customers</li> <li>• Improving Employee Morale.</li> <li>• Improved competitive advantage</li> </ul>

# Training Initiatives

#	Area	Key Training Initiatives	Highlights
4	Leadership Development	<ul style="list-style-type: none"> <li>Tied up with best-in-industry knowledge partners such as Franklin Covey, IIMs, and IFMR.</li> <li>Comprehensive development plan comprising classroom sessions, digital sessions, industry expert sessions, business simulations</li> </ul>	<ul style="list-style-type: none"> <li>Enabled executives to “excel” in their jobs.</li> <li>Prepared executives to become effective managers</li> <li>Enhanced skill sets for “Managing Self” &amp; “Managing Others.”</li> <li>Developed a “holistic understanding of business.”</li> <li>Enabled others to perform / Develop people.</li> <li>Built leadership competence for achieving our global aspirations.</li> <li>Inculcated Entrepreneurial Skills. Groomed second-level leadership talent for the future.</li> </ul>
5	Non-Management Staffs	<ul style="list-style-type: none"> <li>Interpersonal behavior and team building</li> <li>Labor laws and industrial behavior</li> <li>TPM</li> <li>Self-directed work team</li> </ul>	<ul style="list-style-type: none"> <li>Behavioral improvement</li> <li>Workplace discipline</li> <li>Teamwork and attendance improvement</li> </ul>
6	Sales Training	<ul style="list-style-type: none"> <li>Train The Trainer Program - Guru Dhrona</li> </ul>	<ul style="list-style-type: none"> <li>Induction and Refresher training programs to keep the internal sales team aligned with updated product and process knowledge</li> </ul>
		<ul style="list-style-type: none"> <li>Webinar on Product Refresher (Region Wise)</li> </ul>	<ul style="list-style-type: none"> <li>Customized product refresher program based on focus areas/regions with respect to request raised or need identified</li> </ul>
		<ul style="list-style-type: none"> <li>LMSTraining - Digitization</li> </ul>	<ul style="list-style-type: none"> <li>Digitalization of the entire team on LMS to be hands-on with the software for recording and assessing the dealership manpower</li> </ul>
		<ul style="list-style-type: none"> <li>Saksham - New Dealer Induction Program</li> </ul>	<ul style="list-style-type: none"> <li>Induction program to welcome the new business partner in the TAFE family while providing an understanding of all the Business functions</li> </ul>
		<ul style="list-style-type: none"> <li>Webinar - New Dealer Induction Program</li> </ul>	<ul style="list-style-type: none"> <li>Induction program for Business partners who have difficulty in attending physically in person @ Chennai</li> </ul>
		<ul style="list-style-type: none"> <li>Aarohan 2.0 - Mdi Gurgaon</li> </ul>	<ul style="list-style-type: none"> <li>Advance Business Matrix training organized at one of the best Management Institutes</li> </ul>
		<ul style="list-style-type: none"> <li>Aarambh - Sales Induction Module</li> </ul>	<ul style="list-style-type: none"> <li>Induction program to introduce the front face of TAFE with the family values, vision, and way ahead, happening in different function focus modules</li> </ul>
		<ul style="list-style-type: none"> <li>Webinar - New Product Training</li> </ul>	<ul style="list-style-type: none"> <li>Making the team to understand the vision, need, and differentiators of product launch through digital mode so that extensive reach can happen.</li> </ul>

## Percentage of Employees Receiving Performance reviews (GRI 404-3)

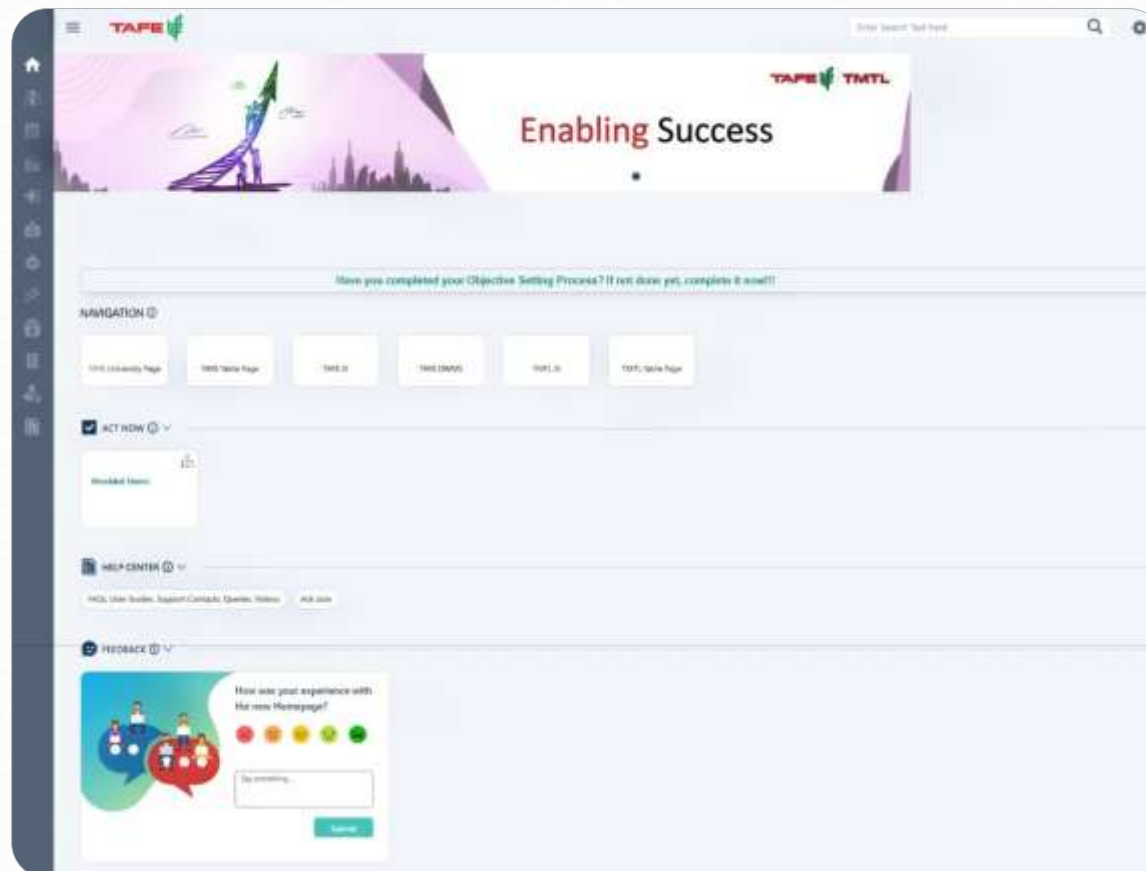
All our employees undergo performance review and receive feedback. Our appraisers and reviewing officers conduct formal mid-year and annual performance feedback and developmental sessions. During both the mid-year and annual performance management processes, formal performance feedback and developmental sessions are conducted by appraisers and reviewing officers. These sessions are facilitated through an integrated Performance Management Plan (PMP) System, which ensures the evaluation of Key Result Areas (KRAs), allowing employees to comprehensively represent their work and receive constructive feedback. To provide additional support in specific

areas, employees have access to our Talent Acceleration Program (TAP).

As part of our PMP, we've instituted a bonus scheme tied to the company's performance for our employees. Additionally, our PMP assists us in objectively determining pay raises for our employees, ensuring fairness and non-discrimination.

While all eligible employees undergo performance and career development sessions as part of the performance management process, high-performing employees undergo focused assessments to identify their strengths and areas for improvement. Based on the outcomes of these assessments, suitable action plans are developed and implemented to further enhance their performance and career progression.

## One TAFE portal catering to our employee's needs.



## Sivasailam Learning Center (SLC)

The Sivasailam Learning Centre (SLC) pays tribute to our visionary former Chairman, Mr. A. Sivasailam, who was deeply committed to learning and innovation that empowered society and brought about transformative changes in people's lives. SLC, inspired by his passion, has revolutionized learning by offering eco-friendly methods to acquire and disseminate knowledge through virtual and physical environments.

Another notable initiative is the establishment of Centres of Excellence in India in collaboration with IIT Madras and Harper Adams University, UK. These partnerships highlight our dedication to fostering excellence in education and research, furthering Mr. A Sivasailam's vision of creating impactful learning environments.

**“To us, excellence is not something that we engineer, inspect or input into our tractors. It is an Innate desire to attain the best that comes from within each of us. It defines our lives at work and at home and ripples out into the world around us”**

**- Mr. A Sivasailam**

**State-of-the-art  
SLC Building at  
Sembium complex.**





# Learning Infrastructure



SLC, has created greener ways to learn and share knowledge:

### **Self-paced Learning (Asynchronous):**

- Through its SLC University portal and mobile apps, SLC delivers TAFE specific content and marketplace content to address capability and competency needs.
- The learners are benefitted by “Anytime Anywhere Learning. Personalisation of training content is done to cater to individual needs.

### **Facilitated Sessions (Synchronous)**

- Through the state-of-art smart classrooms and high-end technology interventions, learners even from remote spaces are well connected to provide a classroom kind of experience.
- The facilitators can also connect from any part of the world.

### **XR Interventions:**

- The Virtual Reality, Augmented Reality, and Mixed Reality Experiences saves provides an immersive learning experience without needing people to travel or ship materials.

### **Engagement (Gamification)**

- SLC offers a plethora of digital games for learner to engage, learn and share their knowledge.

## Physical Infrastructure

SLC is a Zero Energy Building with cutting edge features:

### Reduced cooling loads

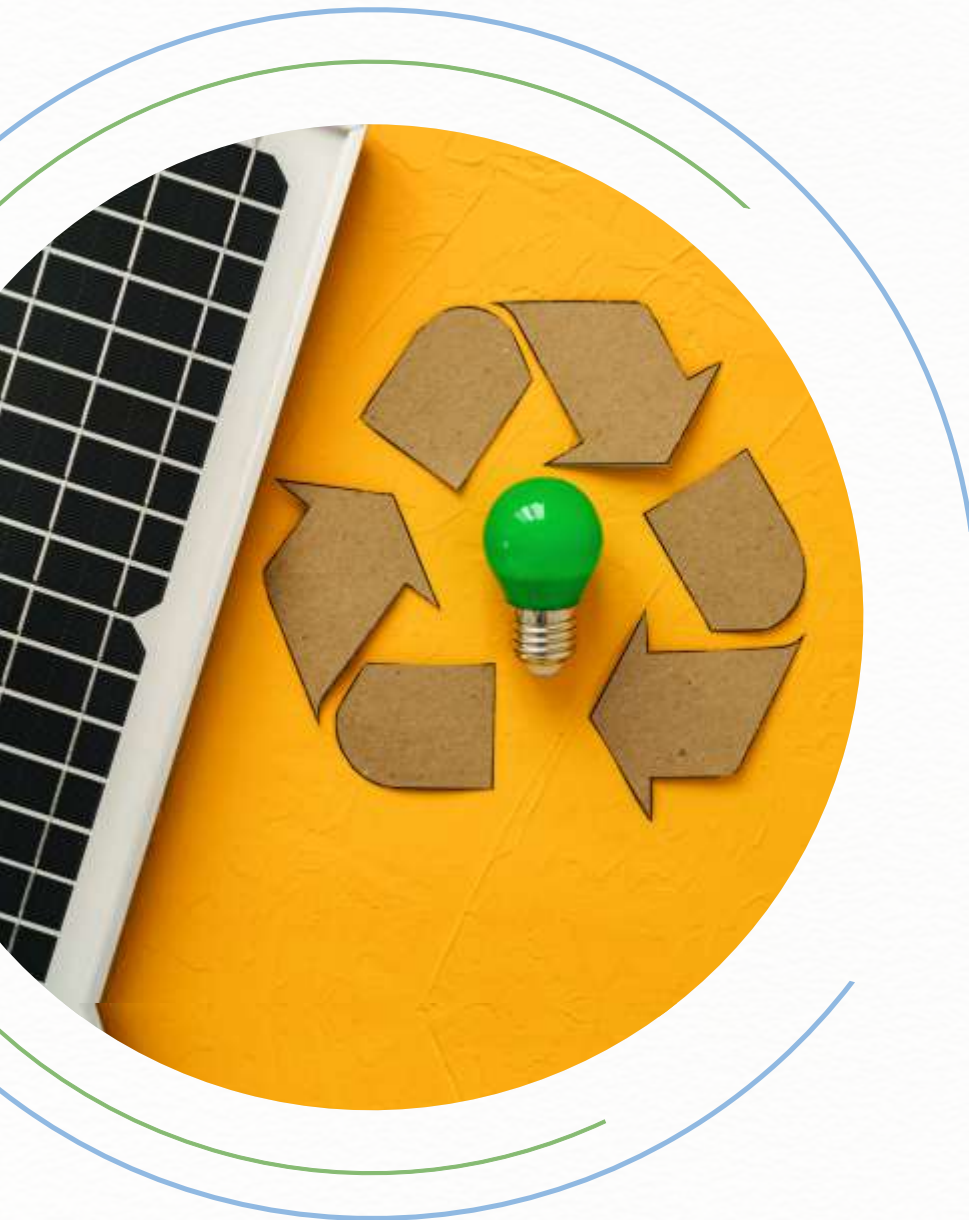
- Shaded façade system to lower solar heat impact.
- Glass outer panels with double layer thermal insulation
- Roof shaded by photovoltaic panels.
- Thermally insulated roof and floor
- LED lights requiring less energy and generating less heat.
- Use of daylight to minimize artificial lighting.

### Solar Energy Harvesting

- Powered 100% by electric energy produced by photovoltaic panels covering the entire roof area.
- Efficient cooling systems
- Radiant floor cooling system for larger areas
- Decentralized smaller cooling units for rooms.
- Reduced mechanical systems and ductwork.
- Reduced return air systems
- Fresh air precooled with heat recovery wheel.

### Recycling and Reuse of building materials

- Minimized use of concrete
- Primary building structure, walls and façade made of recyclable steel.
- Façade made of recyclable aluminum.
- High quality materials for longer life span



## Occupational Health & Safety



### Employees taking safety pledge

We hold occupational health and safety of paramount importance, and it reflects our core value of prioritizing people. We are dedicated to enhancing the safety and ergonomical operating conditions for our personnel through targeted programs, which include the Safety Pillar within our World Class Manufacturing (WCM) initiative, as well as through Six Sigma, Quality Control Circle (QCC), and Cross Functional Team (CFT) projects.

The WCM-Safe pillar ensures the provision of safe work environments for our personnel by implementing a standardized approach throughout the organization and undertaking safety enhancement activities using modern digital technologies. Safety is continually improved through targeted enhancements in areas such as electrical safety, occupational health, ergonomics, and overall work environment safety.

Additionally, we have implemented an Integrated Management system, including ISO 45001 for occupational health and safety management systems (OH & SMS), further strengthening our commitment in this domain. Furthermore, our Skill Development Workshops and Training (SDWT) initiative incorporates a safety pillar, where a designated safety leader (Safety Cap) identifies and addresses unsafe conditions with the support of relevant personnel.

As noted in another section of this report, we prioritized the well-being of our employees by implementing stringent safety measures, including the use of personal protective equipment (PPE) and vaccination programs, while strictly adhering to social distancing guidelines during the COVID-19 pandemic. With these precautions in place, we maintained our tractor production operations, recognizing the critical role of tractors in ensuring food security for the nation.

## Occupational health and safety management system (GRI 403-1)

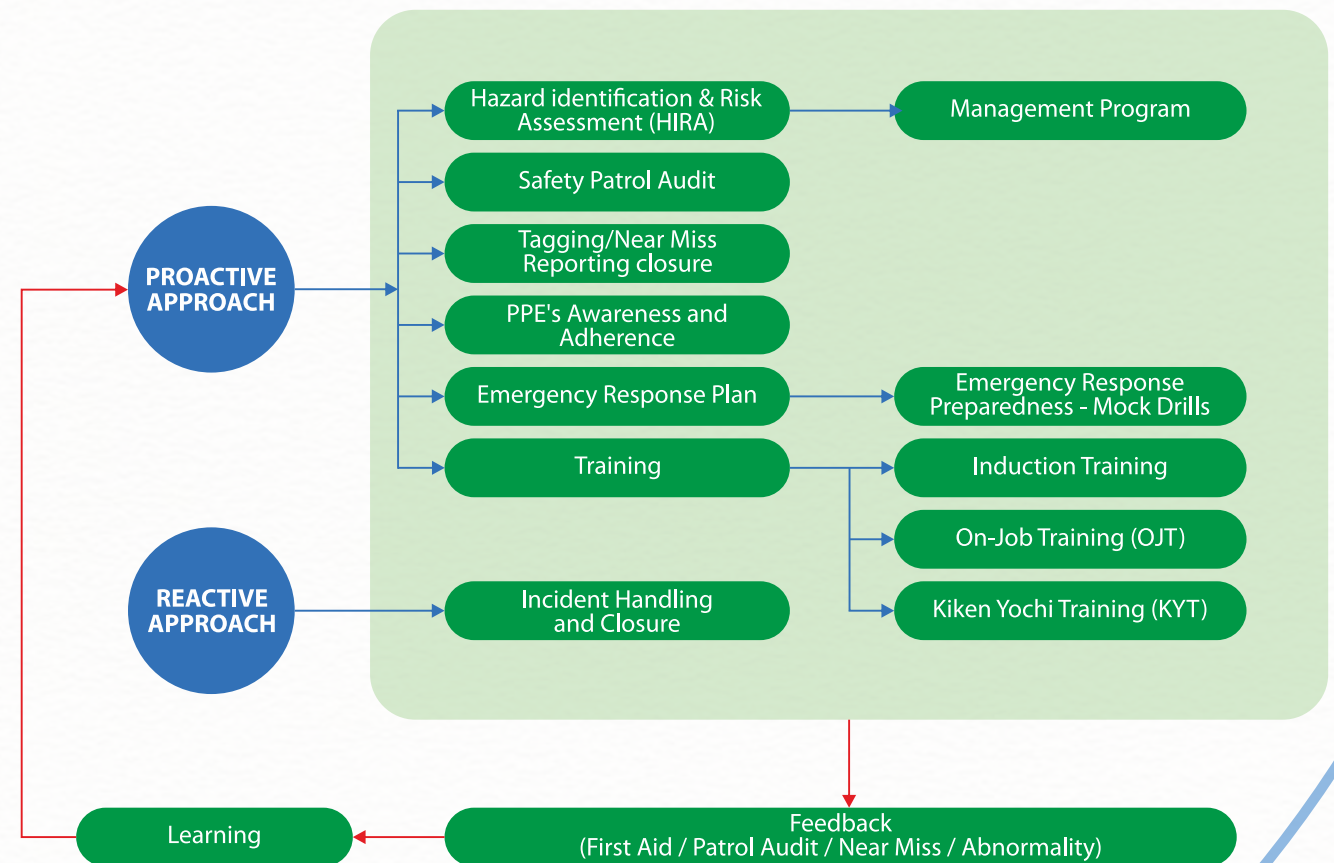
The implementation of an Occupational Health and Safety Management System (OH&SMS) framework underscores our organization's unwavering dedication to health and safety standards. This structured approach enables us to consistently identify and mitigate risks, minimize incidents, ensure regulatory compliance, and continuously enhance our performance.

Our comprehensive OH&SMS framework comprises several crucial components, including injury prevention management, Personal Protective Equipment (PPE) management, emergency response

systems, safety training, the establishment of a safe work environment, employee health check-ups, and ergonomic studies. We also carry out regular maintenance of safety equipment.

A notable feature of our framework is the meticulous tracking of both minor and major injuries, coupled with the proactive reporting and resolution of near misses, unsafe conditions, unsafe acts, and ergonomic concerns. This proactive approach serves to prevent future incidents and maintain a secure workplace environment. Through the consistent utilization of this framework, we prioritize the health and safety of our workforce, uphold regulatory requirements, and continuously elevate our performance standards. This framework underscores our steadfast commitment to fostering a safe and supportive work environment for all employees.

### Safety management framework



## **Hazard Identification, Risk Assessment, and Incident Investigation (GRI 403-2)**

We conduct Hazard Identification and Risk Assessment (HIRA) studies at all of our sites to systematically evaluate potential hazards and assess associated risks. We ensure effective communication within our business processes and with stakeholders to ensure compliance with relevant health and safety regulations. Our Health & Safety policy encourages all our workers at all levels to report hazardous situations, enabling the implementation of preventive measures and corrective actions.

When complaints are received, they are directed to the Management Representative (MR) at the plants, who is responsible for initiating corrective actions following approval from the Head of the plant. HIRA studies cover all our plants comprehensively. We engage in consultations with workers' representatives to facilitate informed feedback and encourage worker participation in decision-making processes related to health and safety performance measures.

Hazards are identified and classified into mechanical, physical, chemical, electrical, ergonomic, fire, biological, and behavioral categories. Root causes of these hazards are analyzed and addressed through controls such as elimination, substitution, engineering/administrative controls, and the use of prescribed Personal Protective Equipment (PPE).

We undertake numerous safety improvement projects continuously to enhance safety standards. All reported safety issues undergo thorough investigation and appropriate corrective measures are taken promptly.

## **Prevention and Mitigation of Occupational Health and Safety Impacts (GRI 403-3, 403-7)**

We implement robust systems to monitor the health of employees exposed to occupational hazards, including regular medical check-ups, screening tests, and monitoring of exposure to hazardous substances or conditions. Additionally, measures are in place to prevent noise exposure, such as providing earplugs or other suitable protective equipment.

Routine assessments are conducted to identify workplace hazards and risks, with thorough evaluations of the working environment to ensure compliance with health and safety regulations. We have established programs and policies aimed at preventing workplace injuries and illnesses, which include training employees on safe work practices, providing Personal Protective Equipment (PPE), and fostering a culture of safety.

Moreover, we actively promote employee health and well-being through various initiatives, including health education programs, yoga sessions, and ergonomic assessments to ensure optimal working conditions for all employees.





## Promotion of Worker Health and Workers Covered by Occupational Health and Safety (GRI 403-6, 403-8)

Our employees undergo annual health checkups, facilitated by fully equipped occupational health centers at our plants to manage illnesses and emergencies. We have established partnerships with nearby doctors and hospitals to ensure prompt medical assistance. Additionally, employees are covered by group health insurance plans. Our operations are covered under ISO 45001.

Furthermore, our facilities extend beyond occupational health needs to cater to non-occupational and non-work-related health requirements, allowing employees and workers to access medical facilities for non-work-related health ailments.

Employees are provided with high-quality Personal Protective Equipment (PPE) tailored to their workstation requirements. Moreover, we ensure a conducive work environment in terms of temperature, ventilation, illumination, etc., for our associates. Health checkup camps are regularly conducted, and informative talks on various health-related topics are organized by specialists.

Our future action plans include maintaining zero fatalities and reducing the frequency rate of injuries, encompassing both major and minor incidents.



## Work-Related Injuries

(GRI 403-9, 403-10)

We are committed to promoting safe workplace conditions through continual improvement in the awareness, skill, and competence of stakeholders for the prevention of injury and ill health.

Injury-free working days are tracked, and injury reporting practices are adhered to. Injuries and illnesses are immediately attended to by the in-house occupational health center or by the nearby hospitals where we have tie-ups.

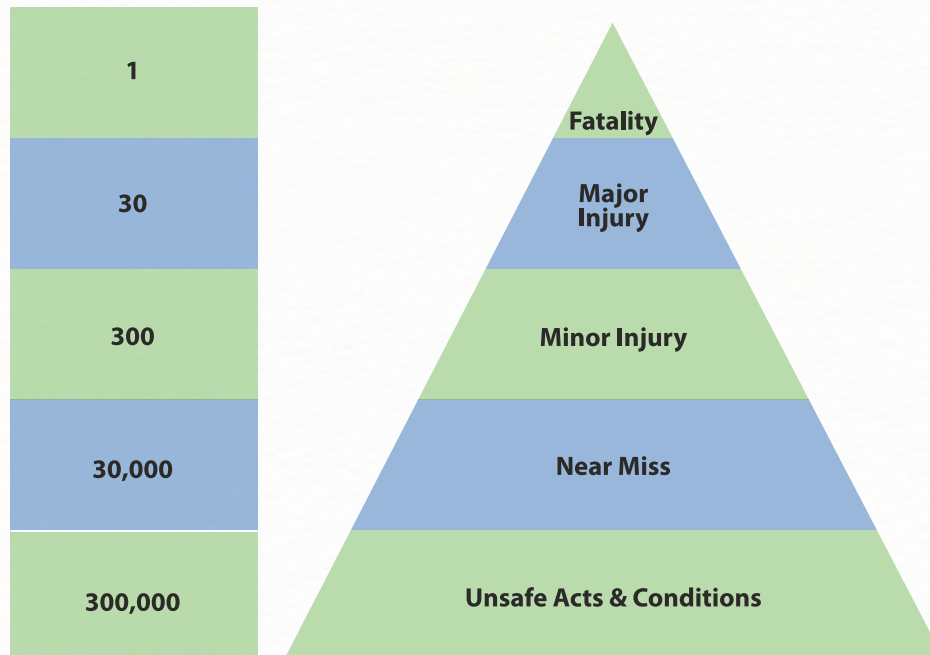
Additionally, injuries are analyzed using the Corrective and Preventive Action (CAPA) format, ensuring thorough investigation, and addressing of root causes. Additionally, proactive safety measures such as regular training and Safety Days are organized to promote a culture of safety and prevent incidents. Our Loss-Time Injury Frequency Rate (LTIFR) is 0.2 for the year FY 2023-24.



### “ We strive to...

- **Achieve zero major and minor injuries in the workplace.**
- **Promote the physical and mental well-being of the workforce to foster a healthy, secure, and supportive workplace culture.**
- **Implement a robust monitoring system to track and evaluate workplace hazards, ensure ongoing assessment, and mitigate risks.**
- **Prioritize the well-being of customers by ensuring high-quality and safe products.**
- **Align with Integrated Management System across manufacturing units including ISO 45001**
- **Support a safe work environment for personnel through the deployment of a unified standard through the World Class Manufacturing Program and its Safety Pillar.**
- **Deliver comprehensive training programs to equip stakeholders with the necessary knowledge and skills for maintaining a safe and healthy work environment.**
- **Ensure compliance with all applicable health & safety laws, standards, and regulations.”**

**FY 2023-24**



Total	MDU	DBR	ETB	ETA	SBM	ETP	TGD
0	0	0	0	0	0	0	0
2	0	0	1	1	0	0	0
1	0	0	1	0	0	0	0
3128	306	311	1319	353	289	305	245
9503	729	817	4958	1016	577	682	724

**Safety Performance (Heinrich's Triangle)**



Safety Poka-Yoke, Dual hand operating press synchronised with area sensor to eliminate hand injury.



## Customer **Health & Safety**

Customers' health and safety are of utmost importance to us, as it aligns with our core values and commitment to delivering exceptional products and services. We recognize that prioritizing the well-being of customers not only ensures their satisfaction but also establishes trust and loyalty.

By adhering to stringent health and safety standards, conducting thorough risk assessments, and implementing robust quality control measures, we demonstrate our dedication to providing reliable and safe products. This customer-centric approach reflects our unwavering commitment to excellence and our responsibility toward the well-being and satisfaction of our valued customers.

### **Assessment of Health and Safety**

### **Impacts of Product and Service**

### **Categories [GRI 416-1, 417-1]**

The Product Management Group plays a crucial role in meeting the ever-changing and diverse market requirements by delivering products and technology that provide value to customers and sustainable growth for the organization. To meet customer requirements and ensure sustainable growth, we deliver products and technology that offer value while prioritizing health and safety considerations throughout the entire lifecycle, from pre-development to post-launch.



## Activities Undertaken to Ensure Safety During Product Use and Service

- **Serviceability, Accessibility & Maintainability (SAM) Verification:** SAM verification is conducted at different stages of product development (Alpha, Beta, and QP) to ensure products are designed for easy servicing and operation.
- **Customer Product Validation:** Products undergo evaluation in field conditions to assess safety, performance, usage, and application compatibility across diverse markets. This validation aids in determining the best fit for customers.
- **Product Acceptance Study:** A systematic process captures customer feedback at various stages of the lifecycle (initial, interim, and final) to understand expectations regarding safety, performance, features, comfort, and application suitability. Incorporating periodic feedback facilitates continuous improvement.
- **Quality Control Measures:** We have implemented robust quality control measures through JQUEST initiatives to achieve zero defects at all operational stages, ensuring customer health and safety.
- **Clear Instructions and Communication:** We provide customers with clear instructions, warnings, and guidelines for safe use and maintenance, communicated through various channels including product catalogs, leaflets, labeling, advertisements,

All our products undergo testing by The Central Farm Machinery Training and Testing Institute (CFMTT & TI) in Budni, Madhya Pradesh, ensuring they meet necessary approval before being cleared for sale. CFMTT & TI evaluates the quality and safety of farm machinery, particularly tractors, against The Bureau of Indian Standards (BIS) guidelines. This process instills confidence in farmers, assuring them that the tractors they purchase meet required performance and safety standards. In the reporting period, there have been no incidents of non-compliance concerning the health and safety impacts of our products and services.

Similarly, certification is required for Tractor-attached Implements and self-propelled farm equipment to participate in subsidy programs.

This certification process is conducted by four Farm Machinery Training & Testing Centers and 38 institutions approved by the

Ministry of Agriculture, GOI. These include CFMTTI, Budni, SRFMTTI, Anantapur, NRFMTTI, Hissar, Agricultural Engineering College & Research Institute (AECRI), TNAU, and Trichy, among others.

The Product Acceptance Study (PAS) is an internal process aimed at capturing customer feedback and understanding customer requirements to identify key strengths and areas for improvement. PAS is conducted at various stages, including preliminary, initial, interim, and final stages of design and manufacturing, as well as post-launch of the product. We also have robust procedures in place for product recalls triggered by safety concerns or operational performance issues. These procedures ensure we can address issues quickly, prioritize customer safety, and minimize disruptions.

Through the implementation of these processes and activities, the Product Management Group ensures that products align with customer needs, uphold safety standards, and reliability, and facilitate the sustainable growth of the organization. Throughout the reporting period, there were no instances of non-compliance concerning the health and safety impacts of our products and services.

## Objectives of Product Acceptance Study (PAS)

- To evaluate the tractor's performance across various applications compared to customer expectations.
- To gather feedback on reasons to buy, likes & dislikes, recommendation levels for the tractor (NPS), and awareness level of key product USPs.
- To identify and suggest improvements based on customer feedback.
  - To initiate corrective actions based on the findings with appropriate stakeholders (CFG, R&D), and ensure closure.



Rollover Protection Structures (ROPS) in one of our tractor models to create a protective zone around the driver when a rollover occurs

# Engagement with Local Communities and CSR

Our core values define its beliefs, principles, and practices. They outline the conduct of business in the everyday lives of its employees and diverse stakeholders, dictate its overarching vision and corporate strategy. As a responsible corporate company, in addition to enabling the farming community to achieve higher productivity and prosperity, we are also committed to contributing to the education and healthcare of our employees and the community, empowering marginalized communities including indigenous tribes and differently abled people, and preserving and perpetuating the rich Indian heritage of art and culture.



## EDUCATION

- Support for Sri Paramakalyani College and Higher Secondary School established in 1963 by Amalgamations Group.
- Sivasailam Chamraj Niketan primary school since 1979.
- Sivasailam Chamraj Higher Secondary School since 1983.
- Support for various schools near our plants.
- Training students as highly skilled tractor mechanics through PTC.
- Internship opportunities for students from IIMs and other eminent institutions.



## HEALTHCARE

- Support for Sri Paramakalyani Hospital established in 1963 by the Amalgamations Group.
- A well-equipped hospital in Chamraj Estates.
- Supporting Sankara Nethralaya for eyecare.
- Supporting Adyar Cancer Foundation for Cancer Care for Children.
- COVID vaccination support for employees, families, and communities.



## PRESERVING CULTURE

- South Indian Classical Music
- Folk Art and Folk Theatre
- Promotion of Hindu Philosophy
- Sanskrit Literature.



## EMPOWERING MARGINALIZED COMMUNITIES

- JRehab for Differently Abled Women
- Tribal Welfare

## Community Educational Initiatives

We uphold the belief in education's profound impact on society's transformation. Through the Amalgamations Group, we have made significant investments in education and healthcare to positively impact and uplift society. UNITEA, an Amalgamations Group company, offers excellent educational opportunities in the Nilgiris district to the children of its employees as well as to others.

Sivasailam Chamraj Niketan is a primary school run by UNITEA since 1979, offering English medium education to over 250 students from Kindergarten to Class 5. With 11 dedicated teachers, the school provides a nurturing environment for young learners. Education is free for the children of employees, while others incur a fee.

Sivasailam Chamraj Higher Secondary School, aided by the Government of Tamil Nadu, caters to students from Class 6 to 12 since 1983. This institution offers instruction in both English and Tamil mediums, with over 500 students and 60 teachers. Tamil medium education is completely free, while English medium education is free for company staff and chargeable for others.

The infrastructure in these schools include furnished classrooms, an audio-visual room, laboratories for physics, chemistry, and biology, computers, bus facilities and hostel facilities for children from faraway places. These two schools offer the best education in the district to the children of its employees, as well as others in the 23 surrounding villages.



**Sivasailam Chamraj Higher Secondary School, nestled in the verdant hills of Nilgiris**



**Our Estate Schools Focus on Overall Development of Pupil**



**Children of Employees and Local Nilgiris Villages Engrossed in Learning**

Sri Paramakalyani College was founded in 1963 by the founder of Amalgamations Group, the late Sri S. Anantharamakrishnan, a prominent industrialist and visionary in South India. The college is affiliated to Manonmaniam Sundaranar University in Tirunelveli. Situated at the foothills of the Western Ghats, Sri Paramakalyani College meets the educational needs of the community.

The Vedic adage “Through Knowledge to Immortality” is the mission of the institution. Sri Paramakalyani College strives to provide value based, quality higher education at an affordable cost to the people living in and around Alwarkurichi. The institute with 100+ teaching staff, and 2200+ students offers 550+ courses across all programs in a year at undergraduate and postgraduate levels in sciences, arts, humanities, and other disciplines, in addition to extracurricular activities in sports, yoga, etc.

The college buildings, playgrounds, staff quarters, women’s quarters, and men’s hostel are all located in the 37-acre site. The College has the necessary facilities and educational resources, including modern laboratories, classrooms, computers, projectors, conference rooms, well-stocked library, smart classrooms, and multiple sporting facilities including courts and playgrounds for various sports, as well as a fitness center.

Besides the college, the group also runs a Higher Secondary School with 1800 students in its roll at Alwarkurichi. We also support schools in the vicinity of its operations, and a few examples include assistance provided to TVK Nagar school near the Sembium plant, primary schools for differently abled children in Basettihalli near DBR plant.



Throwback image of **our Founder Mr. S. Anantharamakrishnan** interacting with the students of Sri Paramakalyani College in Alwarkurichi during the early 1960s.



**Sri Paramakalyani College Today**

## Industry - Institute Connect

We provide valuable opportunities to students from IIM and other eminent institutions by involving them as project assignees in key areas such as marketing, manufacturing, and R&D. This initiative empowers students to gain hands-on experience and practical insights, augmenting their employability in the industry. Moreover, we offer comprehensive training programs to diploma holders and

ITI apprentices at our plants, equipping them with essential skills and knowledge essential for employment opportunities within our premises and beyond. Additionally, we contribute to the advancement of agricultural machinery and technology through our well-equipped Product Training Centre (PTC) at JFarm. This facility conducts regular training sessions for students from diverse agricultural universities and individuals aspiring for careers in tractor servicing and maintenance, thereby fostering skill development and industry readiness.



**Jfarm and Product Training Center (PTC)**



**Students Learning Tractor Repair and Maintenance skills at PTC**



## Public Health Initiatives

We are deeply committed to enhancing healthcare access in the communities it serves. Our group company UNITEA opened the Chamraj Hospital to the public in 1984. The only hospital within a radius of 25 kms from the estate (covering over 16 villages), it provides state-of-the-art medical facilities, free of charge to its workforce. Chamraj Hospital is also the first estate hospital to open its facilities to the local public for a subsidized fee.

Facilities at the Chamraj Hospital include a full-fledged pathology lab, two x-ray units (standard and portable), ECG, ultrasound scanner, fully equipped operation theatre, dental chair, and ophthalmology (consulting only). There are 50 beds in addition to 8 rooms in the hospital available free of cost to employees and dependents, and with nominal charges for non-estate patients from the 27 surrounding villages. Today, the Chamraj hospital treats 25,000+ non-estate patients which is a testament to the high standard of services provided, and our commitment to employees and the community. Hospital staff includes a couple of inhouse doctors in addition to visiting specialist doctors in the fields of cardio, ortho, pediatrics, dental, etc. Furthermore, there are 12 staffs including nurses, pharmacists, lab technicians, etc., and additional support staff comprising maids and cooks. Ambulance facilities are also available in the hospital. Hospital also serves as the registrar for Birth and Death Certificates and is a center for family planning. Through annual health camps in nearby villages, we extend medical services to over 1000 villagers each year.



State-of-the-Art  
**Facilities at Chamraj Hospital**



In June 2016, the TAFE Foundation dedicated the 'Sri. A. Sivasailam Block' through Sankara Nethralaya, to provide specialty eye care to the community. Built in memory of our former chairman, Mr. A. Sivasailam, this block is the embodiment of his dream to provide high quality, affordable healthcare to all. It is also an effective example of a partnership where TAFE has meaningfully aligned with a world-renowned eye care facility in India to provide top quality care.

The Sri. A. Sivasailam Block houses six floors of specialty ophthalmic care, modern infrastructure, world-class equipment and advanced facilities, specially tending to Cornea, Vitreo Retinal issues and Glaucoma among other services. It consists of a contemporary and new age auditorium aided by the latest IT enabled audio-visual facilities dedicated to the memory of Ms. Jayshree Venkatraman former Director of TAFE. The auditorium serves as a platform for eminent ophthalmologists and eye care practitioners to exchange knowledge, innovations, experiences and best practices in the field of ophthalmology through talks, symposiums, forums and meetings.

Approximately 600 patients avail free or low-cost, high quality eye care at the facility every day and free eye care is also offered through the special Sunaina scheme to our employees and close associates. Sunaina was a unique initiative that brought together in a social endeavor, an array of our stakeholders including its dealers. Sunaina facilitates our dealers, associates, employees, and their families to avail free eye treatment and eye surgeries at Asia's premier eye care institute.

Furthermore, we support pediatric lymphoma care, offering free child-friendly patient support post-radiation and chemotherapy. This support has generously contributed towards the treatment of over 300 children with curable cancers since 2013 at the Adyar Cancer Institute, a world-renowned institute acknowledged for its missionary zeal.

Cancers which are most treated in the institute include Acute Lymphoblastic Leukemia (40%), Non-Hodgkin Lymphoma Hodgkin Lymphoma (5-7.5%). Our support and the diligent efforts of the Adyar Cancer Institute in the recent years have resulted in close to 95% survival in patients with Lymphoblastic Leukemia and Hodgkin Lymphoma, paving the way to a healthier future for these children.

Launched under the auspices of the Child's Trust Medical Research Foundation in 2010, as a research and medical care project to focus on pediatric lymphoma, the project provided for free medical care for children at the Kanchi Kamakoti CHILDS Trust hospital and the re-modelling of three wards to make them suitable for child-friendly patient care, post radiation and chemotherapy. The program has provided for review, monitoring and further care as necessary. 80-85% of patients under this research-cum-care programme benefitted by remission or cure.

Intensive Care and Surgery - With a total area of 4400 square feet, the newly renovated Neonatal Intensive Care is run and maintained through TAFE's benefactions. The renovation to treat critical neonates has upgraded the bed unit capacity and created an exclusive space for triage, pediatric anesthesia, pressure support ventilation and a fully equipped trauma care operation theatre to treat critical neonates.

Additionally, we actively engage in public health campaigns such as the Pulse Polio drive, underscoring our dedication to community well-being. Supporting block donation initiatives further underscores our commitment to social causes, aiming to make a positive difference in society's welfare.

Sri Paramakalyani Hospital in Tamil Nadu was established in 1963. We have participated in this initiative of the Amalgamations Group for over five decades. The hospital attends to the needs of indigent public including students, teaching and non-teaching staff of respective institutions by providing free medical services and medicines.

**Six Floor Sivasailam Block at  
Sankara Nethralaya Eye Care Hospital**



## Support During Covid Times

During the COVID-19 pandemic, like many other companies, we have also navigated through challenging times. We prioritized the safety and well-being of our employees by implementing strict health and safety protocols across their facilities. This included mandatory mask-wearing, social distancing measures, and regular sanitization to mitigate the spread of the virus within our workforce.

We focused on enhancing our digital capabilities to facilitate remote work and maintain business continuity, thereby reducing the need for personnel at manufacturing sites. For those who were required to be physically present, we implemented stringent screening measures such as temperature checks and health screenings for employees entering the workplace to identify potential COVID-19 cases and prevent the spread of the virus. We ensured adherence to all local, national, and international regulations and guidelines related to COVID-19 safety in the workplace.

Employees were provided comprehensive training and education on COVID-19 prevention measures, including proper hand hygiene, respiratory etiquette, and recognizing symptoms. Furthermore, those who needed counselling were also provided with support and resources. Management maintained transparent and open communication with employees about company policies, updates on the pandemic, and any changes to work procedures.

We recalibrated our production schedules and inventory management strategies to effectively respond to our customer needs, recognizing that tractors are a critical necessity for farmers, and thus, for the nation as a whole. This was achieved through our hands-on management and coordination, ensuring agile adjustments to production volumes and inventory levels.

We have demonstrated corporate responsibility by contributing to COVID-19 relief efforts. Vaccinations were arranged for all our employees, their family members, and to our community stakeholders. We donated ₹2 crores to the Madhya Pradesh Chief Minister's Relief Fund to support the MP Government's fight against COVID-19. Since the lockdown, various manufacturing facilities of our group have been involved in distribution of food, medical supplies and personal protection equipment to law enforcement officers, sanitation workers, local poor and migrant workers around its area of operations. We have also donated 500 Oxygen Concentrators to the Government of Tamil Nadu, and ₹1 crore to the state of Tamil Nadu for COVID relief activities.

To avoid the adverse effect of the coronavirus outbreak on the livelihood of small and marginal farmers, we have initiated a unique free tractor rental scheme in select states through our JFarm Services app, and those details are covered in a separate section of this report.

**Vaccination for Employees**



**Vaccination for Community Stakeholders**



## Welfare of Marginalized Communities

### Jrehab...

JRehab, a rehabilitation and employment center for orthopedically challenged women makes main wiring harness, battery cable, fender cable, tool bag kit, and other miscellaneous items for 90 models of tractors, supporting our plants in Madurai, Doddaballapur, and Bhopal. JRehab was established in the year 1980 in Madurai, Tamil Nadu, by our former Chairman Mr. A. Sivasailam, in memory of Late Shri. S. Anantharamakrishnan, the founder Chairman of Amalgamations Group.

During the 1980s, polio was very prevalent, affecting people and crippling them with restricted movement and handling capabilities. Among the affected, women were more vulnerable due to socio-economic conditions. Mr. Sivasailam wanted to provide a dignified means of livelihood to these orthopedically challenged women, thus founded Jrehab.

From its humble origins in a small, rented accommodation with five employees in Madurai, JRehab has evolved into a two-acre purpose-built facility with a professional factory layout and well-established infrastructure, supporting 70+ employees. The center boasts a well-ventilated and comfortable workspace, ample aisle spaces, accessible entry-exit ramps, and specially designed toilets tailored for orthopedically challenged individuals. Personnel from a 30 KM radius are picked up and dropped by the company's customized van. The employees are provided with various benefits including PF, ESI, and canteen facilities. Other support provided include annual medical, eye care, and ortho checkups. The employees are provided custom made crutches, artificial limbs, calipers, special shoes, wheelchairs, and other accessories. Physiotherapists visit the center every month to provide physical exercise as well as counseling.



**JRehab** during its initial years

JRehab is equipped with modern machinery and testing equipment to produce harnesses and other accessories. As an ISO 9000 certified center, it has achieved zero PPM in quality and fulfilled 100% of its delivery commitments last year, and generated revenue of Rs. 16.5 Crores last year.

Thanks to the dedication of its employees and active support from the management, JRehab was honored with the title of Best Employer of the Year for Differently Abled People in the State of Tamil Nadu in 2022. Alongside this prestigious recognition, it has received numerous awards from the Government of India, Government of Tamil Nadu, and district-level authorities. Additionally, JRehab has actively participated in various quality competitions, securing prizes at multiple forums.

Jrehab is also an active participant in various CSR activities, including tree plantation in the neighborhood, sponsorship for infrastructure improvements in the nearby government-run primary school, and additional community initiatives. Due to its stellar commitment and performance, JRehab serves as a model facility for differently abled people. The district administration utilizes JRehab as a demonstration site to encourage the establishment of similar facilities by other organizations.



**JRehab's Current Inclusive Infrastructure**

### JRehab's Cheerful Workforce Today





**Women Employees  
Utilizing Modern  
Production & Testing  
Equipment in JRehab**

**Onsite Health Checkup for Employees at JRehab**



**Products Made by JRehab Employees**





## Tribal Welfare

We are in association with the United Nilgiris Conservation Society (UNCS), have been spearheading the development and sustainability of 1000 eco-villages in the ecologically sensitive regions of Eastern and Western Ghats of India since 2013. This collaborative effort showcases the profound impact achievable through harmonious government-private partnerships. We noticed that through the initiatives of TAFE-UNCS partnership, women have emerged as pivotal contributors to community development, actively engaging in decision-making processes and income-generating projects. The UNCS acts as a vital bridge between policymakers and local communities, striving for modern, cost-effective solutions that conserve natural resources and foster self-sustaining communities for future generations.

## Key Highlights of the TAFE-UNCS Initiative

- Safeguarding the rights of local indigenous communities and facilitating individual land ownership under the Forest Rights Act.
- Creating employment opportunities for unemployed youth through career guidance, skill training, and job placements.
- Empowering women through training in various sustainable livelihoods such as beekeeping, tailoring, and poultry farming. Additionally, providing marketing strategies to promote locally produced goods such as honey, soap nuts, candles, medicines, pickles, baskets, and brooms.
- Providing free seedlings for farming and livestock management education.
- Enhancing the quality of education for children through the introduction of digital technology and e-learning.
- Providing awareness on government schemes and facilitating access to government funding for infrastructural development, including roads, educational facilities, and medical care infrastructure.



**Beneficiaries of TAFE-UNCS Partnership**

## Preserving Arts & Culture

The Indira Sivasailam Foundation is a tribute to Smt. Indira Sivasailam, celebrating her life and great love for our traditions and culture. Instituted in 2010 by Ms. Mallika Srinivasan - Chairman, TAFE, the foundation strives to preserve and promote India's rich cultural heritage including folk art and folk theatre, a pursuit Smt. Indira Sivasailam held very close to her heart.

Through the Indira Sivasailam Endowment Fund, the foundation honors and recognizes Carnatic musicians and gives them a

platform to showcase their talent at The Indira Sivasailam Endowment Concert held under the auspices of the Music Academy, Madras. The winner of the concert is honored with 'The Indira Sivasailam Endowment Medal'. The concert is open to all, without any fee to promote South Indian classical music across different sections of society. A testimony of her enriching life, the foundation, in addition to promoting arts, also actively engages with the community and makes meaningful contributions by participating in causes like care and welfare of senior citizens, women's empowerment, preservation and promotion of Hindu philosophy and Sanskrit literature.



A Carnatic Musical Concert Under the Auspices of the Foundation



Felicitation of Eminent Musicians by the Foundation

## Way Forward: Charting the Focus Area for Future



From reducing emissions to supporting farmer communities, we pursue a holistic approach to shaping the future of farming while preserving our planet, as noted below.

- **Efficient Operations:** Developing and manufacturing tractors and farm equipment that are energy-efficient and environmentally friendly by implementing cleaner engine technologies, exploring alternative fuels, and optimizing processes to minimize energy, emissions, water, and wastages.
- **Carbon Reduction Goals:** Setting ambitious targets to reduce the carbon footprint of operations and achieve carbon neutrality. This may involve investing in renewable energy projects, energy efficiency measures, and offsetting remaining emissions through carbon offset programs.
- **Sustainable Supply Chain:** Collaborating with suppliers to ensure sustainable sourcing practices, such as using responsibly sourced materials and reducing the carbon footprint of transportation.
- **Supporting Farmer Communities:** Providing support and education to farmers on sustainable farming practices, soil health management, biodiversity conservation, and precision farming solutions to optimize resource use, such as water, fertilizers, and pesticides.
- **Circular Economy Initiatives:** Implementing circular economy principles by designing products for durability, repairability, and recyclability.
- **Governance Excellence:** Continuing to uphold our high standards of corporate governance, transparency, and ethical business practices implemented through robust governance structures, including effective risk management and compliance frameworks

A large circular image showing a modern glass-walled building with a green-tinted facade. The building is surrounded by lush green trees. The image is framed by a white circular border with green and blue decorative lines.

**In summary, TAFE's comprehensive strategy spans efficient operations, carbon reduction goals, sustainable supply chains, farmer community support, circular economy initiatives, and governance excellence.**

**By prioritizing sustainability across all aspects of our operations, we're not just shaping the future of farming but also preserving our planet for future generations.**

**TAFE** 

**65** 

**YEARS**



**OUR AWARDS**



## AWARDS & RECOGNITIONS



1995  
**Star Performer Awards**

Star Performer Awards for export excellence since 1995, Engineering Export Promotion Council, India



2000  
**Best Employer Award**

Best Employer Award for providing maximum number of employment opportunities for specially-abled to JRehab, Government of India, Government of Tamil Nadu



2009  
**Significant Achievement**

Commendation for Significant Achievement on the journey towards Business Excellence  
- CII Exim Bank



2010  
**India's largest Tractors exporter**

TAFE becomes India's largest exporter of tractors.



2010  
**5S Award**

TAFE Doddaballapur Plant  
Confederation of Indian Industry (CII)



2011  
**India Manufacturing Excellence Award**

India Manufacturing Excellence Award  
TAFE Madurai Plant, Frost & Sullivan.



2011  
**JIPM Award**

TPM Excellence in Category A TAFE Sembium Plant, Japan Institute of Plant Maintenance



2012  
**Significant Achievement**

Commendation for Significant Achievement on the journey towards Business Excellence in the Second Band (550-600), CII-EXIM Bank



2012  
**GKD Outstanding Organization**

NIQR - GKD Outstanding Organization Award  
National Institute for Quality and Reliability.

## AWARDS & RECOGNITIONS



2012  
**Green Award**

TAFE Madurai Plant, Tamil Nadu  
State Government



2013  
**Best Employers  
Award**

TAFE named Best Employers in India, 2013  
Aon Hewitt Best Employers 2.0 | India 2013.



2013  
**PRCI Chanakya  
Award**

PRCI Chanakya Award , Corporate  
Citizen of the Year, Public Relations  
Council of India.



2013  
**Excellence  
Award**

Manufacturing Supply Chain Operational  
Excellence Award – Automobiles, Asia  
Manufacturing Supply Chain Summit –  
Second Edition.



2013  
**JIPM Award**

TPM Excellence in Category B  
TAFE Engineering Plastics Division –  
Doddaballapur Plant, Japan Institute of  
Plant Maintenance.



2013  
**JIPM Award**

TPM Excellence in Category B, TAFE  
Engineering Plastics Division,  
Maraimalai Nagar Plant, Japan  
Institute of Plant Maintenance.



2013  
**Agriculture  
Leadership  
Award**

For Industry Leadership in  
Empowering Farms and Indian  
Farmers, Agriculture Today



2014  
**National Safety  
Appreciation**

National Safety Appreciation TAFE  
Sembiam Plant, National Safety  
Council, India.



2015  
**Star Performer  
Award**

Large Enterprise (Agricultural Tractors), for  
outstanding contribution to Engineering  
Exports for the year 2012-13, Engineering  
Export Promotion Council, India.



## AWARDS & RECOGNITIONS



2015  
**Excellence in  
Consistent TPM  
Commitment Award**

TAFE Sembium Plant  
By Japan Institute of Plant  
Maintenance (JIPM)



2016  
**Marketer of  
the Year**

Social Impact TAFE - 'Be a #FarmDost'  
initiative, Direct Marketers  
Association, India (DMAI)



2016  
**Champion of  
Champions Award**

For winning 16 Corporate Collateral  
Awards at the 10th Global  
Communication Conclave, Public  
Relations Council of India (PRCI)



2018  
**Social  
Development  
Campaign**

TAFE - Be a #FarmDost initiative in  
recognition of 'Initiatives that influence  
individuals and communities for the  
greater social good', Rural Marketing  
Awards 2018



2018  
**Best Marketing  
Campaign of the  
Year (Agriculture)**

TAFE - Be a #FarmDost initiative  
Recognizing the efforts of the initiative to  
increase awareness and respect towards  
farmers and the farming community,  
Making of Developed India Awards



2018  
**Olive Crown  
Award (Silver)**

TAFE - Be a #FarmDost initiative  
For 'Creative Excellence in  
Communicating Sustainability',  
International Advertising Association  
(IAA) India Chapter



2018  
**15 PRCI Collateral Awards**

TAFE wins 15 awards at the Public Relations Council of India's (PRCI)  
12th Global Communication Conclave

TAFE - 'Be a #FarmDost' wins the prestigious Chanakya Award for  
Communication Idea of the Year



2018  
**7th Global ACEF Customer  
Engagement Awards**

For TAFE - Be a #FarmDost, Gold Award - Television (Creativity), Gold  
Award - Events & Promotions (Successful use of CSR), Bronze Award  
- Events & Promotions (Successful use of Technology), For TAFE TRIBE  
Gold Award Retail Touch Points & Merchandising (Effectiveness)

## AWARDS & RECOGNITIONS



June 13, 2018

### **Frost & Sullivan Global Manufacturing Leadership Awards**

Enterprise Integration and Technology Leadership Award for "TAFE Digital Quality Management System"

Supply Chain Leadership Award for "TAFE Supplier Risk Management Model"

Supply Chain Leadership Award for "TAFE Differential Engagement Model"



### January 2018 **Special Award for TPM Achievement**

TAFE Sembiam Plant  
Japan Institute of Plant Maintenance (JIPM)



### February 14, 2019 **Organization with Best CSR Practices for Rural Development**

Rural Marketing Forum &  
Awards 2019



### February 14, 2019 **Agriculture Initiative of the Year Awards & Innovative Ideas for Rural Development Award**

TAFE – JFarm Services, Rural Marketing  
Forum & Awards 2019



### February 15, 2019 **PRCI Chanakya Award for Social Leadership**

TAFE wins 15 awards at the Public Relations Council of India's  
(PRCI) 12th Global Communication Conclave

TAFE – 'Be a #FarmDost' wins the prestigious Chanakya Award  
for Communication Idea of the Year

## AWARDS & RECOGNITIONS



February 16, 2019

### 12 Awards at the Public Relations Council of India's 9th Annual Excellence Awards

For TAFE Corporate Communications

PRCI Crystal Award for Excellence in Corporate Communications

For TAFE – Be a #FarmDost

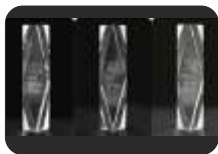
Gold Award for Public Service Advertisement & Silver for Advertisement Campaign (Television)



October, 2019

### 10 awards for Brand Building and CSR

Gold awards for Most Admired Organization for Social Cause - TAFE Corporate, Asian Good Company of the Year - TAFE Corporate, Overall Excellence in Social Responsibility - TAFE Corporate, Best use of Digital Media - Massey Ferguson India, Best Media Relations / PR Campaign - JFarm Services Most Admired Activity for Sustainable Development in Rural Area - JFarm Services  
By Asian Leaders Forum & Awards (ACEF)



### 2019 Manufacturing Leadership Awards

Supply Chain Leadership Award PROSPERO, Operational Excellence Leadership – Synchron, Operational Excellence Leadership - 6 weeks delivery for exports market  
National Association of Manufacturers



### 2019 Centre Convention for Quality Concepts

10 Gold Awards: TAFE Doddaballapur Plant  
7 Gold Awards: TAFE Madurai Plant  
1 Gold Award: TAFE JRehab Centre **By Quality Circle Forum of India**

## AWARDS & RECOGNITIONS



2019  
**Unnatha Suraksha  
Purashkara Safety Award**

TAFE Doddaballapur Plant By National  
Safety Council



January 2019  
**Special Award for TPM**

TAFE Engineering Plastics & Tool Room Division,  
Doddaballapur Plant, Bengaluru  
By Japan Institute of Plant Maintenance (JIPM)



January, 2019  
**Special Award for TPM**

TAFE's - Engineering Plastics & Tool Room Division, Chennai  
By Japan Institute of Plant Maintenance (JIPM)



2019  
**ZERO PPM Award**

TAFE Engineering Plastics & Tool  
Room Division  
By Toyota Kirloskar Motor  
Private Limited



2019  
**Farm Power Awards**

TAFE won three Tractor of the Year Awards  
Massey Ferguson 245 SMART (41-50 hp)  
Massey Ferguson 9500 SMART (>50 hp)  
Eicher 242 (<30 hp) by the Indian Chamber  
of Food and Agriculture (ICFA)



February 2020  
**2nd Edition Corporate  
Communications Awards**

TAFE Corporate Communications for Brand Building; Brand of the  
Year - TAFE Corporate; Best In-house Corporate Communications  
Team of the Year; Best CSR Strategy of the Year ; Best Influencer /  
External Communication of the Year; Best Use of Content Marketing  
in Communication Strategy - By Transformance Forums

## AWARDS & RECOGNITIONS



April 9, 2020  
**ET-Brand Equity Kaleido Awards**

Two Awards for Corporate Communications; Gold: Best Campaign in Agriculture & Agri-Tech - JFarm Services; Silver: Best Campaign in CSR - TAFE Be a #FarmDost Initiative By ET-Brand Equity



August 2020  
**YouTube Creator Award**

Silver Play Button for crossing 100,000 Subscribers on the TAFE Corporate YouTube channel from YouTube



December 2020  
**6th StratComm Asia Summit and Awards**

Most Innovative use of Social & Digital Media; Corporate Communications Team of the Year by Inventicon



2020  
**Apollo Farm Power Awards**

Tractor of the Year (>50 hp) - MF 9500  
 Tractor of the Year (41-50 hp) - Eicher 551 Super+, Most stylish tractor of the Year - MF 6028, Farmer's choice - Brand award - Massey Ferguson by Agriculture Today Group



2020  
**Distinction Award Certificate**

TAFE Madurai plant won the "Distinction Award Certificate" from British Safety Council



2021  
**Indian Tractor of the Year 2021**

The classic tractor of the year - Eicher 242  
 The Best Tractor Between 46-50hp - Eicher 551 by Tractor Junction

## AWARDS & RECOGNITIONS



2021

### National Awards For Excellence

- Most Admired Farm Equipment Company: TAFE
- Emerging Brand for Rural Impact: JFarm Services
- Agriculture initiative of the Year Award: JFarm Services - Free Tractor Rental Scheme
- Organization with Best CSR Practices for Rural Development: TAFE

By CMOAsia



2022

### Kaleido Awards June 2022

Surrogate Communication of the Year - TAFE - Be a #FarmDost |  
100 Farmers. 100 Stories by ET Brand Equity



2022

### Tractor of the Year 2022

Tractor of the Year - Massey Ferguson 246 DYNATRACK; Tractor for Commercial Application - Eicher 557; CSR Initiative – TAFE; Sustainable Tractor of the Year - Massey Ferguson 241 DYNATRACK - By Tractor Junction



2022

### Farm Power Awards 2022

Tractor of the Year 31-40 HP - Massey Ferguson 7235;  
Best Launch of the Year - Eicher 280 4WD; Best CSR Initiative - JFarm Services; Best Digital Intervention - JFarm Services

By Agriculture Today Group



2022

### Best Energy Efficient Category

TAFE – Doddaballapur plant (DBR) won the award for “Best Energy Efficient Category” at CII National

## AWARDS & RECOGNITIONS



2022  
**Olive Crown Awards 2022**

Green Brand of the Year - JFS Free Tractor Rental Scheme | Silver;  
Event - TAFE - Be a #FarmDost | 100 Farmers. 100 Stories. | Silver  
- Digital - TAFE - Be a #FarmDost | 100 Farmers. 100 Stories. Virtual Gallery  
| Silver By International Advertising Association (IAA) India Chapter



2022  
**5 Star Excellence Award**

ETB received the “Madhya Pradesh State Level 5 Star Excellence Award” for adopting best practices in Safety, Health & Environment



2022  
**PLATINUM Award**

ETB team presented a case study on “Focused reinforcement of SHE Pillar”, in CII’s National Level TPM competition, and won PLATINUM Award



2022  
**Best Employer**

TAFE JRehab Centre selected by Tamil Nadu Government as Best Employer for Differently Able. The award presented by the Chief Minister of Tamil Nadu on the Independence Day



2023  
**Top Exporter Award**

Top Exporter Award by Commissioner of Customs for FY22-23, received by the Madurai Plant team

# APPENDIX



## Glossary of Terms

1. Business Relationships - Relationships that the organization has with business partners, with entities in its value chain, including those beyond the first tier, and with any other entities directly linked to its operations, products, or services.
2. Carbon dioxide (CO<sub>2</sub>) equivalent - Measure used to compare the emissions from various types of greenhouse gases (GHG) based on their global warming potential (GWP).
3. Circularity measures: - Measures taken to retain the value of products, materials, and resources and redirect them back to use for as long as possible with the lowest carbon and resource footprint possible, such that fewer raw materials and resources are extracted and waste generation is prevented.

4. Collective bargaining - All negotiations that take place between one or more employers or employers' organizations, on the one hand, and one or more workers' organizations (e.g., trade unions), on the other, for determining working conditions and terms of employment or for regulating relations between employers and workers
5. Direct (Scope 1) GHG emissions - Greenhouse gas (GHG) emissions from sources that are owned or controlled by the organization.
6. Discrimination - Act and result of treating persons unequally by imposing unequal burdens or denying benefits instead of treating each person fairly on the basis of individual merit
7. Effluent - Treated or untreated wastewater that is discharged
8. Employee - Individual who is in an employment relationship with the organization according to national law or practice.
9. Energy indirect (Scope 2) GHG emissions - Greenhouse gas (GHG) emissions that result from the generation of purchased or acquired electricity, heating, cooling, and steam consumed by the organization.
10. Energy reduction - Amount of energy no longer used or needed to carry out the same processes or tasks.
11. Forced or compulsory labor - All work and service that is exacted from any person under the menace of any penalty and for which the said person has not offered herself or himself voluntarily.
12. Greenhouse gas (GHG) - Gas that contributes to the greenhouse effect by absorbing infrared radiation.
13. Grievance mechanism - Routinized process through which grievances can be raised and remedy can be sought.
14. Hazardous waste - Waste that possesses any of the characteristics that are considered to be hazardous by national legislation.
15. High-consequence work-related injury - Work-related injury that results in a fatality or in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within six months.



## Glossary of Terms

16. High-potential work-related incident - Work-related incident with a high probability of causing a high-consequence injury.

17. Landfilling - Final depositing of solid waste at, below, or above ground level at engineered disposal sites.

18. Material topics - Topics that represent the organization's most significant impacts on the economy, environment, and people, including impacts on their human rights.

19. Mitigation - Action(s) taken to reduce the extent of a negative impact.

20. Occupational health and safety management system - Set of interrelated or interacting elements to establish an occupational health and safety policy and objectives, and to achieve those objectives.

21. Ozone-depleting substance (ODS) - Substance with an ozone depletion potential (ODP) greater than 0 that can deplete the stratospheric ozone layer.

22. Parental leave - Leave granted to men and women employees on the grounds of the birth of a child.

23. Recordable work-related injury or ill health - Work-related injury or ill health that results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness; or significant injury or ill health diagnosed by a physician or other licensed healthcare professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.

24. Recycled input material - Material that replaces virgin materials, which are purchased or obtained from internal or external sources, and that are not by-products and non-product outputs (NPO) produced by the organization.

25. Significant operational change - Alteration to the organization's pattern of operations that can potentially have significant positive or negative impacts on workers performing the organization's activities. Examples: closures, expansions, mergers, new openings, outsourcing of operations, restructuring, sale of all or part of the organization, takeovers.

26. Stakeholder - Individual or group that has an interest that is affected or could be affected by the organization's activities.

27. Supplier screening - Formal or documented process that applies a set of performance criteria as one of the factors in determining whether to proceed in a relationship with a supplier.

28. Supply chain - Range of activities carried out by entities upstream from the organization, which provide products or services that are used in the development of the organization's own products or services.



# Abbreviations

<b>BCP</b>	Business Continuity Plan
<b>BRSR</b>	Business Responsibility & Sustainability Reporting
<b>CAPA</b>	Corrective and Preventive Action
<b>CBA</b>	Collective Bargaining Agreements
<b>CFMTT &amp; TI</b>	The Central Farm Machinery Training and Testing Institute
<b>CFT</b>	Cross Functional Team
<b>CO<sub>2</sub>e</b>	Carbon Dioxide Equivalent
<b>DEI</b>	Diversity, Equity & Inclusion
<b>ERM</b>	Enterprise Risk Management
<b>ETP</b>	Effluent Treatment Plant
<b>GHG</b>	Greenhouse Gas
<b>GJ</b>	Giga Joules
<b>GRI</b>	Global Reporting Initiative
<b>GWP</b>	Global Warming Potential
<b>HIRA</b>	Hazard Identification and Risk Assessment
<b>HSD</b>	High Speed Diesel
<b>JQUEST</b>	J. Quality Excellence through Sustainable Transformation
<b>KRA</b>	Key Results Area
<b>LDO</b>	Light Diesel Oil
<b>LPG</b>	Liquefied Petroleum Gas
<b>KRA</b>	Key Results Area
<b>LDO</b>	Light Diesel Oil
<b>LPG</b>	Liquefied Petroleum Gas
<b>KRA</b>	Key Results Area

<b>LTIFR</b>	Lost Time Injury Frequency Rate
<b>ML</b>	Million Liters
<b>MMA</b>	Madras Management Association
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>ODS</b>	Ozone Depleting Substance
<b>OH &amp; SMS</b>	Occupational Health & Safety Management System
<b>PM</b>	Particulate Matter
<b>PMP</b>	Performance Management Plan
<b>PNG</b>	Piped Natural Gas
<b>PPE</b>	Personal Protective Equipment
<b>QCC</b>	Quality Control Circle
<b>RwH</b>	Rainwater Harvesting
<b>SCoC</b>	Supplier Code of Conduct
<b>SDWT</b>	Skill Development Workshop and Training
<b>SLC</b>	Sivasailam Learning Centre
<b>SME</b>	Small Medium Enterprise
<b>SO<sub>x</sub></b>	Sulphur Oxides
<b>STP</b>	Sewage Treatment Plant
<b>TAP</b>	Talent Appreciation Program
<b>TMA</b>	Tractor Management Association
<b>VOC</b>	Volatile Organic Carbon
<b>WCM</b>	World Class Manufacturing

## GRI Index, BRSR and UNSDG References

This report has been prepared “in reference” to GRI standards. In this index, we refer to the appropriate GRI standards based on our materiality analysis, as well as other relevant GRI standards. Furthermore, we also refer to the applicable UN SDG goals to which we positively contribute.

Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
2-1	Organizational details	A2, A5		9
2-2	Entities included in the organization’s sustainability reporting	A13, A21		4
2-3	Reporting period, frequency and contact point	A6,A7,A9,A12		4
2-4	Restatements of information			5
2-5	External assurance	A14, A15, B11		5
2-6	Activities, value chain and other business relationships	A16, A17,P9L1		9
2-7	Employees	A18a	SDG 8, SDG 10	Confidential
2-8	Workers who are not employees	A18a	SDG 8	Not Applicable
2-9	Governance structure and composition	B9	SDG 5, SDG 16	22-23
2-10	Nomination and selection of the highest governance body	P1 L2	SDG 5, SDG 16	22-23
2-11	Chair of the highest governance body		SDG 16	22-23
2-12	Role of the highest governance body in overseeing the management of impacts		SDG 16	22-23
2-13	Delegation of responsibility for managing impacts	B8		22-23
2-14	Role of the highest governance body in sustainability reporting			22-23
2-15	Conflicts of interest	P1L2	SDG 16	84

# GRI Index, BRSR and UNSDG References



Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
2-16	Communication of critical concerns			-
2-17	Collective knowledge of the highest governance body	P1 - E1		22-23
2-18	Evaluation of the performance of the highest governance body			Not Applicable
2-19	Remuneration policies	P5E3		105-106
2-20	Process to determine remuneration			Confidential information
2-21	Annual total compensation ratio	P5E3		Confidential information
2-22	Statement on sustainable development strategy	B7		23-24
2-23	Policy commitments	B1 a b c, B3, P1E4, P5E8, P9E5	SDG 16	Relevant sections of the report
2-24	Embedding policy commitments	B2, P1L1, P5E1, P5E8		Relevant sections of the report
2-25	Processes to remediate negative impacts	A23, P1E6, P3E6, P3E13, P5E6, P5E7, P5L1, P8E3, P9E1		Relevant sections of the report
2-26	Mechanisms for seeking advice and raising concerns		SDG 16	27-29, 82, 86-87
2-27	Compliance with laws and regulations	P1 E2, P6E12		Relevant sections of the report
2-28	Membership associations	P7E1, P7L1		88
2 - 29	Approach to stakeholder engagement`	P4E1, P4E2, P4L1, P4L3		28-30
2 - 30	Collective bargaining agreements	P3E7	SDG 8	67, 84, 86-87

# GRI Index, BRSR and UNSDG References



Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
<b>3-1</b>	Process to determine material topics	A24, P4E2, P4L2, P5L2		24-25
<b>3-2</b>	List of material topics	A24		24-25
<b>3-3</b>	Management of material topics	A26		26-27
<b>201-1</b>	Direct economic value generated and distributed	A22, P8L4	SDG 8, SDG 9	103
<b>201-2</b>	Financial implications and other risks and opportunities due to climate change	A24	SDG 13	104
<b>201-3</b>	Defined benefit plan obligations and other retirement plans	P3E2		105
<b>201-4</b>	Financial assistance received from government			Not Applicable
<b>202-1</b>	Ratios of standard entry level wage by gender compared to local minimum wage	P5E2	SDG 1, SDG 5, SDG 8	105
<b>202-2</b>	Proportion of senior management hired from the local community		SDG 8	105
<b>203-1</b>	Infrastructure investments and services supported		SDG 5, SDG 9, SDG 11	106
<b>203-2</b>	Significant indirect economic impacts		SDG 1, SDG 3, SDG 8	106
<b>204-1</b>	Proportion of spending on local suppliers	P8E4, P8L3	SDG 8	69
<b>205-1</b>	Operations assessed for risks related to corruption		SDG 16	107
<b>205-2</b>	Communication and training about anti-corruption policies and procedures	P5E1	SDG 16	113
<b>205-3</b>	Confirmed incidents of corruption and actions taken	P1E5, P1E7		113

# GRI Index, BRSR and UNSDG References



Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
<b>206-1</b>	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		SDG 16	There were no legal cases on anti-competitive behavior, anti-trust and monopoly practices
<b>207-1</b>	Approach to tax		SGD 1, SDG 10, SDG 17	107
<b>207-2</b>	Tax governance, control, and risk management		SGD 1, SDG 10, SDG 17	107
<b>207-3</b>	Stakeholder engagement and management of concerns		SGD 1, SDG 10, SDG 17	107
<b>207-4</b>	Country-by-country reporting		SGD 1, SDG 10, SDG 17	Not Applicable
<b>301-1</b>	Materials used by weight or volume		SDG 8, SDG 12	60 – 62
<b>301-2</b>	Recycled input materials used	P2L3	SDG 8, SDG 12	61
<b>301-3</b>	Reclaimed products and their packaging materials	P2L5	SDG 8, SDG 12	Not Applicable
<b>3-3</b>	Management of material topics	P6E1, P6L1	SDG 7, SDG 8, SDG 12, SDG 13	26 – 27
<b>302-1</b>	Energy consumption within the organization		SDG 7, SDG 8, SDG 12, SDG 13	36
<b>302-2</b>	Energy consumption outside of the organization		SDG 7, SDG 8, SDG 12, SDG 13	Not disclosed
<b>302-3</b>	Energy intensity		SDG 7, SDG 8, SDG 12, SDG 13	36 - 37
<b>302-4</b>	Reduction of energy consumption		SDG 7, SDG 8, SDG 12, SDG 13	36 – 37
<b>302-5</b>	Reductions in energy requirements of products and services	P6E1, P6L1	SDG 7, SDG 8, SDG 12, SDG 13	36 – 37

# GRI Index, BRSR and UNSDG References



Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
<b>303-1</b>	Interactions with water as a shared resource	P6E4, P6E11	SDG 6, SDG 12	52 – 57
<b>303-2</b>	Management of water discharge-related impacts	P6E4	SDG 6	51 – 57
<b>303-3</b>	Water withdrawal	P6E3, P6L3	SDG 6	53
<b>303-4</b>	Water discharge	P6L2, P6L3	SDG 6	54
<b>303-5</b>	Water consumption	P6E3	SDG 6	55-57
<b>304-1</b>	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	P6E10	SDG 14, SDG 15	91 - 94
<b>304-2</b>	Significant impacts of activities, products and services on biodiversity		SDG 6, SDG 14, SDG 15	91 - 94
<b>304-3</b>	Habitats protected or restored		SDG 6, SDG 14, SDG 15	91 - 94
<b>304-4</b>	IUCN Red List species and national conservation list species with habitats in areas affected by operations		SDG 6, SDG 14, SDG 15	91 - 94
<b>3-3</b>	Management of material topics	P6E6, P6E7	SDG 3, SDG 12, SDG 13, SDG 14, SDG 15	26 – 27
<b>305-1</b>	Direct (Scope 1) GHG emissions	P6E6, P6E7	SDG 3, SDG 12, SDG 13, SDG 14, SDG 15	36 – 37
<b>305-2</b>	Energy indirect (Scope 2) GHG emissions	P6L4	SDG 3, SDG 12, SDG 13, SDG 14, SDG 15	36 – 37
<b>305-3</b>	Other indirect (Scope 3) GHG emissions	P6E6, P6E7, P6L4	SDG 13, SDG 14, SDG 15	Not disclosed
<b>305-4</b>	GHG emissions intensity		SDG 13, SDG 14, SDG 15	36 – 37
<b>305-5</b>	Reduction of GHG emissions		SDG 3, SDG 12	36 – 37



# GRI Index, BRSR and UNSDG References



Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
<b>305-6</b>	Emissions of ozone-depleting substances (ODS)	P6E5	SDG 3, SDG 12, SDG 14, SDG 15	36 – 37
<b>305-7</b>	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	P6E6, P6E7	SDG 3, SDG 12, SDG 13, SDG 14, SDG 15	36 – 37
<b>306-1</b>	Waste generation and significant waste-related impacts	P2E3, P2L2	SDG 3, SDG 6, SDG 8, SDG 11, SDG 12	60 - 67
<b>306-2</b>	Management of significant waste-related impacts	P6E8	SDG 3, SDG 6, SDG 11, SDG 12, SDG 15	60 - 67
<b>306-3</b>	Waste generated	P6E8	SDG 3, SDG 11, SDG 12	65
<b>306-4</b>	Waste diverted from disposal	P6E8	SDG 3, SDG 6, SDG 11, SDG 12, SDG 15	65
<b>306-5</b>	Waste directed to disposal		SDG 3, SDG 6, SDG 11, SDG 12	65
<b>308-1</b>	New suppliers that were screened using environmental criteria	P2 E2, P6L9		71 – 72
<b>308-2</b>	Negative environmental impacts in the supply chain and actions taken	P6L8, P6L9		71 – 72
<b>401-1</b>	New employee hires and employee turnover	A20	SDG 5, SDG 8, SDG 10	109
<b>401-2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees	P2E2, P3E1	SDG 3, SDG 5, SDG 8	110
<b>401-3</b>	Parental leave	P3E5	SDG 5, SDG 8	111
<b>402-1</b>	Minimum notice periods regarding operational changes		SDG 8	110
<b>403-1</b>	Occupational health and safety management system	P3E10a	SDG 8	124
<b>403-2</b>	Hazard identification, risk assessment, and incident investigation	P3E10c	SDG 8	125

# GRI Index, BRSR and UNSDG References



Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
403-3	Occupational health services	P3E12	SDG 8	125
403-4	Worker participation, consultation, and communication on occupational health and safety		SDG 8, SDG 16	112
403-5	Worker training on occupational health and safety	P3E8	SDG 8	112
403-6	Promotion of worker health	P3E10	SDG 3	128
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		SDG 8	125
403-8	Workers covered by an occupational health and safety management system		SDG 8	126
403-9	Work-related injuries	P3E11, P3 E12, P3E15	SDG 3, SDG 8, SDG 16	127
403-10	Work-related ill health	P3E12, P3E15	SDG 3, SDG 8, SDG 16	127
404-1	Average hours of training per year per employee	P3E8, P5E1	SDG 4, SDG 5, SDG 8, SDG 10	113
404-2	Programs for upgrading employee skills and transition assistance programs	P3E8, P3L4	SDG 8	116 – 118
404-3	Percentage of employees receiving regular performance and career development reviews	P3E9	SDG 5, SDG 8, SDG 10	119
405-1	Diversity of governance bodies and employees	A18b, A19	SDG 5, SDG 8	111
405-2	Ratio of basic salary and remuneration of women to men	P5E2	SDG 5, SDG 8, SDG 10	111
406-1	Incidents of discrimination and corrective actions taken	P5E6	SDG 5, SDG 8	111
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		SDG 8	76
408-1	Operations and suppliers at significant risk for incidents of child labour		SDG 5, SDG 8, SDG 16	76

# GRI Index, BRSR and UNSDG References



Standard	Disclosure	BR SR Reference	UN SDG impacted	Page reference
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor		SDG 5, SDG 8	76
410-1	Security personnel trained in human rights policies or procedures	-	-	Not disclosed as not material
411-1	Incidents of violations involving rights of indigenous people.		SGD2	132
413-1	Operations with local community engagement, impact assessments, and development programs	P6E11, P8E1, P8E2, P8E3, P8L1, P8L2, P8L6		132
413-2	Operations with significant actual and potential negative impacts on local communities		SDG 1, SGD2	132
414-1	New suppliers that were screened using social criteria	P2E2, P5L4	SDG 5, SDG 8, SDG 16	71
414-2	Negative social impacts in the supply chain and actions taken	P3L5, P3L6, P5L4, P5L5	SDG 5, SDG 8, SDG 16	72
415-1	Political contributions		SDG 16	Not applicable
416-1	Assessment of the health and safety impacts of product and service categories			129
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	P9E4	SDG 16	129
417-1	Requirements for product and service information and labeling	P9E2, P9L4	SDG 12	129
417-2	Incidents of non-compliance concerning product and service information and labeling		SDG 16	129
417-3	Incidents of non-compliance concerning marketing communications		SDG 16	129
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	P9E3, P9L5	SDG 16	107

