



AN ESG RESEARCH FOUNDATION  
INITIATIVE

# ASPIRE TO INSPIRE SUCCESS STORIES

**Aspire to inspire,  
for a  
greener tomorrow**

**Small actions,  
big impact on  
our planet**

**Sustainability is  
not a choice,  
it's a responsibility.**

**Building a future  
where progress  
meets purpose**





# ABOUT US

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ESG Research Foundation (ERF) is a not-for-profit Organization incorporated in 2021 with the objective of increasing awareness and adoption of the growing importance of the Environmental, Social and Governance (ESG) aspects of the business operations, both within public and private sector.

ERF is set up by a team of leading chartered accountants in India and UK with 70+ years of combined experience in providing business and regulatory advisory services to leading Indian and global multinationals.

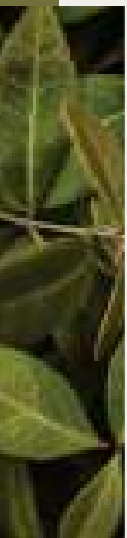
ERF team has worked extensively with PSUs and multiple state and local government bodies on various regulatory initiatives and has also collaborated with international bodies like the World Bank and IFC to successfully deliver social impact projects like affordable housing.

ERF aims to achieve its objective by undertaking projects focused on UN Sustainable Development Goals (e.g., Climate Action, Sustainable Cities & Communities, Zero Hunger, etc.) and wider ESG aspects of business operations (e.g., Circular Economy, Net-zero transition, etc.).

The idea is to work alongside government bodies, private and public sector businesses and societies to support their transition to more sustainable operations and in-turn enable achievement of India's ESG and climate related goals.

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# From the Editor-in-Chief



Welcome to “**Aspire to Inspire**,” a collection of stories dedicated to the unwavering human spirit and our collective responsibility to the planet we call home. In an age often defined by headlines of environmental crisis and impending doom, it’s easy to feel overwhelmed, paralyzed by the sheer scale of the challenges we face. We read about melting glaciers, raging wildfires, and polluted oceans, and a sense of helplessness can creep in. But this book is a testament to the powerful counter-narrative—one of hope, action, and profound change, driven by the dedication of individuals and communities around the world.

This booklet isn’t just about the “what”—the problems—but the “how” and the “who.” It’s a journey into the lives of everyday heroes who have turned their passion for the environment into a force for good. They are not policymakers or scientists with grand budgets, but ordinary people who saw a problem and decided to become part of the solution. Their stories are a reminder that environmentalism isn’t an abstract concept or a political debate; it’s a series of tangible actions, born from a deep love for the natural world and a commitment to protecting it for future generations.

The title, “**Aspire to Inspire**,” is more than just a catchy phrase. It’s a call to action. We aspire to be better, to live more sustainably, and to leave a lighter footprint on the Earth. And as we do, we have the power to inspire others to join us. Each story within these pages is a spark, a small flame that can ignite a larger fire of change.

These are not tales of grand, sweeping gestures, but of incremental progress and sustained effort. They show that change is often a marathon, not a sprint. The stories highlight the importance of patience, resilience, and the willingness to start small. They demonstrate that while the problems may be global, the solutions often begin locally, in our own backyards, schools, and neighborhoods.

This collection is also a celebration of innovation and creativity. In daily life You’ll discover stories of ingenious solutions to waste management, from a family who built a compost system that feeds their garden and reduces their household waste to almost zero, to a fashion designer who is creating beautiful, sustainable clothing from recycled materials. These innovators show that environmental responsibility can be a source of artistic expression and economic opportunity, not a limitation. They challenge the old notion that “going green” means sacrificing quality or convenience. Instead, they show that it can lead to a richer, more intentional way of life.

At its core, “**Aspire to Inspire**” is a book about connection. It’s about reconnecting with the natural world around us, from the tiny insect to the towering tree. It’s about connecting with our communities to work together toward a common goal. Most importantly, it’s about connecting with ourselves, discovering the innate power we each hold to make a difference. The people in these stories didn’t wait for permission or for a perfect plan. They acted, guided by their conscience and their passion.

The challenges we face are indeed significant, but they are not insurmountable. The stories in this book offer a powerful antidote to despair. They are living proof that hope is a renewable resource, and that when we work together, we can overcome even the most daunting obstacles. As you read these pages, I hope you’re not just entertained but deeply moved. I hope you’re inspired to look at your own life and find a way to contribute, no matter how small. Perhaps it’s by reducing your plastic consumption, planting a tree, or simply having a conversation with a neighbor about the importance of protecting our planet.

Every act of environmental stewardship, no matter how small, sends a message—a message that we care, that we are accountable, and that we believe in a better future. The people in this booklet are not extraordinary; they are ordinary people who chose to do extraordinary things. Their legacy is not just the clean river or the flourishing garden, but the inspiration they ignite in others.

So, let this be the beginning of your journey. Let these stories be your guideposts. Let them remind you that the power to change the world resides not in grand speeches or massive movements, but in the heart of a single, committed individual. Aspire to be that individual. Aspire to inspire. And together, we can build a more sustainable, more beautiful world for generations to come. Thank you for being part of this vital conversation and for choosing to be a force for good.

## MANAGEMENT TEAM



**CA. (Dr.) Atul Kumar Gupta, Founder Director**

A staunch leader has risen to the highest echelon of Accounting Profession to acquire position of President of The Institute of Chartered Accountants of India for the year 2020-21. On International front, he is on the Board of International Federation of Accountants (IFAC) and XBRL International.



**CA. Deepak Batra, Founder Director**

He specializes in Policy Formulation, Project Financing, Advisory to Smart Cities, Forensic Audits, Risk Mgt. and Management Consulting. Has extensive Experience of working in China, various European Countries, Malaysia, Japan, Hong Kong, Mauritius, Dubai, Qatar etc. including with leading PSUs and State/Local bodies, Banks, Indian Railway, etc.



**CA. Spandan Shah, Director**

He is an ESG Consultant and a Value Chain Management Expert. Has worked with Big 4 Firms in India, London and Dublin. Advises companies on ESG strategy, circular economy, ESG reporting, and sustainable business transformations.



**Mr. Rajesh Kumar Bhalla, CEO**

He is the Former Additional Secretary of The Institute of Chartered Accountants of India (ICAI) – A Statutory and Regulatory Body (Under the Ministry of Corporate Affairs, Govt. of India). He is a Highly experienced professional with over 38 years of dedicated service at ICAI, excelling in admn., compliance and regulation, and leadership of a vast network.

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Founder  
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## Dr. Kinsuk Mukherjee

**Head (General Manager) - Manufacturing Excellence and Sustainability,**

### **PCBL Chemical Limited**

#### **Profile Summary:**

Dr. Kinsuk Mukherjee is a Strategic Manufacturing Excellence and Sustainability leader with nearly 30 years of experience across Sustainability & ESG, Quality Assurance, Technical Services, Process Technology, and Carbon Black Manufacturing. GRI-certified with a PhD in General Management and extensive global-standard certifications, delivering proven results in ESG performance, operational transformation, and customer satisfaction. Recognized for driving continuous improvement through innovation, robust QMS, strong governance, and high-impact leadership. He is currently Head (General Manager) – Manufacturing Excellence and Sustainability at PCBL Chemical Limited.

#### **A Journey of Transformation: From Challenges to Sustainability Leadership**

When Dr. Kinsuk Mukherjee stepped into the role of leading **Manufacturing Excellence and Sustainability** at PCBL Chemical Limited, the organization was at a critical crossroads. It was the year 2020, a time when sustainability was still a buzzword for many companies in India but not yet a deeply embedded practice. PCBL's ESG ratings were at the bottom—**“-D” in CDP Climate Change and “Bronze” in Ecovadis**—and internal awareness on sustainability was limited.

Yet, where many saw a challenge, Dr. Mukherjee saw an

opportunity. With his nearly three decades of experience across **Sustainability & ESG, Quality Assurance, Technical Services, Process Technology, and Carbon Black Manufacturing**, he took on the responsibility of shaping PCBL's sustainability journey.

#### **Building the Foundation**

The first step was to create awareness. In 2021, PCBL brought in a consultant to guide the organization. Working shoulder to shoulder with them, Dr. Mukherjee engaged stakeholders, gathered insights, and began shaping a materiality framework that reflected both PCBL's impact and stakeholder expectations. For him, this was more than a corporate exercise—it was the beginning of embedding sustainability into the DNA of the organization.

Through workshops, data analysis, and candid stakeholder feedback, the company identified its key material issues. Year after year, reviews confirmed their relevance, validating the path they had set. For Dr. Mukherjee, this experience became a masterclass in understanding how sustainability connects risks, opportunities, and long-term value creation.

#### **Turning Vision into Action**

Armed with clarity, Dr. Mukherjee divided PCBL's sustainability activities into three pillars: Compliance, Excellence, and Reporting.

- **Compliance** meant strengthening governance—achieving certifications in **QMS, EMS, OHSMS, ISMS, and EPR**, aligning products with REACH and RoHS, and ensuring all sites adhered to **Zero Liquid Discharge** norms.
- **Excellence** came through hands-on Manufacturing Excellence Projects: reducing power and water consumption, cutting waste to landfill, lowering GHG emissions by embedding **DMAIC principles** into operations.
- **Reporting** meant adopting **global frameworks**—GRI, BRSR, UN SDGs, UNGC—and publishing **third-party assured sustainability** reports that transparently communicated progress.

Each initiative was not just a task, but a movement—driven by **cross-functional teams, SMART goals, and relentless monitoring**.

#### **Overcoming Challenges**

The journey wasn't without obstacles:

- **Lack of awareness** among employees was overcome

by regular ESG training across all plants and offices.

- **The carbon black industry's** inherently high emissions were tackled with process innovation—improving conversion rates, energy efficiency, refrigerant efficiency, reducing breakdown, efficient logistics to drive down GHG emissions and even pioneering the use of circular feedstock recovered from end-of-life tyres.
- **Absence of ESG data systems** was solved by developing a user-friendly data capture tool for GHG accounting and ESG reporting.

Every challenge turned into a learning curve, every barrier into an opportunity to innovate.

### Collaborating Beyond Boundaries

Dr. Mukherjee realized early that true sustainability required collaboration across the value chain.

- **With suppliers**, he initiated training, ESG assessments, and improvement programs, even extending the life of their products and improving quality through root-cause analysis and recommending corrective actions.
- With **customers**, he provided data, surveys, and support to help them meet their own ESG commitments.
- With stakeholders, he built a culture of trust by ensuring transparent disclosure and consistent engagement.

### Achievements that Define the Journey

The results speak for themselves:

#### Performance Milestones

- Reduced absolute GHG emissions by 9.3% and GHG intensity by 11.6% (FY24–25 vs FY23–24).
- Brought Scope 1 & 2 GHG intensity to 1.906 tCO<sub>2</sub>e/MT, outperforming global peers.
- Secured ISCC Plus certification for development of sustainable product from end-of-life tyre feedstock (TPO) reinforcing circularity.
- Cut Specific Power Consumption by 4.8% and Specific Water Consumption by 18% within two years.
- Achieved Zero Liquid Discharge at all sites and diverted 95%+ non-hazardous waste from landfill by recycling and reuse.
- Delivered ₹10 Cr annual savings through process improvements and ₹1.23 Cr savings through resource

efficiency projects.

### Recognition and Ratings

- Elevated EcoVadis rating from Bronze to Gold in 3 years (2022–24).
- Secured 'A' rating in CDP's Supplier Engagement and improved Climate Change rating by 62.5%.
- Received Platinum & Gold Green Building certifications (USGBC and IGBC) across multiple sites.

### Leadership Awards

- **Top Gear Award** for Managerial Excellence (RPSG Group)
- **Well Done Award** for innovation in inventory, development of e-modules and SPC implementation
- Multiple **Team of the Month Awards** for customer satisfaction and cost optimization
- Honored with **ET Edge Top 100 CSOs recognition (2025)**

### Knowledge Contributions

- Published **research papers** on customer satisfaction and sustainability.
- Invited as **speaker** at ICSSR-sponsored International Conference (IIT Kharagpur), and Bengal Chamber of Commerce & Industry forums.

### The Road Ahead

For Dr. Mukherjee, sustainability is not just about compliance or recognition—it's about legacy.

From turning a low-rated ESG profile into a **gold standard of performance**, to embedding a culture of sustainability across value chains, his journey reflects a deep belief: **that challenges are not roadblocks but stepping stones to transformation.**



## Mr. Munish Sharma

Head of Group - ISO compliance  
ESG & Digitization initiatives,

## BSES Rajdhani Power Ltd.

### Introduction: Our Guiding Philosophy

At BSES Rajdhani Power Ltd. (BRPL), we believe that electricity is not merely a service but a lifeline that powers progress, prosperity, and possibility. In a rapidly urbanizing India, ensuring uninterrupted, affordable, and sustainable power supply is both a challenge and a responsibility. Our ESG philosophy rests on a simple yet powerful idea: our actions today shape the world of tomorrow.

Environmental stewardship, Social responsibility, and Ethical governance are not parallel pursuits—they are integral to our business strategy. Our transition towards renewable energy (RE), community-centric initiatives, and robust governance frameworks reflects our commitment to building a resilient and inclusive energy future.

### Overcoming Challenges: Building Climate-Resilient Infrastructure

Delhi, with its surging energy demand and pollution concerns, presents unique challenges. Meeting the growing requirement for reliable electricity while reducing dependence on fossil fuels required a strategic pivot.

### We at BSES addressed this by:

- **Transitioning the energy mix:** Sourcing 42% of allocated capacity from renewables (solar, wind, and waste-to-energy).
- **Exceeding commitments:** Achieving 126% of Renewable Purchase Obligation (RPO) in FY24 and

103% in FY25.

- **Pioneering rooftop solar aggregation:** India's first utility-anchored program helped ~5800 consumers generate ~135 MW, transforming them into "PROSUMERS" (Producers + Consumers)

These measures not only reduced Carbon intensity but also empowered consumers to actively participate in the clean energy transition.

### Environmental Stewardship: Innovations in Clean Energy

#### 1. Electric Mobility Transition

- Corporate EV fleet of 29 vehicles (2W, 3W, 4W).
- 278 captive charging points across 182 offices.
- Delhi's first private and semi-private EV chargers.
- Smart e-mobility portal enabling efficient location and load management.

#### 2. Battery Energy Storage Systems (BESS)

- Commissioned 20 MW / 40 MWh grid-scale BESS at Kilokari in April 2025, benefitting ~25,000 consumers.
- Balances peak demand, integrates renewables, and strengthens reliability in congested areas.

#### 3. Vehicle-to-Grid (V2G) Innovation

- In partnership with ISGF, piloted bidirectional charging with battery swapping for EVs.
- Enables EVs to act as distributed storage units, improving grid stability and renewable integration.

#### 4. Tree Plantation & Green Cover

- Planted 30,000 trees and shrubs annually across RWAs, schools, police stations, and crematoria, enhancing Delhi's biodiversity and air quality.

#### 5. Supply Chain Sustainability

- Actively adopting green procurement policies and encouraging partners to align with net-zero goals.
- Integrating consumer-friendly digital tools for bill payments, EV services, and rooftop solar facilitation, thereby reducing paper usage and improving efficiency.

### Energy Efficiency & Demand-Side Management

- **Super Energy-Efficient BLDC Fan Scheme:** Enabled consumers to replace old fans at up to 64% discount, lowering energy bills.
- **LED Lighting Program:** In partnership with EESL, subsidized LEDs distributed through customer care centres.

- **Consumer Awareness:** Workshops conducted with NGO partners sensitized 360+ participants on energy conservation practices.

## 2. Social Responsibility: Empowering Communities (CSR)

### 1. Education & Skills Development

- Vocational Training (computers, tailoring, beauty culture) benefitting marginalized groups including transgender and visually impaired individuals.
- Thread of Trust handloom initiative revived artisanal skills, empowering semi-literate women to earn with dignity.

### 2. Women & Girl Child Empowerment

- **Self-defense training** to ~9,000 schoolgirls in 12 schools with professional trainers.
- **Sanitary Napkin Production & Distribution:** 200,000+ stitched and distributed through Self-Help Groups; 325,000 pads utilized in government hospitals via vending machines.

### 3. Health & Well-being

- Tobacco de-addiction programs helped 212 participants pledge to quit.
- **School Health Clinics** in 20 government schools benefitted 20,000+ students.
- Organized 61 **yoga and fitness camps**, reaching 2,550 beneficiaries including police personnel and educators.

### 4. Sports Promotion

- Sponsored football training, nutrition, and equipment for underprivileged youth in West Delhi, channelling sports as a tool for inclusion and empowerment.

### 5. Community Infrastructure

- Water ATMs & Coolers: Safe drinking water for 4,000 families and six MCD schools.
- **Project “Dignity”:** Established Delhi’s first electric crematorium at Sarai Kale Khan; upgraded 35 conventional crematoria to be cleaner and more community-friendly.

## Governance & Ethical Practices

Strong governance forms the backbone of BSES’s ESG journey.

- **Transparency:** Robust internal control systems ensure integrity in reporting and compliance.
- **Code of Conduct:** Mandates ethical practices, anti-

corruption, and fair competition.

- **Board of Directors:** 8 members including 4 Independent Directors and 1 woman director, supported by Committees on Audit, CSR, Nomination & Remuneration, and Investment.
- **Stakeholder Responsiveness:** Policies continually reviewed to align with global best practices and investor expectations.

This governance architecture fosters trust, accountability, and sustainable decision-making.

## Milestones & Achievements at a Glance

- 42% renewable share in allocated power capacity.
- 20 MW/40 MWh Battery Energy Storage System commissioned.
- India’s first rooftop solar consumer aggregation program launched.
- Delhi’s first electric crematorium under Project Dignity.
- 30,000+ trees planted annually.
- 9,000+ girls trained in self-defense.
- 20,000+ students served via School Health Clinics.
- 200+ women artisans empowered through handloom incubation.
- Consistent RPO overachievement (103% in FY25, 126% in FY24).

## Looking Ahead: A Future Powered by Responsibility

- Expand renewable capacity share beyond 50% by 2030.
- Scale up Energy storage systems for resilience.
- Facilitate wider EV adoption through charging networks and digital platforms.
- Deepen community partnerships in Health, Education, and Women empowerment.
- Continue governance reforms to align with global ESG standards.

## Conclusion: Aspire to Inspire...

The journey of BSES Rajdhani Power Ltd. is defined by resilience, reinvention, and responsibility. By embracing clean energy, innovation, and social inclusion, we are not just powering homes but empowering communities and protecting the environment. True progress lies in lives touched and futures secured—as we stay committed to building a sustainable tomorrow, today.



## Mr. Ashhok Kumar Jain

Executive Chairman

### Mahavir International, Delhi

#### A Van of Hope in Delhi's Lanes

On a hot summer morning in a slum area of Delhi, a brightly painted mobile van pulls into a narrow street buzzing with life. Within minutes, a small crowd gathers—mothers carrying children, elderly men guided by grandchildren, and daily wage earners waiting anxiously. Inside, a small team of doctors and volunteers swiftly sets up their equipment. Blood pressure checks, eye screenings, and free medicines are dispensed with care. Some patients are referred to nearby hospitals for advanced treatment.

For families living in uncertainty, this is not just medical care—it is a promise of dignity and inclusion. Behind this initiative stands Mahavir International Delhi (MID), an organization that since 1979 has redefined how service, compassion, and governance can work together. MID's work spans healthcare, women's empowerment, skill development, nutrition, environmental stewardship, and disaster relief—embodying the very essence of Environment, Social, and Governance (ESG) principles long before the term became mainstream.

#### The Beginning: Turning Challenges into Purpose

In the late 1990s, Delhi was expanding, but progress often bypassed its most vulnerable. Migrant families and daily wage earners faced a painful choice—lose a day's

earnings for medical care, or continue working while neglecting health. Government hospitals were overcrowded, and private healthcare was prohibitively expensive.

MID stepped in to bridge this gap. Three centers were established in Nabi Karim (1998), Hauzrani (2002), and Badarpur (2006), each designed to bring quality healthcare into underserved neighborhoods. These centers were complemented by the Doctor at Door Step (DADS) initiative—mobile vans carrying doctors, medicines, and equipment directly into communities.

The philosophy was clear: "Healthcare is not a privilege—it's a right. Our mission has always been to take doctors to the people, not people to the doctors." — MID Volunteer

This approach—mobile, accessible, and inclusive—has stood the test of time. Over 27 years, MID has treated 59 lakh patients, conducted 4,200 free health camps, and performed 35,000 cataract surgeries.

#### Restoring Sight, Restoring Livelihoods

Few initiatives symbolize MID's impact better than its fight against preventable blindness. Cataracts—though treatable with a simple surgery—robbed countless poor citizens of their livelihood and dignity. Through its hospitals and mobile eye camps, patients were identified and provided free or low-cost cataract surgeries. The results were transformative: every restored eye was a restored livelihood, every surgery a second chance at life.

Equally powerful has been MID's awareness campaigns on eye donation, encouraging communities to give the gift of sight even after life.

#### Women at the Heart of Change

No society can progress if women remain marginalized. MID recognized that women in slums and unauthorized colonies bore a double burden of poverty and neglect. Taboos around menstruation, limited maternal healthcare, and poor nutrition took a toll on both mothers and children.

To counter this, MID launched Swasthya Saheli, reaching over 40,000 women with counseling on menstrual hygiene, reproductive health, and lactation. Alongside, Janitri Workshops distributed nutrition kits, maternity pads, and newborn kits, often in collaboration with corporate CSR partners.

By combining education with tangible support, MID created long-lasting impact for women and children alike.

## Eyes of Hope: Jhanke Nanhi Ankhon Mein (JNAM)

At a bustling municipal school in Delhi, little Rani often struggled to read the blackboard. Her blurred vision made her fall behind in class. Then came MID's program (**Jhanke Nanhi Ankhon Mein**).

Doctors and volunteers screened her eyes, and Rani received her first pair of spectacles—free of cost. With a bright smile, she whispered: “Now the words are my friends again.”

To date, more than 200 camps in MCD schools have screened over 50,000 children, providing free glasses, health checkups, and awareness sessions.

## Serving Humanity in Times of Crisis

MID's spirit of service shines brightest in moments of crisis.

- COVID-19 Pandemic: During the first wave, MID distributed PPE kits, masks, sanitary napkins, rations, and food packets—touching nearly 3 lakh lives. As the second wave unleashed oxygen shortages, MID launched Har Saans Hai Zaroori, providing 280 oxygen concentrators and ICU ventilators worth ₹3.5 crore. Meanwhile, Sab Ko Bhojan ensured 43,000 meals reached the hungry, and Mission Sanjeevani vaccinated 16,000+ vulnerable individuals.

- Natural Disasters: MID has consistently responded to calamities—constructing a school after the Uttarakhand floods, donating 70 shelter homes post the Nepal earthquake, and rushing kits during Kerala floods.

## Beyond Healthcare: Pathways to Independence

MID understands that true empowerment means economic independence. Under Project Swavalamban, women were trained in stitching while youth were trained as healthcare assistants.

Take Rekha, a young woman from Nabi Karim. Once entirely dependent on her husband, she now earns an income through stitching: “Earlier, I depended on my husband for everything. Now, I contribute to the household. My daughters see me differently—they see possibilities.”

## Nourishing Communities with Food and Care

Healthcare without nutrition is incomplete. Recognizing this, MID integrated nutritional support into its health camps. Medicines, spectacles, and food supplements were distributed hand-in-hand. This direct linkage between donations and visible impact fostered a strong bond between supporters and communities.

## Healing the Earth: Environmental Stewardship

Though best known for healthcare, MID also ventured into environmental sustainability.

At the Multimodal Logistics Park (MMLP) in Kathuwas, Rajasthan, declining groundwater posed a serious challenge. MID designed an ambitious deep recharge rainwater harvesting system with five recharge ponds (14.85 lakh litres each), one smaller pond, trenches, RCC pipelines, and six 200-foot deep wells.

## By the Numbers: MID's Impact

- 59+ lakh patients treated since inception
- 4,200+ health camps conducted
- 35,000 cataract surgeries performed
- 40,000 women educated on health & hygiene
- 50,000 children screened
- 310+ individuals trained
- 6 recharge ponds & 200-ft wells
- 3 lakh COVID beneficiaries
- 280 concentrators + 5 ICU ventilators
- 43,000 food packets
- 16,000 vaccinations
- Relief in Uttarakhand, Nepal, Kerala, Gujarat, Odisha

## Governance that Builds Trust

Behind every program lies an unseen but vital strength: good governance. What sets MID apart is its commitment to transparency and accountability. Donors know where funds go. Patients are never abandoned. This governance culture has earned MID the trust of civil servants, corporate leaders, and professionals.

## The Road Ahead

After nearly three decades of service, MID has demonstrated that ESG is not a checkbox—it is a way of life. By blending healthcare, women's empowerment, crisis relief, and environmental stewardship, MID has created a holistic model of service. Looking ahead, MID envisions scaling healthcare, deepening women's programs, expanding environmental projects, and leveraging technology for transparency.

“Every camp, every surgery, every kit distributed is more than a number. It's a life touched, a future restored. And that's the story of MID.”



## Mr. Kannan M

GM – EHS

### Sundaram Clayton Limited

#### SCL’s Journey Towards Sustainable Excellence: Overcoming Challenges and Achieving Milestones Across Environmental, Social, and Economic Dimensions

At SCL, sustainability is not a side initiative—it is a core tenet of our operational philosophy and corporate purpose. Guided by a robust Environmental, Social, and Governance (ESG) framework, we are driving transformative change across environmental stewardship, social equity, and economic responsibility. In alignment with the United Nations Sustainable Development Goals (SDGs), our strategic roadmap is designed to deliver measurable, lasting impact for the planet, people, and business integrity.

These achievements have been made possible through the visionary leadership of our Managing Director, Dr Lakshmi Venu, and the strategic guidance and executional oversight of our Director & CEO, Shri Vivek Shripad Joshi, whose commitment to sustainable development has inspired and mobilized action across all levels of the organization.

This article outlines SCL’s key achievements, the challenges we’ve overcome, and the strategic innovations that continue to position us as a sustainability leader in our industry.

#### 1. Environmental Achievements: Driving Impact Through

#### Innovation and Stewardship

Our environmental strategy is anchored in carbon neutrality, resource circularity, and biodiversity enhancement. Each initiative is mapped to critical SDGs—including SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production), and SDG 15 (Life on Land).

#### Key Milestones:

- 35% Renewable Energy Adoption
- 50% Reduction in Carbon Intensity per Product
- 10% Improvement in Energy Efficiency
- 99% Waste Recyclability
- 90% Use of Secondary Alloys in Raw Materials
- 10-Acre On-Campus Forest Development

**Challenges Overcome:** Implementing clean energy solutions required significant infrastructure upgrades, employee engagement, and expert collaboration to preserve biodiversity within an operational industrial zone.

**Strategic Enablers:** Energy audits, green power purchase agreements, IoT-based monitoring, material flow analysis, ISO 14001 systems, and biodiversity projects co-designed with specialists.

#### 2. Social Equity Advancements: Cultivating a Safe, Inclusive, and Healthy Workforce

Our commitment to social sustainability is grounded in ensuring a safe, healthy, and equitable workplace—aligned with SDG 3 (Good Health and Wellbeing), SDG 5 (Gender Equality), and SDG 8 (Decent Work and Economic Growth).

#### Key Milestones:

- Wellness 360 Program
- 100% Employee Health Screenings
- 100% Training on Human Rights, Diversity, and Inclusion
- 18% Female and 1% PwD Workforce Representation
- 30% Reduction in Workplace Incidents
- 100% Ergonomic Assessments

**Challenges Overcome:** Shifting from reactive to proactive EHS models, driving inclusion, and ensuring participation in wellness and training.

**Strategic Enablers:** AI safety monitoring, partnerships with

healthcare providers and NGOs, digital training platforms, and ergonomic enhancements using RULA and REBA standards.

### 3. Economic & Governance Contributions: Embedding Sustainability into Our Corporate DNA

Economic sustainability at SCL means designing circular products, enabling data security, and fostering ESG maturity across our value chain—supporting SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Sustainable Consumption and Production), and SDG 16 (Peace, Justice, and Strong Institutions).

#### Key Milestones:

- 90% Recyclability and 95% Recoverability in Product Design
- ISO 27001 Certification at All Sites
- 100% Data Loss Prevention (DLP) Coverage
- 50% IoT-Connected Machinery
- ESG Engagement with Suppliers

**Challenges Overcome:** Integrating legacy systems with IoT, engaging suppliers on ESG, and maintaining data privacy across a decentralized organization.

**Strategic Enablers:** IoT platforms, predictive analytics, cybersecurity tools, supplier ESG toolkits, workshops, and PLM systems.

**Conclusion:** A Holistic Sustainability Model Driving Impact and Resilience

SCL's journey toward sustainable excellence is defined by bold ambition, rigorous execution, and unwavering purpose. Through a deeply integrated ESG approach, we have advanced measurable progress across environmental stewardship, social responsibility, and economic governance.

Our ability to overcome systemic challenges—be it through technology, people-centric programs, or ecosystem partnerships—has not only enabled us to meet ambitious sustainability targets but also reinforced our long-term resilience and stakeholder value.

As we look to the future, SCL remains steadfast in its commitment to continuous improvement, collaborative innovation, and purpose-driven leadership. By embedding sustainability into every process, product, and partnership, we are shaping a more equitable, greener, and more sustainable world—for today and generations to come.





## Ms. Shweta Goela

Associate Vice President - Strategy

### Safexpress Private Limited

#### Introduction

Safexpress Pvt. Ltd., India's largest supply chain and logistics provider, operates 86 logistics parks, a fleet of 13,000+ vehicles, and covers 31,000+ PIN codes. This scale brings responsibility to address climate impact, social equity, and governance excellence. Over the last year, Safexpress has transformed ESG awareness into measurable action, embedding sustainability at the core of operations.

#### Challenges and Our Responses

##### 1. Climate Risks & Emissions

**Challenge:** Heavy reliance on fossil fuels, ageing fleets, and last-mile inefficiencies drove high GHG emissions.

**Response:** Organisation-wide GHG inventorization (Scope 1–3), emission reductions (5% Scope 1, 10% Scope 3 across FY22–24), a Net Zero 2047 roadmap, and pioneering EV pilots, including long-haul trials.

##### 2. Infrastructure & Technology Gaps

**Challenge:** Lack of EV charging networks, weak waste systems, and fragmented ESG reporting.

**Response:** Deployed a first-of-its-kind ESG Tech Platform, integrated IoT/AI for route optimisation, predictive fleet maintenance, and built energy-efficient hubs with LED retrofits, HVLS systems, and rainwater harvesting.

##### 3. Workforce Diversity & Welfare

**Challenge:** Male-dominated workforce, limited driver welfare, and underrepresentation of women.

**Response:** Introduced driver dormitories and rest areas, preventive health camps, POSH training, safe lodging, and set a 30% gender diversity target by 2028. The "Chalak se Malak" initiative empowers drivers to transition into vehicle ownership.

##### 4. Compliance & Reporting Expectations

**Challenge:** Though unlisted, Safexpress needed global-grade ESG disclosures.

**Response:** Voluntarily completed BRSR, CDP, EcoVadis, and SAQ reporting; conducted materiality assessments; and ESG audits across hubs—building credibility with regulators and global clients.

##### 5. Circularity in Growth

**Challenge:** Expansion increased packaging waste, plastics, and e-waste.

**Response:** Eliminated single-use plastics, digitised operations to cut paper, introduced e-waste recycling, and set a 25% operational waste reduction target by 2028.

#### Key Milestones

**Emission Reductions:** Consecutive 5% (Scope 1) and 10% (Scope 3).

**Net Zero Roadmap:** Published and aligned with 2047.

**EV Leadership:** First in India to pilot long-haul EVs.

**ESG Tech Platform:** Real-time ESG intelligence system.

**Voluntary BRSR Reporting:** FY24–25 completed.

**Global Benchmarks:** CDP, EcoVadis, and SAQ assessments.

**Workforce Welfare:** Expanded health, safety, insurance, and rest facilities.

**Recognition:** Certified "Great Place to Work."

#### Accomplishments & Impact

##### Environmental:

- Reduced emissions via EV pilots, younger fleet, and route optimisation.
- Expanded green infrastructure and water conservation.

Regular plantation drives and biodiversity enhancement.

## Social:

- Driver welfare (dormitories, health camps, mess facilities).
- 7,800+ annual training hours and women empowerment programs.
- Safeducate trained 1.5 lakh youth in logistics skills.

## Governance:

- Instituted human rights and whistleblower policies.
- Maintained ISO 9001, 14001, 45001, and 27001 certifications.
- Board-level ESG oversight with quarterly KPIs.

## Case Highlights

- **ESG Tech Platform:** Central digital command centre enabling real-time monitoring of emissions, waste, and energy, transforming fragmented reporting into transparent dashboards.
- **Long-Haul EV Pilots:** First to test heavy electric vehicles in India, proving decarbonisation feasibility in high-emission segments.
- **Chalak se Malak:** Empowering drivers to become vehicle owners, strengthening loyalty and dignity.
- **Materiality Assessment:** In 2025, Safexpress conducted a comprehensive Materiality Assessment with an accredited advisory firm to identify and prioritise ESG issues. Using stakeholder surveys, risk analysis, and SEBI's BRSR framework, key focus areas were defined: climate action, fleet decarbonisation, driver welfare, supply chain transparency, data security, diversity, and circular economy practices.
- The exercise linked daily employee actions to broader ESG goals, provided a roadmap from short-term improvements to Net Zero commitments, and shifted ESG from compliance-driven to strategy-driven. It institutionalised priorities into governance, informed Board decisions, and strengthened stakeholder trust.

## Customer & Stakeholder Impact

- For customers, Safexpress has become more than a logistics partner. It is an ESG enabler. With voluntary BRSR reporting, EcoVadis benchmarking, and 73+ client ESG assessments, customers gain reliable sustainability disclosures across their supply chains.

- For employees, the introduction of structured training, leadership development, and ESG literacy has elevated workplace culture, validated by the Great Place to Work certification.
- For communities, CSR programs in healthcare, education, women's empowerment, and disaster relief have touched millions of lives, demonstrating holistic impact.
- For regulators and policymakers, Safexpress sets a benchmark by voluntarily aligning with SEBI's BRSR and contributing to India's Net Zero vision.

## Future-Readiness

The achievements of the last 12 months are not endpoints but foundations. Looking ahead, Safexpress will:

- Scale EV adoption in First, last-mile and long-haul transport.
- Extend ESG Tech to suppliers for end-to-end visibility.
- Expand renewable energy penetration across logistics parks.
- Deepen workforce inclusion and ESG literacy across all employee levels.
- Strengthen customer ESG enablement, offering disclosure support and logistics sustainability assessments.

By institutionalising ESG, we ensure that our business is resilient against future risks and positioned as a benchmark for sustainable logistics in India.

## Conclusion

Safexpress's journey reflects not just accomplishments, but a transformation in how logistics is imagined in India. By embedding ESG at the core of operations, we have reduced our environmental footprint, strengthened social equity, and enhanced governance integrity.

Our efforts prove that a logistics company of our scale can be both a business leader and a sustainability leader. We see ESG not as an obligation but as a driver of resilience, customer trust, and long-term value creation. Safexpress remains committed to building a logistics ecosystem that is green, inclusive, transparent, and future-ready, serving not just customers, but the nation and the planet.



## Mr. Tribhuwan Adhikari

Managing Director & Chief Executive Officer,

**LIC Housing Finance Ltd.**

### ESG Journey: Challenges, Milestones, and Achievements

#### Introduction

LIC Housing Finance Limited (LIC HFL), as India's largest housing finance company and an upper-layer NBFC, has consistently strived to embed sustainability and responsibility into its operations. While compliance with SEBI's mandate to publish a Business Responsibility and Sustainability Report (BRSR) acted as the initial catalyst in 2023, the Company has gone beyond compliance to build a systematic and integrated ESG framework. This framework addresses not only the Company's operational footprint but also its extended impact on communities, ecosystems, and the financial sector.

**Our journey in ESG has been shaped by three imperatives:** regulatory compliance, stakeholder expectations, and our intrinsic commitment to resilience. This article reflects on the challenges overcome, milestones achieved, and the strategies that have enabled LIC HFL to embed ESG principles across both operations and community-facing interventions.

#### Challenges Faced

##### Data capture across a large network

One of the earliest and most significant challenges we faced was the absence of reliable systems to track and capture ESG data across our widespread footprint of 386 offices (including 282 area offices, regional and cluster offices, and the corporate office). Standardizing reporting across such a distributed network required designing and deploying new processes and digital tools.

##### Stakeholder buy-in

Convincing upstream and downstream value chain partners to comply with ESG requirements was another challenge. As a financial services institution, we depend heavily on external stakeholders and vendors for service delivery. Awareness-building and alignment were crucial. To address this, we launched **training programs and inducted "ESG Green Warriors," later rebranded as "ESG Monitors,"** across offices and regions to champion ESG initiatives.

##### Awareness generation within the organization

As we are not a manufacturing company, the perception initially existed that our environmental footprint was minimal. However, through **awareness sessions, training programs, and demonstrable action** (such as shifting to recycled paper, installing motion-sensor LEDs, solar panels at owned premises, and implementing green tariffs), we built an internal culture of responsibility.

##### External project challenges

In CSR interventions, each geography posed distinct hurdles:

- **Flood-prone Kuttanad** (Kerala) demanded innovative rainwater harvesting solutions in saline environments.
- **Drought-prone Kutch** required large-scale desiltation to restore aquifer recharge.
- **Sundarbans** demanded deep tube-well solutions to tackle extreme salinity.
- **Tourism-driven Kaziranga** faced plastic waste management challenges due to uncontrolled visitor influx.

Each of these challenges required tailored interventions designed after technical studies such as geo-hydrological surveys, stakeholder consultations, and pilot demonstrations.

##### Milestones and Achievements

##### Internal operational achievements

A series of operational milestones have been accomplished in recent years:

- **UPS replacing DG sets:** All offices transitioned away from diesel generators to UPS systems, eliminating localized air emissions.
- **Green tariff adoption:** Five offices shifted to renewable energy tariffs, resulting in an **avoidance of 111.83 tCO<sub>2</sub>e in FY25.**
- **Rooftop solar adoption:** A 10 kWp rooftop solar installation was commissioned in 2025 at owned premises, setting a precedent for scale-up.
- **AI-enabled energy optimization:** In partnership with Living Things (an IIT Bombay-based startup), we introduced patented AI technology to monitor and reduce energy use across key offices.
- **Efficiency retrofits:** 100% LED retrofits, along with motion sensors and timer-controlled lighting, are now part of our infrastructure.
- **Sustainable products:** Introduction of Green Deposits.

These achievements were validated externally, with **MSCI upgrading LIC HFL's ESG rating from "BB" to "A"** in FY2024–25 and **CRISIL rating the Company "Strong."**

### CSR milestones

Our CSR strategy rests on two flagship programs — **Green Tomorrow** (solid waste management and circular economy) and **Sujalam** (water security and conservation).

**Green Tomorrow:** Focused on waste segregation, reduction, reuse, recycling, and the establishment of **Material Recovery Facilities (MRFs)**. Projects in Mamallapuram, Kaziranga, Kakatpur, Raigad, and Manipat have created **formalized livelihoods for waste workers** while safeguarding sensitive ecological and cultural sites.

**Sujalam:** Dedicated to water security through groundwater restoration, rejuvenation of lakes, ponds, and rivers, and ensuring drinking water access. Projects in Udaipur, Telangana, Kutch, and Sundarbans were designed after geo-hydrological studies, ensuring long-term sustainability.

Together, these initiatives have **benefited over 200,000 people directly, created over 600 livelihoods, diverted over 2,000 tonnes of waste annually,** restored over 150 hectares of pasturelands, and recharged **millions of cubic meters of water storage capacity.**

### Governance and Culture

The ESG journey has brought about a clear cultural transformation within LIC HFL. Employees across branches

now demonstrate **conscious utilization of energy, paper, and other resources.** With training, awareness, and the ESG Monitors network, staff participation has grown significantly.

At the governance level, the **Board has begun prioritizing ESG matters** as a part of strategic discussions. ESG considerations are now embedded in decision-making, from operations to CSR and product innovation. The transition towards online and paperless processes has further reduced internal resource consumption.

### Partnerships and Innovation

**Partner selection** LIC HFL employs a rigorous due diligence process to select NGO partners. Organizations with a proven track record, field experience, and successful implementation history are shortlisted through desk and field reviews. Geo-hydrological study reports are mandatory for water projects.

### Criteria for interventions

For waste management, the "Green Tomorrow" project prioritizes tourist-heavy geographies where waste generation and awareness gaps are most acute. For water projects, intervention sites are chosen based on scientific studies, need assessments, and community ownership potential.

### Innovation in projects

Our CSR portfolio demonstrates innovation in multiple forms:

- **Metered rainwater harvesting systems** (ATREE) enabling equitable water use.
- **43-category waste segregation systems** (Aasra Welfare) maximizing circularity.
- **Tourism-linked eco-fee models** (SAAHAS at Kaziranga) ensuring sustainability through visitor contributions.
- **AI-based monitoring** (Living Things partnership) in energy consumption within our offices.

These innovations not only deliver measurable outcomes but also establish replicable models for other organizations.

### Personal Reflection

Our ESG journey underscores a fundamental truth: secure housing cannot exist without secure ecosystems. Communities require clean water, resilient agriculture, safe waste systems, and restored biodiversity to thrive.

Internally, the journey has instilled a culture of accountability and pride. Employees now identify themselves as contributors to a broader sustainability agenda, not merely as staff in a financial institution. The recognition from MSCI and CRISIL has reinforced our belief that embedding ESG enhances both purpose and performance.

## Future Vision

Looking ahead, LIC HFL is committed to an ambitious ESG roadmap that aligns with both India's national priorities and global sustainability frameworks.

### Key priorities for the next five years:

- **Carbon reduction:** Expanding renewable energy adoption across branches; reducing Scope 1 & 2 intensity further; broadening Scope 3 disclosures.
- **Green finance expansion:** Scaling Green Home Loans and Green Deposits, contributing to India's green housing ecosystem.
- **Water security:** Scaling up the Sujalam portfolio to new geographies, enhancing irrigation, groundwater recharge, and potable water access.
- **Waste and circularity:** Replicating Green Tomorrow in more urban and tourist towns, ensuring sustained livelihoods through waste worker formalization.
- **Biodiversity restoration:** Expanding afforestation, pasture regeneration, and urban biodiversity parks.

**Long-term impact envisioned:** LIC HFL aims to be recognized not only as India's largest housing finance company but also as a national leader in housing-linked sustainability, ensuring that every home financed is embedded within resilient, healthy, and sustainable ecosystems.

## Conclusion

From compliance-driven beginnings in 2023 to becoming a nationally recognized ESG leader by 2025, LIC HFL's journey reflects resilience, adaptability, and innovation. We have overcome challenges of scale, data, and stakeholder engagement by introducing systematic processes, forming strategic partnerships, and embedding sustainability into both operations and community interventions.

Our milestones — from eliminating DG sets and introducing AI energy monitoring to implementing waste management in fragile ecosystems and restoring millions of liters of water capacity — represent more than achievements. They are stepping stones towards a future where finance,

environment, and communities thrive together.

As we move forward, LIC HFL remains committed to expanding its ESG footprint, delivering sustainable housing finance, and reinforcing the principle that **every secure home requires a secure ecosystem.**





## Mr. Brijesh Kumar Agarwal

Whole-time Director & Member of Corporate Social Responsibility & Sustainability Committee

### IndiaMART InterMESH Ltd

#### Driving Digital Empowerment and Sustainable Growth

IndiaMART InterMESH Limited, India's largest online B2B marketplace, has been at the forefront of **empowering small and medium enterprises (SMEs)** and Women Entrepreneurs by making business simpler and more accessible. With a network of over **8.4 million suppliers and 211 million buyers**, IndiaMART has built a robust ecosystem that fuels trade, fosters innovation, and drives inclusive economic growth.

Our journey has been defined by **resilience, innovation, and responsibility**. At IndiaMART, ESG is not just a commitment it is embedded in the way we do business. Our journey is guided by a deep sense of responsibility towards the planet, people and principles of ethical governance.

#### ENVIRONMENT

As a growing technology-driven platform, IndiaMART is committed to operating responsibly and sustainably while serving the evolving needs of millions of users. We strive to ensure that our growth remains in harmony with the well-being of the planet by continuously monitoring and minimizing our environmental footprint. Our sustainability strategy focuses on efficient resource utilization, reducing emissions, and building scalable systems designed to lower environmental impact.

**Challenges:** IndiaMART may face environmental challenges as we expand our operations and digital infrastructure.

The increasing reliance on servers, data centers, and office spaces may lead to a significant rise in electricity consumption, contributing to our overall carbon footprint. Our IT infrastructure, while essential to platform performance, also adds to the environmental burden through high energy usage and the generation of electronic waste, which requires careful management and sustainable disposal practices.

#### Lessons Learned:

As an organisation, we understand that **digitalization itself is a driver of decarbonization**. By reducing physical paperwork, transport needs, and enabling online procurement, the company realized that its platform could function as a climate enabler. This insight reinforced the need to further invest in platform innovations that drive down emissions across the value chain. In the next year, the key lesson evolved into recognizing the importance of partnerships. Additionally, transparency in emission reporting (using protocols such as ISO 14064-1) was identified as critical for credibility and long-term accountability.

We learned that environmental sustainability must be **embedded into operational planning** rather than treated as a separate initiative. Continuous measurement and monitoring of energy use, waste management, and emissions are essential to track progress and identify opportunities for improvement.

A strong governance framework around environmental data helped us set measurable goals and maintain accountability across the organization.

#### Achievements:

- IndiaMART achieved several milestones in its journey towards environmental sustainability:
- IndiaMART's Noida headquarters has earned the prestigious LEED Gold certification for its environmentally responsible infrastructure such as installation of Solar Power System, Heat Recovery Wheel systems, motion sensors and LED lighting, EV charging stations, utilisation of Organic Waste Converters, Rain Water Harvesting etc.
- Digital enablement for Decarbonisation
- Active promotion of eco-friendly products across the full green value chain, including raw materials, machinery, and final products. **~1.7 million buying requests for green products, with 10% of paying suppliers** dealing in sustainable solutions.

- **E-waste management protocols** were strengthened to ensure proper recycling and safe disposal of electronic waste from data centers and offices.

These initiatives reflect IndiaMART's commitment to creating a **low-carbon, resource efficient ecosystem**, demonstrating that technology-driven businesses can grow sustainably.

## SOCIAL

IndiaMART's social initiatives are driven by a deep commitment to **inclusive growth** and the belief that empowering communities lays the foundation for long-term socio-economic development. We focus on long-term development by addressing deep rooted social challenges through continuous efforts. Rather than short term fixes, we invest in solutions that enable lasting change in the communities we serve. **Our Corporate Social Responsibility (CSR) strategy** focuses on education, skill development and rural infrastructure, aiming to create meaningful and sustainable change in underserved regions, particularly in rural India.

**Challenges:** One of IndiaMART's most impactful CSR interventions has been in Bahraich, a district identified by NITI Aayog as one of India's most underdeveloped among the 112 Aspirational Districts.

The challenge was not only to improve school infrastructure but also to gain trust and acceptance from local communities and stakeholders. Many schools were skeptical, having never received external support before and doubting whether such promises would translate into tangible improvements. Additionally, identifying which schools to prioritize required a clear, transparent process.

### Lessons Learned:

To address these challenges, IndiaMART engaged closely with government authorities and local stakeholders. Early in the project, our team met with the Director General of the Education Department in Lucknow and the Basic Shiksha Adhikari (BSA) of Bahraich to share our vision and seek their guidance. Their support was instrumental in shaping the project roadmap.

Based on lists provided by the BSA, our CSR team visited 200+ schools to evaluate infrastructure needs. While initial visits met with hesitation and lack of enthusiasm from school administrations, consistent communication, transparency, and swift action helped us build trust.

Over time, we noticed a significant shift as schools that were once skeptical began referring other schools to us

and actively promoting our CSR initiatives. This evolution in perception reinforced the importance of trust-building and collaboration in driving sustainable social change.

### Achievements:

IndiaMART's social impact in has been transformative, touching thousands of lives across rural and semi-urban regions. Under the CSR initiative "Leaving No Dreams Behind," IndiaMART achieved remarkable milestones:

- **Direct Impact:** The programs collectively **impacted 1.2 million people**, creating a ripple effect of change in education, health, and livelihoods.
- Constructed and renovated **160+ classrooms**, improving learning spaces for thousands of students.
- Built **45+ toilets**, addressing sanitation challenges in rural schools.
- Developed **12+ lunch sheds**, ensuring hygiene and safe spaces for mid-day meal programs.
- Established **safe drinking water facilities** in multiple schools. Supplied ~1400 desks, benches, and other essential educational resources to enhance the learning environment.
- By improving physical infrastructure, IndiaMART has directly addressed barriers such as absenteeism and dropout rates, fostered better educational outcomes, and encouraged children, especially girls, to continue their schooling.
- **Skill Development and Digital Literacy:** Beyond infrastructure, IndiaMART emphasizes capacity building and digital empowerment through its "Childhood to Livelihood" approach. This initiative equips youth and women with vocational training and digital literacy skills, enhancing their employability and economic independence. Skill development through SMART Centers, benefiting 2,000+ individuals (62% women).
- Parental engagement programs benefit **45,000+ parents**, enhancing children's education outcomes.
- By bridging the digital divide, these programs enable marginalized communities to participate in India's growing digital economy, aligning perfectly with IndiaMART's mission to **digitally empower SMEs and individuals** alike.
- **Geographic Reach:** These interventions spanned across **Bahraich district in Uttar Pradesh** and **M.M. Hills in Karnataka**, regions with historically limited

access to quality education and basic infrastructure as well as other districts of Uttar Pradesh, Delhi, West Bengal, Maharashtra, Telangana, Tamil Nadu.

IndiaMART ensures that its CSR initiatives are **sustainable and community-driven** by collaborating with **local organizations and government bodies**. This approach guarantees that the interventions remain relevant and continue to deliver impact long after implementation.

The transformation has been so profound that schools and local stakeholders who were once hesitant now actively **champion and promote IndiaMART's CSR programs**, further extending their reach and creating a multiplier effect.

**Overall Social Impact:** Through these comprehensive efforts, IndiaMART's CSR has evolved beyond financial contributions to deliver **lasting social transformation**. The projects not only address immediate educational and infrastructural challenges but also build **resilient communities** capable of driving their own growth.

By integrating education, skills, and empowerment, IndiaMART is fostering a generation equipped to create sustainable livelihoods and contribute meaningfully to India's economic development.

## GOVERNANCE

At IndiaMART, governance forms the backbone of our operational efficiency, continued growth and sustained investor confidence. By adhering to the highest standards of transparency, ethical business practices and legal compliance, we promote a culture of integrity that safeguards the best interests of all stakeholders.

**Challenges:** The challenges evolved towards **strengthening compliance with global governance** standards. As the platform grew, expectations for transparency, board diversity, and ESG integration into governance frameworks increased. Cybersecurity risks, though managed effectively, require continuous vigilance.

The digital economy is vulnerable to **cybersecurity threats and fraud**, making data privacy and security paramount. As IndiaMART's platform expanded to serve millions of businesses, safeguarding transactions and building trust emerged as significant challenges. Moreover, the rapid scale-up of digital operations intensified the demand for stronger data privacy safeguards.

Additionally, aligning corporate governance with **global benchmarks** require continuous improvement and stringent compliance with national and international standards.

## Lessons Learned:

It is evident that **governance is not static but requires ongoing evaluation**. Key insights highlighted the importance of continuous board performance reviews, inclusion of independent directors, and fostering diversity. Furthermore, the Company continued to establish a robust system to identify and mitigate potential risks to data security, proactively addressing any threats to prevent data breaches through various ISO Certifications that instil trust among stakeholders by demonstrating our ability to uphold rigorous data protection regulations.

Through this journey, we understand that governance is not just a compliance requirement but a **strategic enabler of sustainable growth**. Proactive risk identification, backed by strong systems and certifications, creates a culture of accountability and resilience.

## Achievements:

- 60% independent board, including two women directors, ensuring transparency and strong oversight.
- Zero human rights violations; strict POSH compliance.
- Recognised internationally for swift IPR redressal.
- ISO 27001 & 27701 certified for data security and privacy.
- Expanded policies on anti-bribery, equal opportunity, and whistleblower protection.
- Enhanced board diversity and alignment with global ESG frameworks.
- AI-driven fraud detection for secure transactions.

## Conclusion:

IndiaMART InterMESH Ltd.'s ESG journey reflects the balance between business success and societal progress. By reducing emissions, optimizing resources, and expanding sustainably, the company has advanced its environmental goals. Social initiatives in education and skill development have impacted over 1.2 million lives across eight states, while strong governance practices have reinforced transparency and stakeholder trust. Recognised with a 'Strong' ESG rating by CRISIL, IndiaMART remains committed to supporting India's \$5 trillion economy vision through CSR outreach, digital inclusion, and alignment with global ESG standards—creating a future where businesses, communities, and the environment grow together.



## Carborundum Universal Ltd.

### CUMI as part of Murugappa Group

Carborundum Universal Limited (CUMI) is one of India's leading manufacturers of abrasives, electro-minerals, industrial ceramics, and super-refractories established in the year 1954. CUMI is a constituent of the Murugappa Group. A 125-year-old conglomerate with presence across India and the world. The group has INR 902 billion (90,178 crore) with diverse businesses in agriculture, engineering, financial services and more. Guided by the Five lights: integrity, passion, quality, respect, and responsibility, and a culture of professionalism, the Group has a workforce of 94,041 employees.

### Introduction to CUMI

CUMI has manufacturing operations across seven countries and products are sold in more than sixty countries. CUMI reported a consolidated revenue of 48,335 million in FY 2024-25. CUMI is leading market player in Abrasives and one of the largest global producers of Silicon Carbide grains. Our global team of over 10,000 passionate employees continue to drive economies of scale, enhance our competitiveness, and co-create bespoke solutions for our customers. Together, we are shaping a smarter, stronger, and more sustainable future for industries across Engineering, Auto Components, Infrastructure, Steel, Aerospace and beyond.

### CUMI and sustainability

Our purpose is **"Making a material difference."** Guided by this, our vision and mission are anchored in shaping a sustainable future.

**Vision:** "To be a globally admired company, driving innovations in materials science that create sustained value

for people and our planet."

**Mission:** "To design, co-create, and deliver sustainable solutions that make a meaningful positive impact on all our stakeholder.

CUMI integrates its Sustainability Report within the annual report, showcasing our year-on-year progress and steadfast commitment to sustainability. For over seven decades, we have upheld sustainable practices as a core value. Guided by strong environmental and sustainability policies, we emphasise pollution prevention, resource optimisation, social responsibility, and ethical governance. Our efforts are focused on reducing carbon footprint while minimising waste, water, and energy consumption.

### CUMI's sustainable steps since inception

Rainwater harvesting has been an integral feature in the design of most CUMI facilities since their inception—practiced not for measurement, but as a responsibility to conserve natural resources. Many of our facilities are built to coexist harmoniously with natural tree plantations. For example, our Tiruvottiyur facility has over 70% of its land area under forest cover, serving as a habitat for numerous migratory birds and species.

A standout example of our commitment is the hydropower plant CUMI has been operating in Kerala for over 30 years. Long before renewable energy and climate action became global priorities, CUMI recognised their importance. Given the energy-intensive nature of our Kerala facility, we made renewable energy a cornerstone of our operations.

### Chairman's Message

"Our ambition is to lead the industry in sustainable and responsible manufacturing practices, while building advanced, differentiated solutions across Abrasives, Electrominerals, and Ceramics. At CUMI, sustainability is a core business imperative, reflected in the formation of a new function - Environment, Health, and Safety (EHS). Our efforts are guided by measurable goals, a long-term vision, and responsible resource management. The Company is set to achieve the 2030 Sustainability targets with 2025 as new baseline. Our ambition is to lead the industry in sustainable and responsible manufacturing practices, while building advanced, differentiated solutions across Abrasives, Electrominerals, and Ceramics."

### Managing Director's Message

"The Company remains committed to integrating sustainable practices across its operations. As market dynamics evolve and stakeholder expectations continue to increase, the

Company is focused on aligning its long-term strategy with responsible business conduct. Beyond business performance in financial parameters, the Company is deeply committed to making a positive and lasting impact on the communities in which it operates. Through a range of Corporate Social Responsibility (CSR) initiatives in and around its manufacturing plants and other locations, value driven actions are being undertaken in the core areas of education, healthcare, and skill development which have had a positive impact. These efforts reflect the belief that sustainable growth is best achieved by uplifting the communities that support and surround the business. The Company always has and will continue to prioritize decisions and actions that safeguard the environment. While the Compliance management system ensures all the regulatory aspects are met, the newly established dedicated EHS function is driving the sustainability goals of the Company along with the business and other functional teams. The Company's ESG 2030 targets consider significant reduction in energy intensity, GHG emission intensity, water intensity, waste intensity. The Company also focusses on increasing the share of renewable energy in its total electrical energy. In the field of education, the Company has positively influenced the lives of 2,330 students by enhancing access to quality learning opportunities. In healthcare, support has been extended to over forty-eight beneficiaries through the facilitation of critical surgeries and the provision of essential medical equipment, thereby strengthening healthcare delivery systems. Additionally, the Company's skill development initiatives have included 106 beneficiaries receiving technical training programs and skill development. Furthermore, 1,057 women have been empowered through targeted programs aimed at fostering self-reliance and improving livelihood opportunities. The conscious focused improvement in the employee engagement initiatives will ensure the Company being a preferred place to work for the employees whom we consider to be one of the most important stakeholders. The consistent recognitions the Company has been achieving for its Governance framework and practices is a testimony to the significance the organization places on this important pillar of the ESG. However, we remain committed to enhancing this benchmark with and beyond the evolving standards."

### **Sustainability targets**

In FY 2021-22, the Company had set a target of 25% intensity reduction across energy, water, emission by 2025. We have met the target in energy & water, exceeded by 6% in emissions. Further on the sustainability roadmap for 2030 has been set by the company in 2025: energy intensity by 4%, water intensity by 4%, waste intensity by 5%, emission

intensity by 5% and usage of renewable energy to 50% of electrical energy.

### **Governance and policy**

CUMI's formal sustainability commitments are anchored in the Sustainability Policy that emphasizes "People and Planet" committing to conservation and responsible use of resources, and to protecting employee health and safety. The policy provides the governance foundation that channels operational projects and reporting into measurable outcomes.

### **Environmental projects**

Company is taking numerous steps towards environmental preservation.

Few key projects of CUMI in GHG emission reduction are -

1. Furnace oil elimination in platen heating press by implementing thermic fluid heating system.
2. R22 usage elimination for Module-4 (Resinoid) area cooling system by upgrading the chiller system to R134a refrigerant and improving energy efficiency due to upgradation of motors.
3. Secondary heat exchanger introduction in Kiln for Refractory manufacturing process there by reducing the fuel consumption.
4. The Company has 3.3MW installed in-house rooftop and ground mount solar power generation plant.
5. 12 MW Hydro power plant is being operated in Kerala wheeling power to its facilities in Kerala.
6. Sourcing 10 MW solar power via Group captive power purchase agreement for its facilities in Kerala.

Upgradation of 11kV to 33 kV is done at its one of the business vertical industrial ceramics which enables reduction in transmission losses and indirect emission reduction. Further to enhance the stack dispersion a 60m chimney has been constructed in one of the facility in Electromineral division. Retrofit of DGs has been done across facilities to ensure reduction of particular matter.

Also, the Company has implemented Zero liquid discharge to all its applicable facilities. Effluent Treatment Plants (ETP) and Sewage Treatment Plant (STP) are installed within its premises for management of effluent wastewater and domestic wastewater, respectively. The treated wastewater is recycled and reused within the respective plants for process and gardening purposes adhering to

the regulatory norms. New-generation screw compressor-based AC system has been installed in one of the facilities of Abrasives division which has resulted in dual benefit of reduction in energy consumption and water consumption and indirectly the emissions. A sludge dewatering system is introduced in Industrial ceramics wastewater treatment plant which impacted in reducing sludge generation by moisture reduction. As part of material circularity, the company ensures the EPR fulfilment in plastics and E waste.

Further CUMIs corporate office at Dare house is a Gold certified green building from IGBC.

### **Sustainability linked CSR programs**

CUMI provides active support to the CSR programmes via Shri AMM Murugappa Chettiar Research Centre (MCRC), a pioneering institution that focuses on nutrition through sustainable agriculture, renewable energy, environment protection, and rural community development. MCRC's projects address a range of critical Championing Environmental Sustainability challenges including climate change and biodiversity loss. Some of the programmes CUMI supports include addressing malnutrition through bio-fortified crops, enhancing agricultural productivity through soil nutrient analysis and crop advisory services in remote areas and conserving soil through optimizing use of chemical fertilizers.

### **Awards and recognitions**

CUMI received the esteemed Golden Peacock Award for Risk Management from the Institute of Directors - a sound endorsement of our governance maturity. From the Kerala Safety Council, Electrominerals was awarded the Safety Award for most of the plants, acknowledging its exemplary standards in workplace safety and compliance. Electrominerals also won Platinum Award at SEEM (Society of Energy Engineers and Managers) National Energy Management Awards. CII EHS Excellence Award Earned a Bronze category award for the Ceramics business in the CII Environmental, Health, and Safety (EHS) Excellence Competition.





## Mr. Anand Deshpande

COO & Plant Head

### MB Power (M.P.) Ltd.

#### 1. Brief Introduction

MB POWER (MADHYA PRADESH) Limited (MBPMPL) is a Public Limited Non-government Company, which is registered at Registrar under Company Act. MB POWER (MADHYA PRADESH) LIMITED has set up 2 x 600 MW coal-based sub-critical thermal power plant in the Anuppur district of Madhya Pradesh. Unit I (600 MW) was commissioned on April 20, 2015, and Unit II (600 MW) on March 30, 2016. Now, plant capacity has been expended from 2x600 MW to 2x625 MW in year 2024.

MBPMPL is an award-winning company for its excellence in innovation, safety and community development. MBPMPL has been honoured with numerous awards across various categories, reflecting its commitment to excellence, innovation and sustainable development. These accolades highlight the company's achievements in delivering impactful community services and its dedication to responsible business practices.

The Environment Health and Safety (EHS) initiatives of MBPMPL are propelled to drive excellence in environmental protection, health standards and safety practices to ensure that operations are carried out in a sustainable manner. MBPMPL has created a separate EHS Department, which comprises of qualified senior professionals. MBPMPL has established a full-fledged Occupational Health Centre and 4-bedded Hospital inside the Plant premises, which is headed by a qualified experienced Doctor, supported by paramedical staffs. Plant safety is supervised by a qualified and experienced safety professionals.

#### 2. Challenges faced by the company and achievements

There was various challenge in achieving the regulatory compliances as set by Ministry of Environment, forest and climate change, Government of India such as 100% use of fly ash, legacy ash and compliance with respect to stack emission (SO<sub>2</sub>) norms.

- **Fly Ash Utilization:**

Ministry of environment, forest and climate change government of India has issued fly ash notification first in year 1999 and it has been amended time to time. As per earlier notification fly ash need to be used year wise in progressive manner such 20%, 50%, 75%, 90% and 100% from the commissioning. But as per fly ash notification 2016 it must be used 100% from the year 2017. Up to this time fly ash utilization was near about 40%. It was very tough to achieve the 100% ash utilization in limited period of time. There was no cement industries nearby the plant for supply the fly ash for using in cement making. The nearest cement plant is located at Katni, Maihar, Satna, Sidhi and Rewa district and the distance of the cement industries from the TPP is in the range of 250km to 350km. In between our thermal power plant and cement industries, there are few other thermal power plants for supply of ash and because of short distance from that plants transportation cost are less in comparison to our plant. This is the main reason to reach limited ash user for our plant.

MBPMPL has started to promote user by providing incentive to compensate transportation cost and because of that user started to take ash from our plant. MBPMPL has constituted a team for searching started to identify low-lying area and mine voids nearby power plant. We have taken several consents from collector and State pollution control board for using ash in reclamation of low-lying areas and mine voids. MBPMPL has signed first MOU with SECL Sharda Mine in Sohagpur area for filling ash in coal mine voids on dated 29/11/2021. Later, under the directions of the Company Management and the tireless and regular efforts of the team, many vacant mines were allotted to MBPMPL and the Company's ash utilization target is being achieved for the last seven years. Details given below:

Period	Ash Generation (MT)	Ash Utilization	% Utilization
2018-19	1577875.30	1635958.00	103.68
2019-20	1552755.00	1598765.00	102.96
2020-21	1540524.00	1751594.64	113.7
2021-22	2184816.659	2189356.102	100.21
2022-23	2117475.21	2155390.612	101.79
2023-24	2295675.29	2311283.00	100.7
2024-25	2254321.3	2306217.9	102.30

During this period, we have achieved 100% ash utilization target as well as some portion of pond ash also utilized. This is the reason in some years the utilisation has gone beyond 100%.

The legacy ash stored in exhausted ash pond has also been stabilised and reclaimed as per fly ash notification 2021. The State pollution control board has certified this and we have been successful in achieving the ash utilization target which is most important for the sustainable operation of a thermal power plant.

- Installation of Additional Ash Silos

Even after achieving the target of 100% utilization, we took necessary initiatives to transport the ash through rail wagons keeping in mind future difficulties, environment and safety. MBPMPL has constructed 04 Nos of additional ash silos over the railway tracks to fill the ash in railway wagons for transportation fly ash in pan India through railway wagon. Now all the silos have been completed these are in commissioning stage. There will be following benefits from ash transportation through railway wagon.

- Road traffic will be minimised.
- Life of road will be increased.
- Fugitive emission will be minimised.
- Ash transportation cost will be minimised.
- It will be helpful in achieving 100% utilization target.
- Cement industries will get the fly ash in effortless way.

### Stack Emission Control / FGD Installation

Ministry of Environment, forest and climate change, government of India has issued notification on 7th December 2015 and fixed stack the emission norms for Particulate matter (PM), Sulphur dioxide (SO<sub>2</sub>) and NO<sub>x</sub> (Oxides of nitrogen). PM was already in limit, but combustion modification has been done by MBPMPL for achieving the NO<sub>x</sub> limit. There was the major challenge to achieve the SO<sub>2</sub>

emission limit because it was not possible without installation and commissioning of the flue gas desulfurization (FGD) units. There was huge investment cost and about 03 years' time for FGD installation. Finally, MBPMPL management has decided to install the FGD to control the SO<sub>2</sub> within the limit. Now this, MoEF&CC has revised the norms and given the relaxation to the plants comes under category 'C'. Even though MBPMPL comes under category C and it is not mandatory to operate FGD for category C plants but MBPMPL operating the FGD in favour of environment for improving the environmental quality. After FGD installation and combustion modification, SO<sub>2</sub>, NO<sub>x</sub> and PM emission values have been minimised well below the prescribed norms set by the MoEF&CC, government of India.

### Other Best Practices

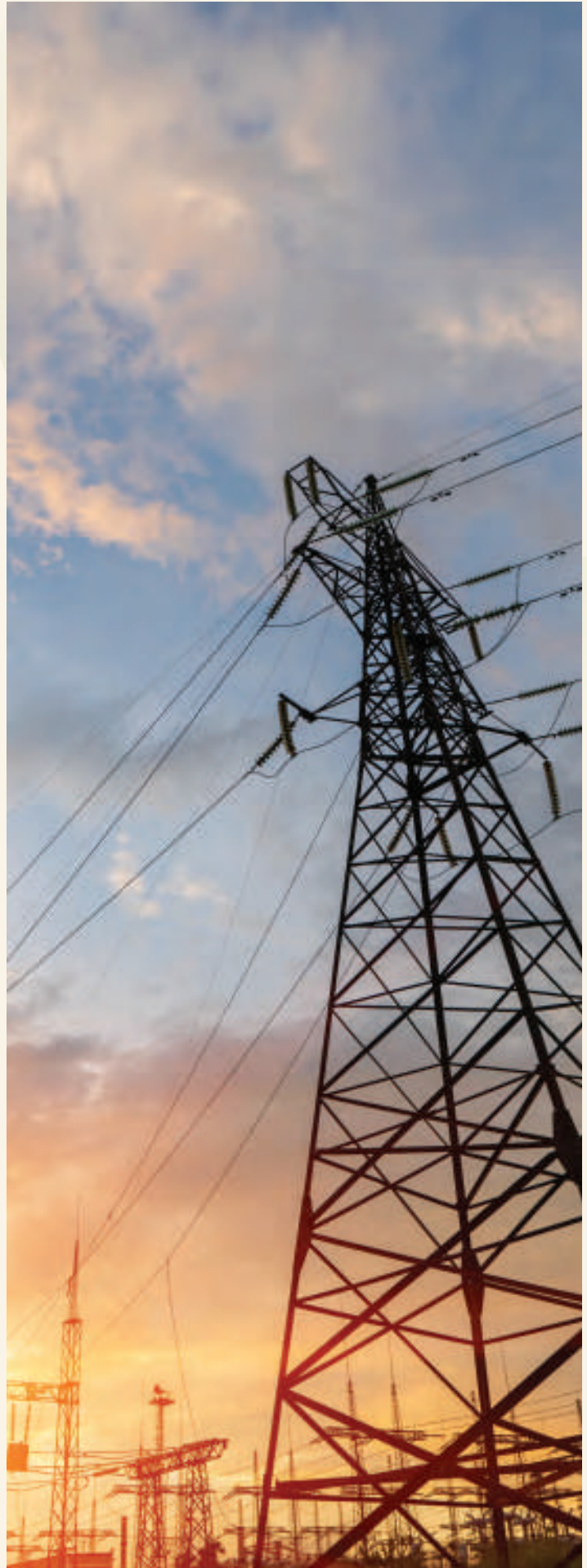
- **Water Pollution Control** We have achieved 7 to 8 Cycle of Concentration of cooling water with implementation of advance cooling water treatment. 100% water recycling is done in bottom ash handling 100% treated wastewater from ETP and STP is reused in horticulture and dust suppression. MBPMPL consumes less than 2.3 m<sup>3</sup>/MWh water whereas it is permitted 3.5 m<sup>3</sup>/MWh. We conduct an awareness program among the workers to save and conserve water. We have displayed banners and stickers on water conservation at several public places to make the workers aware of its benefit. The person making best efforts are being recognized by the management.
- **Waste Management:** Waste water from plant, hospital, offices and staff colony are treated and 100% reused / recycled. Waste oil and grease (lube oil, transformer oil) are collected and sold to authorized vendors. Metal scraps are sold to enlisted vendors. Biomedical wastes are treated and disposed off through authorised vendors. Entire campus has been made plastic free. Used batteries are given back while purchasing new batteries through buy back arrangement. Electronic wastes are disposed off through authorised vendors. All records are maintained.
- **Green Belt Development:** Plantation efforts are being continued to the maximum possible extend in and around MBPower (Madhya Pradesh) Limited campus. In this direction, we are making efforts for avenue plantation from, nearby villages and their school, community building etc. which shows our sincerity in making efforts for continual improvement in quality of environment not only inside the MB Power (Madhya Pradesh) Limited campus, but also in the adjacent area. Our effort is not only economical, but also viable and easily adoptable

as the saplings are well familiar to survive and grown in the same atmosphere prevailing in the campus. We have planted around 287350 nos sapling of indigenous species.

### GREEN BELT development

- **Energy Conservation:** ESP controller tuning done to reduce ESP power consumption. Installation of timers in lighting circuits to reduce unwanted power consumption (timer-based cut-in / out) Installation of Flue gas flow stream-liners i.e. diverter plates inside the flue gas ducts at the outlet of Boiler which has reduced Induced Draft Fan and Forced Draft Fan power consumption Operating voltage in 'main lighting distribution board' is reduced thus reducing power consumption by 60KW per day. Further effort in this line is being explored. Cooling water pumps are stopped during winter days, to take advantage of low ambient water temperature. Motor driven boiler feed pump (11 MW motor) is not operated during unit start up, provided second unit is running and auxiliary steam is available.
- **Moving toward Sustainability:** ESG is an international acronym that companies use to designate Environmental, Social, and Governance (ESG) criteria. These criteria constitute the three critical financial pillars for measuring the sustainability and ethical impact of a company. Essential in the corporate world, Due to the growing importance of environmental and social concerns, ESG is increasingly at the heart of business considerations. ESG criteria can assess how companies exercise their responsibility towards the environment and their stakeholders (employees, partners, subcontractors, and customers). Understanding and analysing these criteria is therefore vital to ensure sustainable growth and satisfy the expectations of investors and customers.

MBPMPL has discharged all its corporate responsibilities and complied with all applicable compliances, ensuring its accountability towards the environment, safety, society, employees and stakeholders. With its hard work MBPMPL has accepted all the challenges and has been successful in overcoming them. There has been no non-compliance till date with respect to environmental, safety or any other regulatory requirements. We are moving towards sustainable development. We have started ESG reporting from the year 2023-24 and it will be continue in future.





## Mr. G. Seshadri

Executive Director (Corporate,  
Coordination, Projects & IT)

# Rashtriya Chemicals and Fertilizers Limited

### A Journey Towards Sustainable Growth

#### I. Achieving Sustainable Growth:

Rashtriya Chemicals and Fertilizers Limited (RCF), one of India's leading fertilizers and chemical manufacturing company, has always believed that industrial growth and environmental stewardship must go hand in hand. As a responsible corporate citizen, RCF recognizes that its success cannot be measured merely by financial performance but also by the way it impacts people, society, and the planet.

RCF's ESG framework is built upon three interlinked pillars- **Protecting the Environment, Minimising Resource Use, and Promoting Inclusive Growth**. Each pillar addresses critical themes ranging from energy efficiency, water conservation, and waste management to social equity and community development.

The following account reflects how RCF has embraced these principles, overcome challenges, and turned them into opportunities to innovate and grow sustainably.

#### Improving Energy Efficiency:

The fertilizer sector is a highly energy-intensive sector. The Ammonia-Urea plants at RCF Trombay and Thal units have completed more than 40 years of operation. Mulling

any further energy reduction is technically challenging and warrant huge CAPEX. Thus, meeting stringent targeted energy norms for its Trombay Urea Plant was a critical challenge. During the year 2024-25, RCF responded decisively by implementing the **Ammonia-V Revamp Project** under its energy improvement schemes.

The project, completed in **May 2024**, resulted in energy savings of 0.18 Gcal per MT of Ammonia, marking a significant stride towards operational efficiency. By adopting this initiative, RCF has reinforced its position as a forward-looking organization prepared to meet evolving global energy challenges.

Currently, RCF is implementing energy schemes in Ammonia plant at Thal. The expected energy saving is about 0.40 Gcal/MT of Ammonia. The scheme is expected to be completed by July 2027.

#### 2. Tackling Water Scarcity and Wastewater Management:

Water scarcity remains a pressing issue in India, especially in industrial clusters. For RCF, ensuring sustainable water usage has always been central to its operations.

At its Trombay Unit, RCF has been operating **two large Sewage Treatment Plants (STPs)**, each with the capacity to treat around **22.75 million litres per day (MLD)** of sewage received from Brihanmumbai Municipal Corporation. Instead of letting untreated sewage flow into the sea, RCF treats it and converts it into process water. Both plants together generate more than 30 MLD of treated water. Part of this treated water (8MLD) generated is supplied to neighbouring BPCL refinery. During FY 2024-25, these plants together generated nearly **7,983 million litres of treated water**, a substantial contribution to water conservation and environmental protection.

Memorandum of Understanding (MoU) was signed with **HPCL** in January 2025 for supplying 4 MLD of treated water to HPCL Mumbai refinery.

This initiative not only showcase efforts of RCF in conservation and efficient management of water resource, but also has impact over the issue of per capita water availability. This makes water availability to 1.62 Lakhs of people in the year 2024-25. (Benchmark for urban water supply is 135 litres per capita per day (lpcd).

Additionally, RCF embarked on the upgradation of the Effluent Treatment Plant (ETP) at Thal with a capacity to treat 10,000 m<sup>3</sup>/day of effluent. The goal was not only to meet statutory discharge norms but also to recycle

treated effluent as raw water. The project was executed in two phases, with the first phase partially commissioned in January 2025 which enabled treatment of 4,000 m<sup>3</sup>/day of effluent, demonstrating RCF's proactive approach toward reducing freshwater dependency.

### 3. Addressing Greenhouse Gas Emissions:

Climate change is one of the major challenges of our time, and reducing greenhouse gas (GHG) emissions is at the core of RCF's sustainability agenda. To combat this, RCF commissioned a **Briquette-Fired Boiler at its Thal unit** in May 2025.

Briquettes, often referred to as "white coal," are made from agricultural and forest waste. By adopting this renewable and carbon-neutral fuel, RCF is not only reducing reliance on fossil fuels but also supporting circular economy principles.

### 4. Renewable Energy:

In order to achieve ecologically sustainable growth, RCF has set-up 2.03 MWp ground mounted Photovoltaic Solar power generation facility Trombay Unit. Additionally, RCF also set-up solar rooftop facilities at Trombay and Thal, with a combined capacity of 2.15 MWp. The generated power is utilized for captive consumption, thereby reducing Company's power import. During the year 2024-25, these solar power generation facilities produced **4,745 MWh of solar power**, directly reducing conventional power consumption thereby reducing GHG emissions.

To further augment its renewable energy efforts, RCF is installing **additional rooftop solar power generation capacity of 655 KW** at Trombay and Thal. This initiative aligns with the Government of India's renewable energy targets, underscoring RCF's proactive role in contributing to India's national energy transition.

## II. Milestones and Achievements in 2024-25:

The efforts outlined above represent not just individual projects but milestones in RCF's broader ESG journey. These achievements symbolize the company's ability to adapt, innovate, and lead in a sector known for its operational complexities.

**Energy Milestone:** Completion of the Ammonia-V Revamp Project, a breakthrough in energy efficiency, ensuring compliance with targeted norms and strengthening competitiveness.

**Water Milestone:** Upgradation of ETP at Thal and operation of large-scale STPs at Trombay, collectively recycling billions of litres of water annually and moving toward zero effluent

discharge.

**Carbon Milestone:** Adoption of biomass-based Briquette Boiler, cutting GHG emissions.

**Renewable Milestone:** Commissioning solar power plants generating green power.

### III. Inclusive Growth:

Beyond its environmental commitments, RCF has also prioritized inclusive growth, ensuring that its progress translates into tangible benefits for society.

The organization remains committed to corporate social responsibility initiatives in education, healthcare, and community development, reinforcing its role as a socially responsible enterprise.

### IV. Governance:

RCF has consistently upheld the highest standards of corporate governance, transparency, and accountability. Through regular disclosures, responsible risk management, and ethical business practices, the company ensures that stakeholders remain informed and engaged.

### V. Conclusion

The challenges of climate change, resource scarcity, and social inequality are formidable, but RCF has shown that with commitment, they can be transformed into opportunities for growth and leadership. By protecting the environment, minimizing resource use, and ensuring inclusive growth, RCF has not only met its ESG commitments but has also set new benchmarks for the fertilizer sector.





## Mr. Hrishikesh Ramani

Vice President - Manufacturing

### Dabur India Limited

#### Dabur India Limited: A Journey of Commitment and Leadership in ESG and Sustainability

At Dabur India Limited, we believe that true success lies not only in financial growth but in the ability to create lasting value for people and the planet. For over 140 years, guided by the wisdom of Ayurveda and the science of nature, we have carried forward our purpose of bringing health and wellbeing to every household.

As the world faces unprecedented challenges like climate change, biodiversity loss, resource scarcity, and social inequities, we have embraced sustainability as the cornerstone of its business strategy. Our ESG journey has been shaped by challenges that tested us, milestones that inspired us, and achievements that continue to strengthen our resolve.

We firmly positioned ourselves as a visionary leader and front-runner in integrating Environmental, Social, and Governance (ESG) principles across every facet of its business model. With a legacy rooted in natural healthcare and Ayurveda, we have uniquely placed to champion sustainability, weaving these principles into its operations, culture, and strategy. Committed to embedding sustainability deeply at every operational level, our ESG journey at Dabur is characterized by visionary leadership, robust governance frameworks, and meticulously set ambitious goals that address both present and future sustainability challenges.

Our ESG transformation has been propelled by a

comprehensive four-pronged strategy focusing on environmental stewardship, social empowerment, governance excellence, and climate risk management. This holistic approach ensures that sustainability is not a peripheral activity but a central pillar driving long-term value for Dabur and all its stakeholders.

#### Overcoming Challenges with Resilience

Our ESG journey has not been without challenges. As an FMCG company dependent on natural and agricultural inputs, we have faced disruptions caused by climate change, particularly extreme weather events, along with biodiversity loss, water scarcity, fluctuating commodity prices, resistance to change, and the complexity of integrating ESG across the entire value chain. These challenges have tested the resilience of our supply chain, manufacturing operations, and long-term business continuity. Despite this, Dabur has demonstrated resilience and agility in navigating these issues. Our approach includes aligning all stakeholders from board-level committees to operational teams and fostering a culture where sustainability considerations permeate decision-making at every level across the value chain.

#### Governance and Transparency as ESG Backbone

Governance forms the backbone of Dabur's ESG execution, with multi-tiered oversight structures ensuring accountability and transparency. The Board-Level ESG Committee, alongside executive committees, continuously monitors progress and adapts strategy to meet evolving sustainability standards and stakeholder expectations.

In addition to the ESG Committee, we have a Board-level Risk Management Committee and a CSR Committee that strengthen our governance framework. These committees collaborate closely with the ESG Committee to identify, address, and monitor ESG-related risks, ensuring that our goals and targets stay on track. This collaboration enhances our ability to remain resilient and adaptive to evolving ESG challenges. Together, they provide comprehensive oversight and strategic direction, reinforcing our commitment to ESG and long-term value creation.

In addition to establishing board and management-level oversight on ESG matters, we adopted a double materiality assessment in FY 2025 to evaluate the ESG issues most material to Dabur, which plays a critical role in shaping our strategic priorities. By identifying 16 critical material issues—ranging from Climate Change and Responsible Sourcing to Biodiversity & Ecosystem and Human Rights—we realigned our ESG strategy to address both immediate risks and long-term opportunities. This assessment has enabled

us to link ESG priorities with business objectives, allocate resources more effectively, and revisit our target to ensure comprehensiveness while driving accountability across the organization. It also ensures that we address stakeholder expectations while strengthening our resilience, enhancing brand trust, and positioning Dabur for sustainable growth in an evolving global landscape.

### **Visionary and Ambitious Targets**

Based on the outcomes of our double materiality assessment, we have integrated the identified high-priority ESG issues into the Enterprise Risk Management (ERM) framework to ensure robust oversight and risk mitigation. Correspondingly, we have updated existing targets and defined new measurable goals to address these critical areas comprehensively and systematically.

Our sustainability roadmap is underpinned by ambitious commitments that aim to mitigate climate risks, conserve biodiversity, empower communities, and uphold the highest standards of governance.

We have committed to ambitious long-term targets including achieving Net Zero carbon emissions by FY 2045, 25 years ahead of India's national net zero target. We also aim to become water positive by FY 2030, an imperative given the water-intensive nature of our juice and health product manufacturing. Additionally, we are committed to achieving No Net Loss to biodiversity by FY 2050, No Gross Deforestation by FY 2045, and 100% reusable, recyclable, or compostable plastic packaging (both rigid and flexible) by FY 2035. We are also dedicated to maintaining plastic waste positivity permanently, ensuring that more plastic waste is collected and processed than we use.

Complementing these overarching goals are medium-term targets, including:

### **Energy and Emissions**

- 100% elimination of coal usage from operations by FY 2025 (successfully achieved in FY 2024 and sustained in FY 2025).
- Achieve over 60% renewable and clean energy consumption by FY 2026 in own sites (surpassed early in FY 2025).
- Reduce energy intensity by 30% by FY 2026 from the baseline.

### **Water Stewardship**

- Achieve water positivity across operations and communities by FY 2030 (achieved 86% in FY 24-25)
- Reduce water intensity (KL/MT) by 30% from the baseline (achieved one year ahead of the plan)

### **Sustainable Sourcing and Biodiversity Conservation**

- Ensure 100% sustainable sourcing of materials at high deforestation risk by FY 2026.
- Ensure 100% of operating sites are outside protected areas and eco-sensitive zones (achieved and sustained)
- Cultivate 15,000 acres of medicinal and aromatic plants sustainably by FY 2030.
- 100% mitigation of risks associated with critically endangered species by FY 2026 (Achieved in FY 2025, one year ahead of plan)

### **Plastic and Waste Management**

- Maintain plastic waste positivity by collecting and processing more plastic waste than the company uses (5 (successfully achieved in FY 2023 and sustained in FY 2024 & FY 2025)).
- Achieve 80% use of reusable, recyclable, or compostable plastic packaging by FY 2028 (achieved in FY 2025- 3 years ahead of plan)

### **Social Empowerment and Diversity**

- 21% gender diversity at the managerial level by FY 2028.
- Positively impact the lives of 5 million individuals by FY 2030 through health, education, and empowerment initiatives.
- Enhance the livelihood of more than 13,500 farmers' families by FY 2030.
- Achieving over 60% renewable and clean energy consumption by FY 2026 (surpassed early in FY 2025).
- Ensuring 100% sustainable sourcing of materials at high deforestation risk by FY 2026.
- 20% reduction in virgin plastic weight by FY 2030 for non-food items
- 80% use of reusable, recyclable, or compostable plastic packaging by FY 2028
- Cultivating 15,000 acres of medicinal and aromatic plants sustainably by FY 2030.

- Positively impacting the lives of 5 million individuals by FY 2030 through health, education, and empowerment interventions.
- Achieve water positivity across operations and communities. These ambitions are backed by continuous enhancements in governance, business practices, supply chain resilience, and innovation.

## **A Purpose Beyond Profit: Project Prakriti – Growing with Nature**

Dabur's philosophy has always been rooted in 'Profit with Purpose'. For us, sustainability is more than compliance—it's a commitment. We continue to contemporize Ayurveda for new generations while ensuring that growth is achieved responsibly through protecting biodiversity, reducing our carbon footprint, empowering farmers, and enriching communities. Guided by robust governance, strategy, risk management, and performance metrics, Dabur embeds sustainability into every business decision.

Dabur India's deep-rooted commitment to sustainability stems from a unique blend of ethical values, evolving market forces, regulatory requirements, and strategic foresight. With heritage grounded in Ayurveda and natural wellness, Dabur aligns its entire business approach with the principles of environmental stewardship, social responsibility, and sound governance. This alignment not only meets the growing global demand for responsibly produced, sustainable products but also ensures compliance with increasingly stringent environmental and social regulations.

Prioritizing ESG has helped Dabur strengthen its long-term resilience, create holistic well-being for people, and foster business practices that harmonize with nature and society. Leading ESG practices enable Dabur to mitigate operational risks, enhance brand equity, and engage ESG-conscious investors—all while responding with agility to ever-changing consumer preferences.

A pivotal driver in this journey is **Project Prakriti – Growing with Nature**, the company's flagship program demonstrating its commitment to addressing current and emerging ESG challenges such as climate change, plastic pollution, water scarcity, biodiversity loss, supply chain risks, and social inequalities. This initiative guides strategic efforts to reduce carbon footprints, manage climate and water risks, promote renewable energy use, foster sustainable sourcing, and advance social empowerment and inclusion. Central to the program are concrete actions aimed at reducing Dabur's carbon footprint, sourcing renewable energy, minimizing plastic pollution, improving resource efficiency, and

increasing the use of sustainable materials across the entire product range—all while enhancing diversity, well-being, and social inclusiveness. These efforts not only minimize environmental and social impacts but also drive operational excellence and deliver substantial stakeholder value.

Internally, Project Prakriti fosters a culture of sustainability among Dabur employees and value chain partners, aligning their values with the company's mission and enhancing engagement and retention. This holistic approach ensures sustainability is integral to decision-making, innovation, and everyday business processes.

By embedding ESG deeply into its DNA through Project Prakriti, Dabur not only effectively responds to today's sustainability challenges but also positions itself as a leader in building a regenerative and resilient future. This journey exemplifies how legacy, innovation, and responsibility can converge to create impactful progress for generations to come

## **Environmental Stewardship @ Dabur**

As one of India's most respected consumer goods companies rooted in nature and Ayurveda, we understand that responsible energy use is essential for securing long-term value, reducing environmental impact, and aligning our growth with global climate priorities. **In FY 2025, Dabur achieved 61% renewable energy share, a milestone accomplished a year ahead of schedule.** These initiatives are supported by energy efficiency initiatives, investments in solar power, and a conscious transition to clean fuels. Dabur sustained the achievement of 'zero coal-based emissions' in operations in FY 2025. Among the year's most significant milestones was the transformation of our Ghaziabad corporate office into a facility powered entirely by solar electricity. Similarly, our Sahibabad Manufacturing Facility became the first manufacturing unit within the Dabur network to operate entirely on solar energy, setting a benchmark in our journey toward carbon neutrality.

In FY 2025, we reduced water intensity by 30% from baseline, one year ahead of the plan. Over the past two years, our water conservation capacity has increased to 11,92,286 KL which is 86% of total water extraction by us. This represents 4.5 times increase in 24 months; thus, we are well on track to achieve water positivity ahead of the target.

On the packaging and waste front, Dabur sustained its plastic waste positive status by collecting, processing, or recycling 105% of the plastic we used. Dabur is proud to announce that it has already achieved 80% recyclable packaging in FY 2025, reaching its earlier goal of "80% use

of reusable, recyclable, or compostable plastic packaging by FY 2028", ahead of schedule. This milestone underscores our unwavering commitment to innovation, circularity, and a greener future. In the reporting year FY 2025, we have achieved 87% recyclable packaging consumption.

## Sustainable Sourcing and Biodiversity

Our approach is rooted in science, aligned with national biodiversity priorities, and deeply embedded in community engagement. Dabur has pledged to achieve 'No Net Loss to Biodiversity' by FY 2050 and "No Gross Deforestation by 20245". A major milestone this year was the **100% mitigation of risks** associated with critically endangered species, aligning with our previous year's consumption levels. We **sustainably sourced 93.36%** of materials from high deforestation-risk categories. We expanded sustainable agronomy practices across 13,191 acres of land pan-India, a significant increase over FY 2024. With this, we are steadily progressing toward our goal of sustainably cultivating these plants across 15,000 acres by FY 2030.

During the year, Dabur engaged **12,753 farmers in the cultivation and sustainable collection of medicinal and aromatic plants**, as well as Non-Timber Forest Products (NTFPs), a notable increase from 10,877 in the previous year.

These initiatives not only support biodiversity conservation by protecting rare and endangered species from extinction but also contributes to the revival of region-specific biodiversity. By focusing on the cultivation of critically important native species, we are fostering ecological resilience while enhancing rural livelihoods.

## Social Responsibility

We believe that our people are the foundation of our long-term success and are committed to fostering an inclusive, growth-oriented culture where employees are empowered to innovate, lead, and excel. We always strive to cultivate a workforce where every individual feels valued, heard, and motivated to contribute. In the FY 2025, Dabur conducted extensive training sessions covering functional and behavioural skill development, compliance requirements, employee health and safety, and wellbeing initiatives. This resulted in an average of **10.2 training hours** per FTE, with 32 hours per FTE for permanent workers and 3 hours per FTE for permanent employees.

Gender diversity and inclusion are also critical to our ESG commitments. Women today constitute 13.4% of our managerial workforce, and we continue to focus on creating an inclusive workplace that fosters equal opportunities, growth, and respect. Some of our key functions have over

20% gender diversity, like Marketing (28%), Research & Development (34%), Corporate Finance (21%) and Human Resources (34%). We uphold a strict non-discrimination policy, ensuring equal opportunities in recruitment, compensation, promotions, and career development, irrespective of race, colour, age, gender, caste, religion, nationality, marital status, sexual orientation, or disability.

In FY 2025, we delivered 109,605 training hours covering OHS policies, emergency response, hazard control, and risk assessment. We also launched awareness campaigns on machine, electrical, fire, road, and seasonal safety, and engaged employees through street plays, skits, competitions, and drills. Dabur's vision is a "Zero Incident" workplace. We are proud to have maintained a "Zero Fatality" record for many years, reflecting our unwavering commitment to employee safety and wellbeing.

## Empowering Farmers and Communities

Our social impact initiatives reflect our philosophy of 'Profit with Purpose'. In FY 2025 alone, Dabur positively impacted **3.61 million lives**. Our CSR programmes focus on health, education, livelihood creation, and community empowerment. Healthcare camps, school infrastructure development, skill-building for women, and clean drinking water projects are transforming lives across rural India.

As a company reliant on nature-based raw materials, Dabur has always recognised the importance of inclusive growth. We have engaged with over 12,753 farmers in cultivating medicinal and aromatic plants across 13,191 acres. Through initiatives such as beekeeping, herb cultivation, and agroforestry, Dabur has not only enhanced rural livelihoods but also advanced biodiversity conservation. Its efforts have strengthened rural resilience, increased farmer incomes, and doubled livelihood opportunities compared to 2020 levels.

## Recognitions Reflecting ESG Leadership

Dabur's leadership and commitment have garnered numerous prestigious awards and honors affirming its ESG excellence. Noteworthy recognitions in FY 2025 include:

- Inclusion in the S&P Global Sustainability Yearbook 2024, ranking among the top 5% of performers in the Corporate Sustainability Assessment (CSA) with a CSA performance score of 83 in latest rating (Sep 25)
- Dual Gold Climate Action Awards at the Times Now Global Sustainability Alliance SDG Summit, recognizing Net Zero Leadership and Biodiversity Champion efforts.
- Awarded the Prithvi Award ESG Icon 2024 by the ESG Research Foundation for commendable work

in greenhouse gas management, renewable energy adoption, and energy efficiency.

- Honored with two awards—Gold for Sustainable Business of the Year and Silver for Biodiversity & Conservation Leadership at the inaugural FE Green Sarathi Awards.
- Ranked among the Top 40 Most Sustainable Companies in India by Business World.
- Named among the Times Now Champions of CSR 2024 for innovative and impactful community development.
- Enhanced MSCI ESG rating from A to AA in FY 2024-25
- Reduced Sustainalytics ESG Risk exposure by 11.6 points from High Risk (31.76) to Medium Risk (20.6) in two years.

### Closing Thoughts

Guided by our purpose of bringing the science of nature to every household, Dabur remains committed to creating lasting value not only for our shareholders but also for the planet and society at large. Through decades of heritage combined with forward-looking innovation, Dabur exemplifies how sustainability and business excellence can co-evolve. For us, sustainability is both tradition and innovation in action. Our proven track record, ambitious goals, and robust governance reflect a company that cares deeply about its impact on the planet and society while growing a thriving business.

We hope our journey inspires others to embrace purposeful growth because true success is creating a world where people and nature flourish together.



## Mr. Rakesh Tirath

Advisor Sustainability and Corp Affairs,  
**Merino Industries Ltd.**

**A pioneer in use of Bio-mass, exhibiting unwavering commitment to ESG**

While the world is struggling to limit rise in earth's temperature by 1.5 Degrees Celsius by 2050, Merino Industries Ltd. has been steadily and significantly reducing its dependence on Fossil Fuels to meet energy requirements for manufacturing its products. Fossil Fuels are the root cause of rise in earth's temperature.

Merino's ESG initiatives are well structured, holistic and long term in nature. These are driven through its programme named **Nirmal** and it focuses on 5 key dimensions namely Energy, Emissions, Water, Waste and Soil. Known for quality products world over that include High Pressure Laminates, Rest Room Cubicles, Modular Furniture, Particle Board and Agro Products, true to its stated Mission of Universal Weal through trade and industry, it switched over from Coal to Bio-mass (Saw Dust and Rice Husk) way back in 2005 for its Manufacturing Unit at Hapur. Entire Equipment for optimized use of Bio-Mass has been designed and manufactured in India, Merino has collaborated with a senior Professor from IIT Delhi to achieve this transition to weed out coal and replace it with Bio Mass. Merino CMD, Sh. Prakash Lohia has been spearheading the cause of ESG across the enterprise.

Since then, there has been no looking back and now, 5 out of 6 manufacturing units have switched over from harmful Coal to clean/biogenic Non-Fossil Fuel options such as Bio Mass (for Heat and Steam) and Solar PV (For electricity).

**Its energy landscape is built on predominantly sustainable, non-fossil fuel sources as is evident from**

## **the following data points for the Year 24-25.**

- 100% of process heat and steam generation came from renewable/non-fossil fuels at its manufacturing units in Hapur (U.P.), Hosur (Tamil Nadu), and Rohad (Haryana)
- 88% of process heat requirements were met through renewable/non-fossil fuel sources.
- 80% of total energy needs (heat plus electricity) were fulfilled through renewable sources.
- 29% of electricity requirements were met from non-fossil sources (25% solar and 4% biomass-fired turbines).

Use of Bio Mass instead of Coal brings added advantages of saving precious Foreign Exchange, Economic Empowerment to the Agro Sector and reducing Scope 3 emissions. A special focus of Merino's ecological efforts is on enhancing soil health and carbon sequestration, aligned with national priorities for improving farmer incomes through Merino Innovation Centre at VNIT Nagpur.

Innovative composting solution jointly developed by Merino-VNIT Nagpur Centre of Excellence to convert Paddy Straw into organic manure. During FY 24-25, Merino produced over 300 MT of Bio Nutrients by utilizing paddy straw, cane trash and potato peels (Recovered from Merino's Potato Flakes production unit based at Hapur). Composting units to convert Paddy Straw into compost have also been fielded in the state of Punjab through CII.

During the year 24-25, team Merino successfully supported plantations of over 10.55 lac saplings in collaboration with 1,250 farmers, bringing 6,952 acres of land under agroforestry. Merino continues to preserve and nurture its Miyawaki and Bamboo plantations, Collectively, these plantation and agroforestry efforts are estimated to sequester around 35,00 tons of CO<sub>2</sub> equivalent, significantly contributing to Merino's climate action goals.

Merino has adopted a comprehensive water management strategy aimed at ensuring that the volume of water consumed is balanced by the volume replenished/ Restored. Merino is close to achieving 100% water neutrality. From its humble beginning in 1974 as a small-scale manufacturer of plywood, Merino has evolved into a global leader in the laminates, panels, and interior solutions space. However, what sets Merino apart from its peers is not just its product excellence but its profound dedication to social responsibility and sustainable development through Good Governance practices.

Shri Hara Kasturi Memorial Trust stands out for creating positive change in the lives of those in need. This commitment

establishes an unwavering focus on creating positive change in society. The foundation's core values centre around protecting and promoting the three Ps: Profit, People, and Planet. Merino's commitment to society is an ongoing process and currently the following initiatives are underway.

- Swami Vivekananda Arunoday Vidyalaya (SVAV): A formal primary school up to Class VIII, located in Hapur, Uttar Pradesh.
- Support in SAVERA School: for the education of specially-abled children in Jhajjar, Haryana.
- Yogakshema: A scholarship program for academically inclined and deserving children from economically weaker communities, operational in Kolkata, West Bengal.

## **Compliance to standards include.**

- Merino currently complies with ISO 9001:2015, ISO 45001:2018, and ISO 14001:2015 standards.
- It measures its carbon footprint based on the ISO 14064 protocol through a cloud-based system.
- Merino has published results as per Environmental Product Declaration (EPD) norms.
- It has commenced CII Green Product labelling for its products.

## **Key Awards Won**

- Winner of Prithvi Awards 2023, presented at the Global Conference by ESG Research Foundation in July 2023.
- Winner of "Best Practices in Renewable Energy" Green Practices Award by CII North October 2023.
- Winner of Prithvi Awards 2024, presented at the Global Conference by ESG Research Foundation in Sept. 2024
- Winner of Asian Brands 2024 for maximizing use of Renewable Energy
- Winner of IFGE 2024 award for being a pioneer in use of Biomass
- Green Sarathi 2024 Golden Award as Clean Energy Champion by Financial Express
- Green Sarathi 2024 Silver Award for Climate Action Leadership by Financial Express
- Renewable Energy Champion awarded by CII North in June 2025
- Part of CII Clean Air CEO Forum



## Marelli Mothereson

### Marelli Mothereson: Our Commitment to Sustainable Manufacturing

At Marelli Mothereson (MMLI), sustainability is not an afterthought—it is a core driver of our business strategy. Guided by the vision of minimal environmental impact, we are embedding **ESG (Environmental, Social, and Governance)** practices across our operations and value chain.

In 2021, the **Mothereson Group became the first Indian automotive company to sign the UN Global Compact**, underlining our commitment to responsible and sustainable business practices. Today, sustainability is not just a customer requirement—such as achieving **net zero targets across value chains**—but also our responsibility toward the planet, people, and future generations.

### Our ESG Philosophy

- **Environmental Stewardship:** Reducing carbon footprint, effective waste management, and responsible use of natural resources like water.
- **Social Responsibility:** Commitment to diversity, equity, inclusion, employee well-being, and community engagement.
- **Strong Governance:** Transparency, ethical practices, and accountability form the backbone of our ESG journey.

We have cascaded ESG practices across all levels—from central leadership to associates and partners—ensuring collective ownership.

### Integrating ESG into Core Business Strategy

To become the **globally preferred solutions provider**, we have aligned our **core values with ESG principles**. Our policies and targets are based on:

- Legal and compliance requirements
- Customer and stakeholder expectations
- Global standards and certifications
- Management's sustainability vision

### Key Targets:

- Net Zero by 2040
- Water Neutrality by 2030
- 100% Green Power by 2030

**Certifications:** ISO 14001, ISO 45001, ISO 50001 (in progress: Product Carbon Footprint certification).

Already, we have achieved **40% water neutrality**, with projects underway to achieve full neutrality by 2030. Sustainability **KPIs**—such as % green power, SEC, SWC, Ltr/FG, training hours/person, and kaizen/person—are integrated into every employee's performance review.

### ESG Governance Framework

- **Dedicated Sustainability Officer** supported by **ESG Champions** for Environment, Social, and Governance.
- Sub-champions for **water, waste, energy, biodiversity, and legal compliance**.
- **Clear roles and responsibilities** from data collection to roadmap execution.
- **Monthly reviews** and reporting via **Mothereson's global Gensuite portal**.
- **External audits (EY) and BRSR reporting** ensure transparency and credibility.

Training needs are regularly assessed, and workshops are conducted to enhance employee capability.

### Achievements That Define Our Impact

#### Environmental Achievements

- **Energy Efficiency:** 1000+ ENCON projects completed in 5 years; 14% reduction in specific energy consumption.
- **Renewable Energy:** Currently at 10% RE, progressing

toward 50% by FY 2026–27.

- **Water Neutrality:** Rainwater harvesting, recharge ponds, treated water reuse, and advanced monitoring in place.
- **Waste Recycling:** Achieved 100% process waste recycling, with 99.5% waste diversion ratio.
- **Biodiversity:** Habitat restoration projects across plant premises.

### Social Achievements

- **Inclusive Culture:** 90% employee satisfaction on inclusion and engagement.
- **Community Development:** CSR programs for schools, libraries, irrigation, and waste disposal.
- **Health & Safety:** 100% safety compliance, regular audits, and establishment of a community fire station through CSR.

### Recognition & Awards

- **National Energy Conservation Award – Pune Plant**
- **National Energy Leader Award – CII**
- **Mahaurja Award – MEDA (Govt. of Maharashtra)**
- **ACMA Gold Award for ESG**
- **ISO 50001 Case Study Feature – Clean Energy Ministerial**
- **Quality Circle Awards** and multiple internal recognitions

### Looking Forward: Our ESG Vision

- **Net Zero by 2040** through renewable energy and operational efficiency.
- **100% Waste Recycling** maintained at global standards.
- **Water Neutral by 2030**, with accelerated efforts to achieve ahead of schedule.
- **Future Certifications:** ISO 14040, SA8000 by 2030.

At MMLI, **sustainability is a journey of continuous improvement.** By uniting environmental responsibility, social impact, and strong governance, we are building a future-ready organization that balances business growth with planetary well-being.





## Mr. Bharat Rnkawat

CEO & CO-Founder,

### Enlog

#### Unlocking the Negawatts in India's Buildings

The hidden energy savings—every kilowatt-hour we don't consume—that can drive climate action faster than building new power plants.

#### The Silent Drag on Climate Goals

India's buildings leak nearly a quarter of their electricity. As record demand strains the grid, a quiet efficiency movement—driven by AI and IoT—is emerging as the nation's most immediate, low-cost climate technology.

Globally, buildings consume about 35% of electricity and contribute 28% of energy-related CO<sub>2</sub> emissions. In India's booming economy, commercial and institutional buildings already account for roughly 20% of national electricity demand—and that slice is growing as urbanisation accelerates.

Studies show that 20–25% of electricity in commercial spaces is wasted—from chillers cycling in empty corridors to elevators running at peak speed on near-vacant floors. These “negawatts”—energy saved rather than produced—represent a massive, immediate lever to cut Scope 2 emissions, stabilise stressed grids, and free operating capital. Yet even as ESG investments surge past \$20 trillion worldwide, organisations of every size struggle to capture these savings.

#### ESG Ambitions vs. Operational Reality

Corporate boards make Net Zero pledges, ministries set

renewable targets, and investors price in ESG risk. But inside actual buildings, translating ambition into measurable action is far harder than a PowerPoint slide suggests.

Traditional Building Management Systems can cost crores upfront, take months to install, and require specialised technicians—timelines and capital commitments that even large campuses hesitate to accept. India's buildings are a patchwork of old wiring, mixed equipment, and inconsistent controls, making per-appliance metering or rewiring disruptive. Energy programs still depend on staff vigilance: one missed checklist and efficiency collapses.

Even sophisticated buildings rarely integrate with DISCOM initiatives like Time-of-Day pricing or demand response, leaving valuable negawatts untapped. The result is underused hardware, curtailed renewables during peaks, and ESG goals that remain aspirational.

#### The Birth of Enlog

Seeing this gap, Bharath Rankawat, an automotive R&D engineer turned entrepreneur, envisioned a solution to bridge boardroom ESG ambition and operational reality. He assembled a multidisciplinary team of data scientists, hardware engineers, and strategists united by a belief that efficiency should be democratised, not reserved for Fortune 500 campuses.

The founding insight was radical in its simplicity: autonomy—not dashboards—would unlock scale. If intelligence could be embedded directly into the flow of electricity, buildings of every size could optimise themselves—no rewiring, no heavy capex, no manual babysitting.

#### Autonomous AIoT Energy Intelligence

Enlog pairs plug-and-play hardware—Enmate for room-level installations and Enpro for building-level monitoring—with Ensyte-AI, a proprietary machine-learning engine trained on billions of data points.

Installed at the MCB panel in under an hour, the system uses Non-Intrusive Load Monitoring (NILM) to disaggregate appliance-level consumption from a single point—eliminating the need for per-appliance sensors. It predicts equipment health, detects arcing or overload risks before they escalate, and autonomously orchestrates heavy loads to flatten peaks and reduce fire hazards.

Crucially, it is grid-ready—able to respond instantly to dynamic pricing or demand response—and future-proofed for EV load orchestration and negawatt trading. Every Enmate and Enpro device is designed and manufactured in India, proving that local innovation can produce world-class

climate tech capable of competing globally.

## Challenges on the Way

Achieving over 95% NILM accuracy in India's variable grid conditions required proprietary algorithms and relentless field trials. Convincing operators that AI could adjust loads without compromising comfort meant months of transparent pilots and trust-building.

Before outside capital, Enlog bootstrapped early deployments. Later, \$100 k in angel funding and \$200 k from Vinnars validated the model. The team also reframed efficiency as a profit centre, showing CFOs that saved kilowatts equate to freed capital and potential carbon credits.

## Measurable Impact

Enlog has autonomously managed more than 30 GWh of electricity, achieving an average 23% reduction in wastage and avoiding over 5,500 tons of CO<sub>2</sub>—tangible Scope 2 emission cuts. The company generated ₹4.38 crore in FY 23–24 with 75% gross margins.

- **Compass Kitchen, Mumbai:** Enmate revealed excessive HVAC cycling and poorly timed refrigeration defrost cycles. Within a month, energy bills dropped 22%, and VRV system life extended by three years.
- **Gurugram Commercial Hub:** Despite an existing BMS, Enlog detected an arcing fault invisible to other systems—preventing potential fire risk and cutting overall consumption by 25%.
- **Co-living Provider (multi-city):** Automated load scheduling and temperature control across hundreds of rooms stabilised bills and improved tenant comfort with no added staff.

## Beyond SMBs

Large campuses face similar blind spots: underutilised BMS, legacy equipment, and missed demand-response opportunities. Enlog's autonomy layer enhances existing systems, offering real-time orchestration without heavy capex. Whether a metro hospital, an IT park, or a manufacturing HQ, Enlog turns inefficiency into financial and environmental dividends.

## Aligning with National & Global Goals

India's Net Zero 2070 target depends on demand-side

efficiency as the fastest lever to cut coal dependence. DISCOM reforms and dynamic pricing initiatives benefit from Enlog's ability to execute load shifts instantly, enabling higher renewable penetration.

Sustainable Development Goals—particularly SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action)—hinge on smarter consumption. Automated, verifiable data streams from Enlog also simplify audits and support participation in emerging carbon markets.

## Lessons for the ESG Community

- **Efficiency is infrastructure:** treat it as critical as generation or transmission.
- **Autonomy beats awareness:** dashboards inform, but algorithms act.
- **Inclusivity fuels innovation: diverse,** collaborative teams out-innovate incumbents.
- **Partnerships multiply impact:** utilities, corporates, and policymakers must co-create frameworks for grid-interactive buildings.

## Looking Ahead

By 2027, Enlog aims to scale to one million endpoints, manage over 500 GWh annually, enable negawatt trading with DISCOM partners, and integrate EV load balancing to support India's electrified mobility future—showcasing Indian-made AIoT as a credible ESG export.

## Closing Reflection

"Efficiency isn't the side show—it's the main stage of climate action. Every kilowatt we save today is a coal plant we don't have to build tomorrow. At Enlog, we're proving that intelligence—not size—decides impact. From boutique hotels to skyline towers, any building can become a silent power plant of savings."



## Dr. Deepak Jain

**Founder, Vijayash Foundation | Chairman, NMA ESG Committee | AIMA Governing Council, Member (2025–27) | Motivational Speaker & Conscious Leadership Coach**

Every inspiring journey often begins with challenges, and the life of CS Deepak Jain is a true reflection of this.

In 2007, while working in a medium-sized organization, he faced significant professional challenges. At that time, he was an introvert, a reserved individual, often struggling to express himself fully. A series of major ups and downs further tested his resilience and confidence.

Rather than giving up, he chose to transform himself. He engaged in self-development activities such as yoga, motivational readings, self-help practices, Art of Living programs, and public speaking. Within two years, this conscious effort led to a remarkable turnaround. By 2009, he bounced back successfully in his organization and, over time, began to evolve as a motivational speaker, addressing topics such as stress management, happiness, and work-life balance.

### **A Bold Transition – From Corporate to Social Assignments**

In October 2016, he made a defining decision to step away from his corporate career to focus on social assignments and learning & development initiatives.

He founded the Vijayash Foundation, a platform devoted to:

- Conducting learning and development sessions for children, youth, professionals, and society.
- Promoting happiness, well-being, conscious leadership, and sustainable development.
- Educating and nurturing less privileged children, equipping them with skills for a brighter tomorrow.

Through the Foundation, he inspired and empowered thousands of individuals by creating awareness on leadership, mindfulness, sustainability, and balanced living.

### **Resilience in Adversity – The Covid-19 Phase**

The year 2020, during the Covid-19 pandemic, brought another turning point. Life presented fresh adversities, but once again, he embraced transformation. This time, he turned inward through meditation, particularly Transcendental Meditation (TM), which deepened his clarity, resilience, and consciousness.

Post-2020, his focus expanded from individual transformation to global challenges and national priorities, with a renewed commitment to:

- **ESG (Environmental, Social, Governance)**
- **Sustainability and Climate Action**
- **AI Governance and Ethical Technology**
- **Conscious Leadership and Sustainable Development**

This phase marked the evolution of his work into aligning personal growth with planetary well-being.

### **Leadership in ESG & Sustainability**

His professional leadership in ESG and sustainability has been impactful and inspiring.

- From **January 2023 to June 2025**, he chaired the DMA ESG Committee, where he led numerous initiatives to spread ESG and sustainability awareness across industries, academia, and society.
- Since **July 2025**, he has been serving as **Chairman of the ESG Committee of Noida Management Association (NMA)**, where he is also a **Board Member**.
- In **2025**, he was elected as a **Governing Council Member of the All India Management Association (AIMA) for the term 2025–27**, a prestigious recognition of his contributions to governance and leadership at the national level.

## During his tenure at DMA, and now at NMA, he has:

- Conducted **awareness programs and workshops** in colleges, corporates, and professional institutions.
- Organized significant events such as the **Global Governance Summit 2024**, bringing governance and sustainability into mainstream discussions.
- Designed and delivered **comprehensive ESG & Sustainability training, including a 20-hour program for MBA students**, preparing youth to become future leaders of change.

His leadership has established ESG and sustainability not just as compliance measures but as **core principles of responsible growth and national development**.

## Alignment with Viksit Bharat @ 2047

Deepak Jain's journey is closely aligned with the vision of Viksit Bharat @ 2047. He strongly advocates that India's growth story must be rooted in:

- **Sustainability**
- **Inclusivity**
- **Good governance**
- **Technological responsibility**

At a time when the world is grappling with the climate crisis, AI disruptions, and geopolitical conflicts, he emphasizes the need for Conscious Leadership and Cosmic Consciousness—approaches that combine self-awareness, ethical decision-making, and harmony with universal values.

## Milestones in the Journey

- **2007–2009:** Overcame professional struggles through yoga, motivation, and self-help; rebuilt confidence.
- **2009 onwards:** Emerged as a motivational speaker on stress management, happiness, and work-life balance.
- **2016:** Left corporate role; founded Vijayash Foundation to focus on social impact and L&D.
- **2016–2020:** Conducted training sessions for children, youth, professionals, and underprivileged communities.
- **2020:** During Covid, embraced Transcendental Meditation; expanded mission to ESG, sustainability, and AI governance.
- **2023–2025:** Chaired DMA ESG Committee, leading high-impact ESG initiatives and the Global Governance Summit.

- **2025 onwards:** Chairman, NMA ESG Committee and AIMA Governing Council Member (2025–27), continuing national-level leadership in sustainability and governance.

## Personal Philosophy – Higher Self and Conscious Leadership

His philosophy is rooted in the belief that:

- *Self-realization builds Conscious Leaders.*
- *Conscious Leaders create Sustainable Organizations.*
- *Sustainable Organizations contribute to a Viksit Bharat and a better world.*

He aspires to do something **unique and impactful**—to move individuals and organizations toward their higher self, promoting leadership guided by **cosmic consciousness, compassion, and sustainability**.

## Closing Note

CS Deepak Jain's journey reflects resilience, transformation, and purpose. From being an introvert facing professional setbacks in 2007 to becoming a national thought leader in ESG, sustainability, governance, and conscious leadership, his life is a testimony to the power of perseverance and vision.

As a motivational speaker, trainer, ESG leader, and governance expert, he continues to inspire thousands, contributing to both individual growth and national progress.

His story is not just about personal success—it is about creating ripples of positive change that align with the dream of a Viksit Bharat and a sustainable world.





**Mr. Sidramappa**

**Shivashankar Dharane**

**Techno-societal Innovations & Patents – Sustainability of Water, Energy, Agriculture & Infrastructures**

**Abstract:** My all innovation, inventions and patents that are related to water sustainability, ground water recharge, flood control, renewable energy, agriculture, earthquake-resistant structures and structural elements, sports bats, large-scale bio toilets, etc., improve the living standards and economy of both individuals and the country as a whole. They also increase employability in rural areas and strengthen the positions of startups, non-governmental organizations, and institutes, and have the potential to become significant entrepreneurs. Additionally, every innovation and patent creates financial chances for everyone from the government and different funding bodies. Moreover it protects lives during earthquakes, landslides, and floods.

The various problem addressed and solved, invented, and advantages of a twenty six granted and seventy published patents are described here, along with the corresponding patent/application numbers in bracket.

**A. Total Water sustainability:** The country and globe is facing many more problems of water scarcity due to climate change, drought, summer, uneven rainfall, contamination of water, etc. are solved in the novel patents.

Simple and effective method of Ground Water Recharge: One easy and efficient way to recharge ground water is to raise the

ground water table more quickly [489038]. Water Sustainability & Flood Control: To provide total water sustainability and flood control consists of un-interrupted effective water supply even from water scarce bore wells by using the existing resources. Even it controls the floods in towns and rivers too. Moreover it converts the non-irrigated land in to irrigate land [516783]. Further the question arises to get the ground water even from water scarce bore wells with minimum power supply is explained in the patent [537093] Appari's Smart Submersible Pump and Accessories for Un-Interrupted Water Supply wherein a smart submersible pump is designed by using the various capacities of pump motor/s connected in parallel and monitored by sensors as per the water level in the bore well [537013]. Further to make the optimum use of water for irrigation purpose Subsurface - Drip Irrigation and Sub-surface Drip Irrigation with aeration are deigned wherein optimum water and fluid manures are directly supplied to the roots of crops and minimizes the weed growth and which is cost effective too [519916, 528672]. In case of rainy reasons the nalls, streams and rivers are carrying the muddy water, and uneven rain if the crops require to be irrigated from the available muddy water in the respective streams and rivers by Using Screw Conveyor System [202121021967], the same principle is used to get the water from the bore wells located in boulder regions. Now further question arise to get the ground water without conventional power supply, by using renewable wind energy from even deeper and water scarce bore wells, which is quiet beneficial in very heavy droughts; and cost effective is solved in Un-Interrupted Water Supply from Multiple Water Sources (Zero Budget Water Supply wherein the continuous 24 X 7 water supply is possible depending upon the availability of water and wind, without any other power requirements [558983]. Further the same structures are being used for Artificial Rain Cum 24 X 7 Water: the artificial rain is provided by using the towers and injecting the compressed and cooled air and necessary seeding agents for artificial rain, which is stored and cooled in the air compressor through the nozzles t the top of the towers; in clouds by considering the various factors and metrological studies. The same towers are being used for producing the wind energy by oscillatory motion or rotary motion which is used to reciprocate the reciprocating pumps connected to various water sources [202421062352]. It provides to supply and distribute the water with minimum required pressure to avoid the pits to collect the water and minimizes the water borne diseases; Smart Urban And Rural Water Supply By Using Existing Resources wherein the height and number of water tanks are minimized, even long lengths of pipe lines and canals too. [202121021966]. For drinking purposes; A Bio-Compound And An Apparatus For Water Purification is invented and designed [479685] wherein a bio-compound consisting of Banana stem extract, stem and root extract, Alum compound and activated Charcoal, is used by dissolving into the water to clean the water and make it disinfected.

**B. Energy:** A Method Of Embedding Arrays of Convex Lenses on Solar Panels: Optical system to enhance efficiency of solar photovoltaic panels wherein the optical system to enhance efficiency of solar photovoltaic panels wherein light concentrates on solar array. The system comprises essentially an array of convex lenses disposed of with embedded in an optically flat glass plate fixed on top of solar panel or fixed directly over each cell in the solar panel array [403224]. An Efficient Solar Thermal Receptor Array For Water Heating wherein the basic element in any solar water heating system is an array which stores water and heats up by absorbing solar thermal radiation is enhanced by the thermal heating by providing an array of convex lenses embedded on to the solar thermal receptor which may have any regular geometrical shape like a circular container or a conventional tube array as is being used generally [368071]. Further, Enhancement of Efficiency-Solar Dryer; a simple and cost effective method is used to enhance the efficiency of present system of all types of solar dryers by simple technique. Wherein the layer of arrays of convex lenses is fitted in the cover glass (preferably toughened glass) or inbuilt system of arrays of convex lenses are used to enhance the efficiency of the solar dryers. The principle of generating and increasing more heat and light by using convex lenses is used for solar dryers by providing additional cover glass containing the arrays of convex lenses. The glass cover may be attachable & detachable or inbuilt as per the requirement. The fresh air can also be heated in the embedded systems of toughened glass pipes in which the convex lenses are fitted well in position/manufactured [451026].

**C. Agriculture:** Sustainable Agricultural Seeds For Smart Farming is developed and tested in the farms wherein the yields of the crop is more and even it do not require the soil testing. Such harvested mixed products of the crops are graded as per the requirements and stored in bunkers and silos [202421059660].

Zero Budget Farming – Sugarcane wherein it is a zero budget/maintenance sugarcane farming wherein the method of cultivation is novel which enhances yields as compared to general conventional methods [202021034127]. Cost Effective Method of Storage of Onion and Agriculture Grains: wherein the method for storages of onion, potato, garlic and related agriculture grains consists of supplying air naturally and artificially [202121020778]. Further, Eco – Friendly and Cost Effective Method of Storage of Onion and Agriculture Grains wherein the method for storages of onion, garlic and related agriculture grains. The method consists of supplying air naturally and artificially by using the various types of

fans, air compressors and vacuum pumps. [202121020910], moreover, A lot Based Efficient and Economical Ferrocement Onion Storage With Air Compressors wherein the IoT-based technique for storing onions, garlic, and related agricultural grains [202421000629]. And cold storages [202321005797],

**D. Equipments:** Multipurpose Circular Air Heater With 360 Degrees Effect Cum Fan and air cooler [202221075143, 202221074080, 560666]

**E. Infrastructures:** Various earthquake resistant structural components and structures are invented and designed which saves the lives and infrastructure.

Cost effective, lightweight, hollow and reinforced bubble bricks are invented which are used for high rise building and moreover which do have more load carrying capacities [501089]; further its strengths are enhanced by using the novel profile of the reinforcements. Enhancement of Behavior of RCC Slabs with Different Shaped Profiled of Reinforcements the different profiles of the reinforcements are used which enhances the behavior of slabs by increasing its load carrying capacity, moment carrying capacity, shear carrying capacity, twisting moment carrying capacity with reduced deflections. Also it enhances the creep and fatigue performance of RCC slab. As well the slabs designed with different profited reinforcement takes into account the reversible loads/stresses, so it can be used for precast and cast in situ slabs [455691]. Further, Enhancement of Behavior of Ferrocement Slabs with Different Shaped Profiled of Skeletal Reinforcements [528301]. Moreover, RCC And Ferrocement Bubble Deck Slabs eliminates the limitation of bubble deck slab. It improves the shear resistance of the slab. The main difference between a solid slab and the voided biaxial slab refers to shear resistance. Due to the reduced concrete volume, the shear resistance will also be reduced. Also it takes in to account the reversal load carrying capacity [314770]. Composite RCC/Ferrocement Grid Slab wherein the grid beams are made up of hollow circular cross sections of preferably mild steel and hollow slabs are prepared by using foreign material like HDPE balls/pods and concrete. The said grid slab have strength, impermeability, light weight, good appearance, reversal load carrying capacity, more moment carrying capacity, more shearing capacity, ductility and can be used for large column free area. The skeletal steel can also be used for beams and slabs in the form of alternate triangular trough, trapezoidal trough, rectangular trough, corrugated trough in both the directions of the slab [412677]. Moreover, Two Way Folded Plates to Enhance the Load Carrying Capacities of Roofing Elements enhance the load carrying capacities of roofing elements. The folded plates are two way

in X and y directions [498398]. Further to make Earthquake Resistant Ferrocement Hollow Columns and Cavity Walls invented [426068]. As well Earthquake Resistant Circular Columns with Main Spiral Reinforcement: Earthquake resistance circular columns with main spiral reinforcement invented [351842]. As well as Reinforced Concrete Slabs and Beam Structure for Buildings and Bridges for Reversal of Loading is designed and patented [503699]. Beams and Columns with Shear Reinforcement and Stirrups which have good earthquake performance and more load carrying capacity 419574]. Earthquake resistance overhead water tanks and structures to withstand earthquake shocks more effectively is patented [478105]. Enhancement of Load Carrying Capacity of RCC Isolated Column Footing is also published; the said isolated column footing is best suited for the heavy loads and uncertainty of moments etc. which occurs due to wind and earthquakes, etc. The same concept can also be used in case of circular slabs. [202021055619, 202021055551]. Earthquake Resistant RCC And Ferrocement Main Continuous Spiral Reinforced Columns, Beams And Joists wherein the columns are made up of reinforced cement concrete (RCC) and Ferrocement provides the additional folded plate, shell actions can be developed in the reinforcement to account the various stresses such as axial, shear bending, torsion [202021054105, 202021054094]. As well as RCC And Ferrocement Honey-combed-Sandwiched Bubble Deck Slabs which are made up of reinforced cement concrete (RCC) and Ferrocement; Wherein the additional folded plate, shell actions can be developed in the reinforcement to account the membrane stresses [202021053664]. Enhancement of Load Carrying Capacity of RCC/Ferrocement Cantilever Slabs and Beams provided additional truss actions and carries more load and are used for long spans [202021051583]. Enhancement In Load Carrying Capacity of RCC Elements By Using Mild Steel Reinforcing Bars With Different Cross Sectional Shapes are also invented [201821028414, 488477]. Solar Roof Panels Cum Water Heating Panels is a simple and cost effective for low cost housing. [202121025096], RCC and Ferrocement Railway Slab Sleepers And Road Pavements are designed which provides a dual purpose and it do not requires the prestressing and moreover it is very cost effective [202121022986]. A Smart Multipurpose Fan Cum Wind Turbine which is having dual-serving multipurpose assembly of blades functioning as a wind turbine as well as a fan with numerous applications is having enhanced efficiency.

**F. Education:** A Multi-Legged Roller Scale and triangular roller scale, a product is used for various purposes can be used as per the requirements [202321035340, 202321033859].

**G. Sanitations:** Large scale bio-toilets for crowded areas and holy-places [202321025522]

#### H. And many more

**COCLUSION:** My all innovations and patents serve the country and globe by enhancing the economy of one individual and save the lives and infrastructures, etc.





## Mr. Shivaji Jadhav

**Sr. Vice President & Head-EHS & Sustainability**

### Aragen Life Sciences Limited

#### **Aragen's ESG journey-challenges faced, milestones achieved, and what comes next:**

At Aragen, sustainability is not a parallel agenda-it is the way the company builds science, serves customers, and shows up for communities. That ethos is captured in a simple, durable idea: **Innovation in Every Molecule, Sustainability in Every Action.**

Aragen's ESG story offers a blueprint for how a rapidly scaling research, development and manufacturing partner can embed environmental stewardship, social progress, and robust governance into daily decisionmaking and longterm value creation.

#### **Challenges along the way:**

Like many fast-growing organizations, we encountered several hurdles in shaping a unified ESG approach.

**Data collection and standardization**-One of the earliest challenges was gathering accurate data on energy, water, waste, and emissions across multiple sites. Each facility had its own reporting practices. Aligning them meant developing new standard operating procedures, training teams, and investing in systems for real-time monitoring.

**Resource constraints**-Sustainability projects require both capital and time. Balancing day-to-day operational demands with the long-term investments needed for water recycling, renewable energy, or new safety infrastructure was not always easy. We had to plan carefully and demonstrate the business

value of each initiative to secure buy-in.

**Cultural change**- ESG is ultimately about people. Shifting mindsets from "compliance" to "commitment" took ongoing communication and leadership example. Employees needed to see how environmental performance, workplace diversity, and governance practices linked directly to Aragen's success.

**Evolving stakeholder expectations**-Our customers, investors, and regulators have raised the bar on sustainability. Each year brings new disclosure frameworks and metrics. Keeping up with these expectations and aligning our efforts with recognized global standards required constant learning.

These challenges, however, became catalysts for innovation. They pushed us to create more robust systems and clearer priorities.

**Building a framework for action:** To address these challenges, we gradually built a stronger ESG framework anchored on four pillars: environment, social responsibility, governance, and transparency.

**Environment**-We set out to reduce our environmental footprint by focusing on water, energy, emissions, and waste. We mapped our usage and risks at each location—Hyderabad, Visakhapatnam, Pune, Bangalore, and California. Identified opportunities for conservation and resilience. Projects such as water recycling, rainwater harvesting, and energy efficiency upgrades began to take shape.

**Social Responsibility**-We expanded our efforts to create a safe, inclusive, and equitable workplace. This included strengthening our diversity initiatives, improving occupational health and safety systems, and extending our community outreach in education, health, and environmental awareness.

**Governance**-We enhanced our policies on ethics, compliance, and supply chain sustainability. Aragen endorsed the Pharmaceutical Supply Chain Initiative's principles on human rights, ethics, health and safety, environment, and management systems, and follows them in both letter and spirit.

**Transparency**-We committed to measuring and disclosing our progress through global platforms such as EcoVadis and CDP. This not only holds us accountable but also signals to stakeholders that we take ESG seriously.

**Concrete targets and interventions:** Aragen set clear and measurable ESG goals:

- Zero landfill organisation status by 2025
- 25% gender diversity by 2026

- Reduce Scope 1, 2, and 3 greenhouse gas emissions by 50.4% by FY2033, with FY2023 as the base year — and 90% reduction by FY2050.
- Water neutrality by FY2035

### From a bold reset to a purpose led ESG roadmap:

- Aragen's ESG chapter began in 2021, when the company—formerly known as GVK BIO—unveiled a renewed brand promise and purpose: *“Together Ahead”* and *“In every molecule is the possibility for better health.”* The rebrand signalled a pivot from “service provider” to “global solutions partner,” aligning scientific ambition with societal impact.
- That alignment is now operationalized through annual sustainability reporting grounded in the Global Reporting Initiative (GRI), integration with the UN Global Compact and the UN Sustainable Development Goals, and thirdparty assurance, foundational steps that give stakeholders transparent, decisionuseful disclosures.
- Aragen's disclosures span its global footprint R&D campuses at Nacharam & Mallapur (Hyderabad) and Bengaluru; manufacturing at Nacharam (Hyderabad) and Visakhapatnam; and a Biologics R&D facility in Morgan Hill, California, ensuring accountability across diverse operations.
- The company uses FY2021 as a baseline for performance tracking, a choice that promotes comparability across years as programs matures.

### Milestones that moved the needle:

#### 1. Climate action with sciencebased targets

In August 2024, Aragen became the first Indian CRDMO to receive Science Based Targets initiative (SBTi) approval for both nearterm and netzero targets, committing to reduce absolute Scope 1, 2, and 3 emissions by 50.4% by FY2033 (baseline year FY2023) and by 90% by FY2050, reaching netzero by 2050.

This anchors Aragen's decarbonization pathway in the Parisaligned 1.5 °C trajectory, strengthening the credibility of its climate claims.

By FY2025, 24.7% of total energy consumption was from renewable sources, with the California facility running on 100% renewable power, and plans in place for advancing for additional solar capacity at Hyderabad, Bengaluru, and Visakhapatnam.

Aragen is also greening its logistics by partnering with DHL Go-Green to incorporate Sustainable Aviation Fuel (SAF) in shipments, tackling a hardtoabate category in Scope 3.

To accelerate the transition, Aragen's public targets include lifting the share of renewable energy (GJ) from 27% to 52%, a blended strategy of onsite generation and green power procurement.

#### 2. Water stewardship in a waterstressed geography

Aragen has invested in Zero Liquid Discharge (ZLD) and highrecycle systems at key sites, maintaining ZLD at the Hyderabad manufacturing and Bengaluru R&D facilities, materially reducing freshwater withdrawals and effluent managing risks.

In FY2025, the company achieved a 29% increase in waterrecycling capacity and expanded rainwater harvesting, while pursuing water neutrality by FY2035.

#### 3. Waste and circularity

A defining milestone came in July 2024 when Aragen reached zerolandfill organisation status for hazardous waste across operations; nonhazardous waste streams are now fully recycled or reused.

This goes beyond compliance and reflects a multiyear push to reengineer waste handling, increase material recovery, and minimize environmental burden, in line with the company's 2025 zerolandfill ambition.

#### 4. Safer, smarter labs and plants

Aragen's integrated EHSS system accredited to ISO 14001 (environment), ISO 45001 (OH&S), and ISO 50001 (energy) is the backbone of its operational ESG.

In FY2025, Aragen lowered its Total Recordable Incident Rate (TRIR) 0.16 from 0.26 compared to the previous year through audits, enhanced training, and behaviourbased safety programs.

External recognition has followed: the Visakhapatnam manufacturing unit has received multiple International Safety Awards from the British Safety Council, while CII platforms have consistently recognized sitelevel EHS excellence.

#### 5. People, culture, and inclusion

For the sixth consecutive year, Aragen earned the Great Place to Work® certification, reflecting the company's in-

vestment in employee wellbeing, learning, and trust.

Targeted inclusion programs are building a stronger pipeline: the Women in STEM Leadership Program mentored 100+ earlycareer scientists, while the enterprise works toward 25% gender diversity by 2026. Achieved 22.3% gender diversity at workforce in FY25.

## 6. Community impact

Aragen's CSR portfolio prioritizes education, environment, and healthcare. The company has adopted multiple Zilla Parishad schools across Telangana and Andhra Pradesh, improving learning environments for 1,000+ children annually; contributed to Haritha Haram treeplanting; developed public parks/green belts in Mallapur (Hyderabad) and Bommasandra (Bengaluru); and constructed 125 household and biodegradable toilets in underserved habitations.

During COVID19, Aragen provided ₹50 million worth of PPE to government hospitals in Telangana and supported migrant communities, evidence that the company shows up for society in a crisis.

## 7. External ratings and recognition

In December 2024, Aragen received EcoVadis Platinum, placing it in the top 1% globally-the only Indianheadquartered company in CRDMO sector to earn Platinum medal in the 2024 assessment. The company is improving EcoVadis score starting with 46 in 2021 to 82 in 2024-attests to disciplined, yearonyear progress.

In 2025, Aragen was named among AsiaPacific's Climate Leaders by the Financial Times, reflecting measured decarbonization gains at pace and scale.

Received "A", "A-" & "B" rating in supplier engagement, water security & climate change respectively in CDP 2024 disclosure.

### How we executed: strategy, systems, and science:

**Clear governance & transparent reporting-**Aragen's FY24 and FY25 sustainability report discloses performance against material topics, with FY25 reporting prepared in reference to GRI 2021 Standards and assured by an independent external firm.

Alignment with UNGC, GRI South Asia Charter, and CDP disclosures on climate and water strengthens consistency with global frameworks.

**Decarbonization plan embedded in operations-**The

SBTivalidated glidepath is backed by concrete levers on-site solar, green power procurement, energy efficiency, green logistics (SAF), and process innovations such as continuous manufacturing that reduce solvent use and waste.

**Water programs designed for local realities-**In a city where groundwater levels have shown worrying trends, Aragen's approach ZLD, highrecycle, rainwater harvesting, is both riskappropriate and communityminded, culminating in a 2035 waterneutrality commitment.

**Circularity in waste-**Achieving zerolandfill organisation for hazardous waste required tightening vendor due diligence, improving segregation at source, and maximizing beneficial reuse, an operational transformation that few companies of Aragen's scale attempt while simultaneously expanding capacity.

**A resilient, responsible supply chain-** With PSCI membership and supplier codes embedded in contracting and 100% compliance with the Supplier Code of Conduct now disclosed, Aragen is aligning procurement with ESG outcomes and engaging suppliers to reduce Scope 3 emissions.

**Safety, always-**EHS management at Aragen is not a checklist-it is a culture reinforced by ISO certifications, periodic audits, behaviourbased programs, and leadership accountability, resulting in improved TRIR and multiple thirdparty safety awards.

### What we learned along the way:

- 1. Targets must be sciencebased and time-bound-**SBTi validation transformed climate intent into a verifiable plan and galvanized internal teams to deliver, measure, and improve, year after year.
- 2. Local context matters-**In Hyderabad and Bengaluru, ZLD and recycling are nonnegotiable because water scarcity is a lived reality, not an abstract risk score.
- 3. Culture compounds-** Recognitions such as Great Place to Work® follow consistent investments in learning, inclusion, wellness, and safety. A culture of trust is a force multiplier for ESG action.
- 4. Growth and sustainability can reinforce each other-** A ₹2,000crore expansion can and should be designed with energy, water, and waste performance locked in from day one.

## The road ahead:

Aragen's ESG priorities for the next horizon are clear:

- Deliver the SBTi glidepath-50.4% absolute reduction in Scopes 1,2&3 by FY2033; netzero by 2050—by scaling renewables, deepening efficiency, electrifying where feasible, and expanding lowcarbon logistics.
- Advance toward water neutrality by FY2035, coupling continued ZLD, recycling, and rainwater harvesting with watershed collaborations that strengthen regional resilience.
- Maintain zerolandfill for hazardous waste and innovate further on circularity and material recovery in nonhazardous streams.
- Increase renewables in the total energy mix to 52%, backed by onsite generation and credible procurement.
- Deepen inclusion and safety, sustaining GPTW momentum, expanding Women in STEM pipelines, and pushing TRIR down with technology, training, and leadership.
- Broaden disclosures and assurance, continuing annual GRIaligned reporting with independent verification and benchmarking via EcoVadis, CDP, and peer indices.

## Why this journey matters—beyond Aragen:

A CRDMO sits at the nexus of discovery, development, and manufacturing, that vantage point allows Aragen to amplify climate and social outcomes far beyond its fence line, by bringing green chemistry, energyefficient processes, and ethical procurement to hundreds of customer programs and thousands of supplier relationships.

This multiplier effect is part of why the company's sustainability work has attracted recognition from EcoVadis Platinum to AsiaPacific's Climate Leaders and why its example is relevant to the broader life sciences ecosystem.

Aragen's journey shows that ESG is not a side project; it is a capability, one that compounds when science, systems, and soul pull in the same direction. The company's next decade will be defined as much by molecules as by megawatts, millilitres, and mindsets and if the past few years are any guide, *Together Ahead* is more than a promise; it is a plan.





## Suzlon Energy Ltd.

### PRODUCT STEWARDSHIP AND LOWEST PRODUCT CARBON FOOTPRINT WTG, S144

Suzlon is working towards accelerating sustainability and innovation growth not just at organizational level but at product level. The R&D technology, design and manufacturing of products across entire lifecycle resonates with Suzlon's vision of being a leader and progress forward faster with growth that can inspire globally for resilient future. Suzlon's latest fleet of turbines, S144 have lowest carbon footprint of 6.16 gCO<sub>2</sub> eq/kWh throughout the lifecycle which is certified by third party, providing traceability and reliability to the sustainability disclosures. The lowest carbon footprint is being recognized globally and has brought many laurels, awards and accolades to the organization.

The lowest carbon footprint is attributed to resource optimization, sourcing locally within India, sustainable manufacturing practices, use of lowest carbon steel, working along with Tier-1 critical suppliers to progress towards decarbonization actively and also extension of Product Life Cycle.

### Launch of S144-3.0 Low-Carbon Turbine

In FY24-25, we introduced a new wind turbine model, S144-3.X, with a larger rotor and higher power rating, which means each turbine now generates more electricity using fewer materials. This upgrade improves energy performance and lowers emissions.

### Product Highlights : S 144-3.0

- Has a PCF of 6.17 gCO<sub>2</sub>e/kWh (cradle to grave), lower than 8.83 gCO<sub>2</sub>e/kWh of Suzlon's conventional turbines and the industry benchmark of 7 gCO<sub>2</sub>e/kWh, as per ISO 14067 and ISO 14040/14044.
- Uses fewer materials, with a tubular tower requiring only 38.984 MT of steel versus 103.821MT in conventional turbines.
- 225 kg of steel per tower is sourced from scrap, reducing the need for virgin steel.
- Offers an extended product life of 25 years, up from 20 years in earlier models ( validated by a third-party review), reducing waste and material use.
- Received a Lowest Product Carbon Certification aligned with ISO/IEC 17029:2019 and ISO 14021:2016 + Amd 1:2021, which governs the accuracy

### Certified Lowest-Carbon Wind Turbines – S120 and S144

In FY24-25, we achieved PCF certification and third-party verification for the S120 and S144 WTG models, using a cradle-to-grave approach. The PCF and Life Cycle Assessment (LCA) calculations were carried out by ERM, following ISO 14067, ISO 14040, and ISO 14044 standards. Independent verification of the PCF results was conducted by TÜV SÜD. The lowest product carbon footprint verification was carried out by Indian Register Quality Systems (IRQS). Additionally, PCF certification for the castings used in production was obtained from Bureau Veritas.

### Case Study: Suzlon's High Temperature Variant (HTV) Turbines

We recognized a critical challenge in our existing HTV-light wind turbine models. These turbines, while effective in moderate conditions, were not optimized for deployment in regions with ambient temperatures exceeding 47°C. This gap risked performance degradation, higher maintenance requirements, and potential non-compliance with the updated CEA guidelines. For our customers operating in high-temperature zones, this posed a serious risk to energy generation, reliability, and regulatory approval.

To address this, we developed the High Temperature Variant (HTV) of our S144 turbine. This design enables reliable operation in ambient temperatures up to 52°C

while ensuring compliance with regulatory standards. We deliberately kept design changes minimal compared to the HTV-light baseline, ensuring efficiency and faster deployment. In addition, we introduced a retrofit kit for turbines already deployed in such regions, creating value for existing customers.

#### LCA Findings : S120-2.xMW Turbine

90–92% of the materials used in the turbine can be recycled at the end of their life. No significant environmental or social risks associated with the product lifecycle were identified.

#### Impact

**Enhanced Reliability:** The HTV turbines operate efficiently under extreme conditions, significantly reducing the risk of thermal stress and component failure.

**Sustainable Design:** With better thermal management and improved cooling, the turbines now deliver higher availability and extended component life.

**Stronger Relationships:** By aligning with CEA requirements and addressing real-world challenges for our clients, we strengthened long-term partnerships and reinforced confidence in Suzlon’s ability to deliver.

**Market Growth:** The initiative positions us for expansion into high-temperature geographies, while also opening opportunities for aftermarket revenue through retrofit solutions.

#### LCA for S120-2.x MW Wind Turbine

A comprehensive LCA was undertaken for the S120-2.x MW turbine & S144-3.x MW turbines aligned with ISO 14040:2006, ISO 14044:2006 and EN 15804:2012+A2:2019 standards. Using a cradle-to-grave approach, the study covered all stages, from raw material extraction and manufacturing to installation, operation, and end-of-life disposal. The insights will help us identify opportunities to strengthen sustainability across the entire turbine lifecycle, from concept to decommissioning.

#### LCA Findings : S120-2.xMW Turbine

90–92% of the materials used in the turbine can be recycled at the end of their life. No significant environmental or social risks associated with the product lifecycle

The initiative under Product Stewardship of Suzlon is a testament of work on ground globally after integration of supply chain, raw material sourcing, traceability principles and is aligned to Circularity goals of Suzlon. It is well articulated not just with vision but with roadmap of Suzlon

#### 1. Sustainability & ESG Roadmap (FY 2024–26)

- Short-term (FY 24–26): Achieve Organizational Sustainability Excellence—enhanced ESG disclosures, green governance.
- Mid-term (FY 26-30): Drive Product Stewardship—roll out low-carbon, high-efficiency turbines like the S144 series.
- Long-term (FY 30 and beyond): Enforce Supplier Sustainability—assess and engage 89.5% of Tier 1 suppliers on sustainability metrics (Suzlon Energy, Suzlon Energy).

#### 2. Environmental & Emissions Commitments

- Net-zero Scope 1 & 2 emissions: Targeted for well before 2035
- Zero Waste to Landfill: Achieved 90% group-wide; aiming for full ZWTL by 2028
- Product Carbon Footprint: Continue low-carbon turbine output (~6.16 g CO<sub>2</sub>/kWh) via S144 series

#### 3. Corporate Social Responsibility (CSR) / Suzlon Foundation (“SUZTAIN”)

Aligned with five capitals (financial, natural, social, human, physical), their goals include:

1. Minimizing environmental footprint
2. Empowering local communities
3. Fostering employee civic responsibility
4. Upholding fair and ethical business conduct

Implementing interventions in water, livelihoods, education, health, sanitation, and institutional strengthening—all linked to UN SDGs (Suzlon Energy).

#### 4. Performance & Growth Targets

- R&D investment: Approx ₹1,200 crore over 3 years to boost turbine & storage tech
- Global market share: Aim for ~15% of global wind mar-

ket by 2024

- Revenue growth: Target ~20% annual growth; revenue ~₹10,000 crore in FY 2024

## 5. Institutional and Governance Goals

- Certifications: Maintain ISO 9001, 14001, 45001 certifications (Suzlon Energy).
- Diversity & inclusion: DEIB council for equal opportunity policies (Suzlon Energy).
- Ethical Governance: Strengthen compliance, whistleblower systems, ESG-aligned reporting frameworks (Suzlon Energy).

## 6. SDG Alignment

- SDG 7 & 13: Clean energy expansion & decarbonization via wind portfolio (~20.8 GW installed, reducing 53 Mt CO<sub>2</sub>/yr) (Suzlon Energy).
- SDG 9: Industrial innovation via S144 tech, local manufacturing, supply-chain R&D.
- SDG 8: Job creation & livelihood enhancement through local sourcing.
- SDG 6, 11, 15: CSR initiatives in water conservation, sanitation, biodiversity, rural infrastructure.

Suzlon's strategy weaves together:

- Operational targets (net-zero, zero waste)
- Product innovation (clean, efficient turbines)
- Social impact (SUZTAIN CSR across communities)
- Talent & governance (DEIB, certifications, ethics)
- Financial ambition (R&D, market)

**Suzlon's S144 WTG** is a state-of-the-art 3 MW-class turbine introduced to accelerate sustainable infrastructure, aligned strongly with SDG 9 ("Industry, Innovation and Infrastructure"). Key highlights:

- Rotor size & efficiency: 144 m diameter rotor (16,618 m<sup>2</sup> swept area), carbon-fibre blades (70 m SB70), targeting hub heights of 140–160 m—India's tallest turbines. These allow tapping of lower wind regimes with high energy yield—a 40–43% uplift over Suzlon's S120 2.1 MW model
- Carbon footprint: S144 is having a very low embodied

carbon intensity (~6.16 g CO<sub>2</sub>/kWh), a benchmark for low-carbon energy products

- Local manufacturing & circularity: Around 85–90% local content ("Make in India"), promoting industrial growth and supply-chain resilience in alignment with SDG 9 targets
- Generation projects: Over 1,200 turbines (120 units × 3.15 MW each = 378 MW) ordered by NTPC Green Energy in Karnataka; multiple projects (69 MW, 99 MW, and 201.6 MW) secured from various developers—highlighting strong uptake
- Technology & innovation: Incorporates DFIG generators, modular hybrid lattice-tower, water-air cooling and carbon-fibre blade tech—overcoming both low-wind deployment challenges and boosting yield.

### SDG 9 alignment:

**Infrastructure resilience & sustainability:** Taller towers, large rotors, low-wind capability → expands viable sites, better efficiency, resilient infrastructure.

**Sustainable industrialization:** High local content and in-country manufacturing help grow domestic industry and jobs.

**Innovation:** R&D in blade design, low-carbon materials, and turbine tech embody target 9.5 outcomes.

These directly contribute to SDG 9 targets such as 9.1 (resilient infrastructure), 9.2 (industrial growth & jobs), 9.4 (upgrade to clean technologies), and 9.5 (innovation and R&D).

**Global SDG 9 themes** emphasize infrastructure development, tech-driven industrial growth, and sustainable, inclusive innovation. The Suzlon S144 exemplifies SDG 9 by delivering innovative, low-carbon wind energy infrastructure that's scalable, locally built, and technologically advanced—catalyzing both environmental sustainability and industrial growth.

### Circularity & Move Toward Future Sustainability Materials & waste strategy:

- Adoption of circular economy principles: modular design, biodegradable lubricants, recyclable components, pilot blockchain-based supply chain traceability
- At manufacturing sites (like Suzlon One Earth campus), 90%+ Zero Waste to Landfill achieved, with targets of 100% by 2028

## End-of-life blade management:

Though industry-wide recycling remains evolving, trends include repurposing blades for structural uses, fiber recovery, and pyrolysis for resin – signaling Suzlon's alignment with global best practices for circularity

## Innovation in materials R&D:

R&D centers are exploring bio-composite and carbon-fiber blade technologies, lighter yet durable alternatives to enhance sustainability and recyclability .

## 4. Enabling the Journey from Low-Carbon to Circularity

Suzlon has embedded sustainability throughout its value chain:

1. Product Level: S144 delivers ultra-low embodied carbon (~6.16 gCO<sub>2</sub>/kWh)
2. Operations: Modular design & SCADA-enabled predictive maintenance optimize lifespan and minimize resource use .
3. Manufacturing: High domestic content, zero-waste targets, and eco-friendly campus operations demonstrate full-cycle stewardship .
4. End-of-life Planning: Though recycling is nascent, Suzlon is tracking global innovations and piloting circular materials strategies
5. Governance & Transparency: 89.5% Tier-1 supplier sustainability assessed; aligned with BRSR, GRI, TCFD, UN SDG reporting frameworks

Suzlon's strategy ensures that the **low-carbon credentials of the S144** are not a one-off—it's replicable across geographies, truly scalable to gigawatt levels, and increasingly circular, tackling waste and materials end-of-life. As Suzlon progresses, its integrated roadmap from product innovation to zero-waste manufacturing and recycled materials positions it on a credible path towards a fully circular wind energy ecosystem.

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# ELIGIBILITY

01

Degree/Diploma/Certificate holders related to ESG/ Sustainability from recognised Universities/ Institutions **OR**  
Having atleast 3 years experience in the field of ESG/Sustainability

## MEMBERSHIP FEE

01

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# VISION

Promoting innovations to achieve Sustainable Development in India, and Globally.

Advocating towards a Greener and better Future.



# MISSION

To spread awareness and educate society about ESG and sustainability issues and work alongside government bodies, private and public sector businesses and societies to support their transition to more sustainable operations and in turn enable achievement of India's ESG and climate related goals.



Imparting Sustainability Education is the Key for a Better Tomorrow

# Embracing Sustainability: Take a Pledge for a Greener Future

Let us all take a Pledge to protect the Planet

[www.esgworldwide.org/take-an-oath/](http://www.esgworldwide.org/take-an-oath/)

With environmental challenges becoming increasingly critical, we believe that it is everyone's responsibility to make a positive impact and contribute to a greener future. It can only be achieved with the collective efforts of all of us.

Continuing our efforts, the ERF has launched an Awareness Campaign - "*Let us Take a Sustainability Pledge Towards Protecting Our Mother Earth*". It is a commitment to support in building a global community committed to social, economic, and environmental responsibility to save our Planet through behavioural changes and advocacy for sustaining life.

In this regard, we invite you to participate in our endeavour by taking the Oath to inculcate sustainability into our lives through these small changes.

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