



Driving Growth, Sustainably.

ESG Report
2024 - 25

About this Report

This ESG Report represents TRL Krosaki Refractories Limited (“TRL Krosaki” or “Company”) environmental, social, and governance (ESG) performance and initiatives for the financial year 1st of April 2024 to 31st of March 2025. The report reflects the Company’s continued progress toward its Net Zero Vision 2050 and outlines the systems, initiatives, and outcomes through which sustainability considerations are integrated into business operations and decision-making.

The report highlights key developments during the reporting year while demonstrating the growing maturity of TRL Krosaki’s sustainability management systems. Through this report, TRL Krosaki seeks to provide stakeholders with transparent insights into how the Company manages its environmental footprint, supports its workforce and communities, strengthens governance practices, and drives innovation within the refractory industry.

We are committed to embedding sustainability at the core of our business through innovative technologies and responsible engagement with all stakeholders.

Reporting Boundary

The report covers the following locations:

Registered Office

Administration Building,
Belpahar Plant
PO Belpahar, District
Jharsuguda, Odisha –
768218, India

Belpahar Manufacturing Unit

Belpahar Plant
PO Belpahar, District
Jharsuguda, Odisha –
768218, India

Salem Manufacturing Unit

Karrupur – 636012, District
Salem, Tamil Nadu, India

Quartzite Mines

Chhuinpali, Post Kapilapur
– 768226, District
Jharsuguda, Odisha, India



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TRL Krosaki – An Overview

Founded in 1958, TRL Krosaki has evolved from manufacturing high performance refractory products into a technically driven refractory solutions provider, underpinned by advanced materials science, precision manufacturing, and application-specific engineering. Our effectiveness stems from the integration of cutting-edge refractory technologies with deep domain expertise to address extreme thermal, mechanical, and chemical operating conditions. Through optimized design, controlled manufacturing processes, and performance-validated solutions, we enable enhanced process stability, improved thermal efficiency, conserve natural resources and extended campaign life across iron, steel, and other high-temperature industrial applications. TRL Krosaki's engineering rigor ensures predictable performance, operational safety, and long-term reliability for customers worldwide.

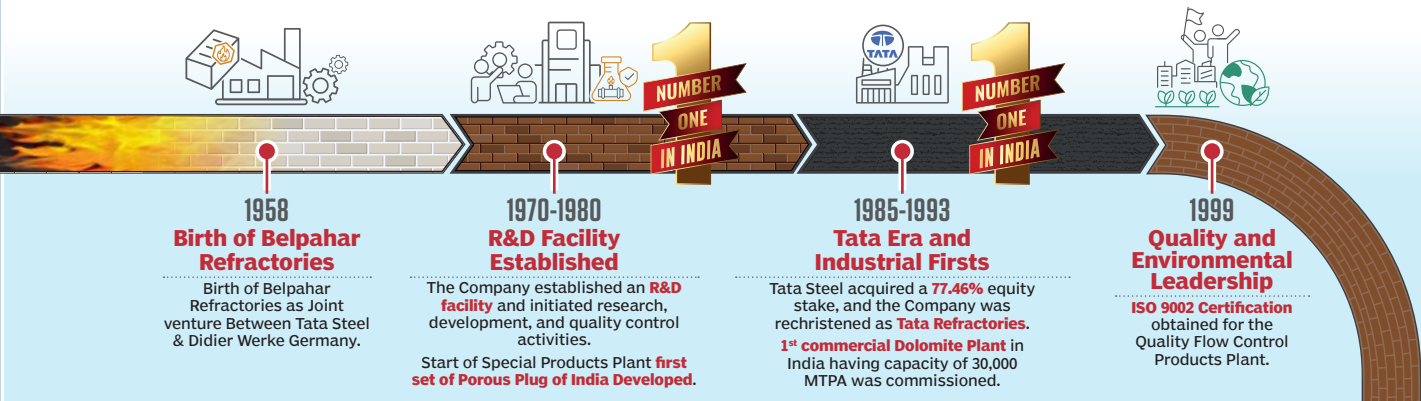




Our Journey

A legacy of innovation, resilience, and sustainable growth shaping TRL Krosaki over the years

1958-1999: A JOURNEY OF INNOVATION AND GROWTH



2000-2019: GLOBAL EXPANSION AND INTEGRATION



2020-2025: LEADING THE FUTURE



MAJOR MILESTONES OF EXCELLENCE

1991 Env. Dept. & Lab. (1st Refractory Company in India)	1994 ISO 9001 certified (1st Refractory Company in India)	1998 ISO 9002 certified (1st Refractory Company in India)	2006 IMS certified (1st Refractory Company in India)	2014 ASHI, ERM, TATA Code of Conduct, WBP, G&H Policy, ISMS (ISO 27001 certified (1st Refractory Company in India)	2020 TRL Krosaki Code of Conduct, ABAC, COI Policy, ISO17025 certified (1st Refractory Company in India)	2022 SA 8000 certified (1st Refractory Company in India)	2024 ISO 14064 & ISO 14067 GHG & LCA Verification & Assurance
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Our Guiding Values



Our Pillars



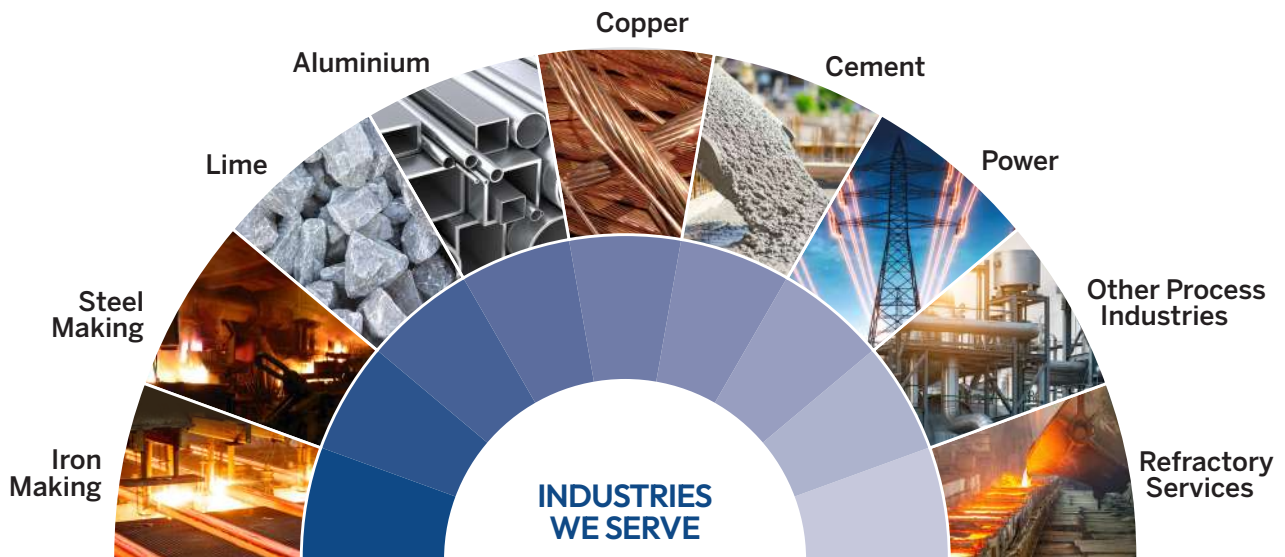
Our Key Products & Services





Industries We Serve

TRL Krosaki serves a diverse range of core and adjacent industries that operate under high-temperature, high-wear conditions. Our solutions support critical process efficiency, safety, and asset longevity across following sectors:



Other Industries

In addition to core metals and minerals, TRL Krosaki supplies specialized refractory products and services to a broad set of industrial applications, including:





Geographies We Serve

TRL Krosaki supports customers across domestic and international markets, delivering products and services to leading industrial players worldwide. With a strong global client base, our solutions are trusted across Asia, the Middle East, Africa, Europe, Australia, North America and South America.





Value Chain

TRL Krosaki's value chain spans responsible sourcing of raw materials, in-house manufacturing and R&D, customer-specific refractory design and application support, and end-of-life material recovery and recycling initiatives.





MESSAGE FROM THE LEADERSHIP

Foreword from the Managing Director

It is my privilege to present TRL Krosaki's Sustainability Report, prepared **in alignment with the Global Reporting Initiative (GRI)**

Standards. This report reflects our continued commitment to responsible growth, transparent disclosures, and the integration of sustainability across our business strategy and operations.

As a leading provider of refractory solutions to core industries such as steel, cement, and non-ferrous metals, TRL Krosaki operates at the heart of industrial value chains. The materials we produce enable high-temperature industrial processes that are essential to modern infrastructure and economic development. At the same time, these sectors are undergoing profound transformation as they transition toward more resource-efficient and lower-carbon operations.

In this evolving landscape, sustainability is our responsibility and a strategic imperative. Over the past year, TRL Krosaki has continued to strengthen its approach to sustainable business practices while navigating dynamic market

conditions and evolving stakeholder expectations. Guided by resilience, operational discipline, and a shared sense of purpose across the organisation, we have continued to advance our environmental, social, and governance priorities while maintaining strong business performance.

Our sustainability journey is guided by four strategic pillars: **ESG Leadership, People Culture & Excellence, Digitalisation for Operational Excellence, and Core R&D & AI-Driven Insights**. Complementing these focus areas is Artificial Intelligence, a cross-cutting enabler that accelerates progress across all pillars and strengthens our ability to create sustainable value. Together, these pillars guide our decision-making, resource allocation, and long-term strategy, helping us deliver meaningful outcomes for our customers, employees, shareholders, and the communities we serve.

A number of important milestones were achieved during the year. One of the most significant was the transition of all thermal equipment to Piped Natural Gas (PNG), making TRL Krosaki the first refractories company in India to complete this transition. This initiative has reduced the carbon intensity of our operations while strengthening alignment with global climate goals.

Resource efficiency remained a strategic priority throughout the year. Our zero-discharge approach and full recycling of process water have contributed to reductions in specific water consumption. In parallel, plantation initiatives around our operational areas continue to support local biodiversity and ecological balance.

Circularity has been a key focus area for TRL Krosaki. Spent refractories collected from customers are processed and reused as green raw materials in our production processes, replacing approximately 20% of prime raw





materials. Over the past five years, the specific consumption of green materials has increased by nearly 49%, reflecting our commitment to conserving natural resources while improving material security. Innovation continues to play a critical role in enabling this transition. Through focused research and development, we are developing advanced refractory solutions that improve operational performance while supporting our customers' own sustainability ambitions.

Alongside environmental initiatives, an integrated sustainability management approach now underpins our business performance. ESG considerations are integrated into our management systems, risk management processes, and performance monitoring frameworks. Independent verification of carbon footprint data, adherence to internationally recognized standards such as SA8000, and the continued strengthening of ISO-aligned management systems reinforce our commitment to responsible and accountable operations.

Safety remains a core organisational priority. Our system-based safety culture, supported by digital analytics and continuous monitoring, helps ensure that our employees and partners operate in a safe and secure working environment.

At TRL Krosaki, we also recognize that strong Employees, Customers, Suppliers, Regulators, Communities relationships are essential to long-term success. Through ongoing engagement with employees, customers, investors, suppliers, regulators and communities, we continuously refine our understanding of material issues and work collaboratively to address shared challenges. Our community development initiatives continue to create meaningful impact in areas such as education, healthcare, infrastructure, and environmental stewardship.

This report represents another step in our ongoing effort to strengthen transparency and accountability. Reporting practices have continued to evolve, strengthening transparency, accountability and ESG disclosures.



TRL Krosaki will continue to invest in digital transformation, core research and development capabilities, and the development of our people.

While meaningful progress has been achieved, the journey ahead demands sustained commitment to addressing climate change, resource constraints and inclusive growth.

Looking ahead, TRL Krosaki will continue to invest in digital transformation, core research and development capabilities, and the development of our people. These priorities will enable us to strengthen ESG leadership, enhance operational excellence, and contribute meaningfully to the transition toward more sustainable industrial systems.

I would like to extend my sincere gratitude to our employees, customers, partners, and communities for their continued trust and collaboration. Together, we will continue to build a resilient and future-ready organisation that delivers lasting value for all stakeholders.

Sincerely,
PRASANT NAIK
Managing Director
TRL Krosaki Refractories Limited



ESG
at TRL
Krosaki



Key Sustainability Highlights

TRL Krosaki's ESG approach translates into measurable outcomes across environmental performance, workplace safety, and community development.

Environmental Stewardship

**34.94%**

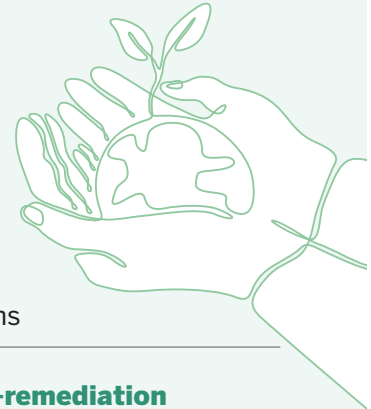
Green belt coverage across operational areas, supporting ecological balance

**937 KLD**

of water saved per day through recycling and conservation initiatives

**20,000**

Saplings produced annually as part of afforestation and biodiversity programs

**1.96 lakh m²**

of garden area coverage, contributing to green infrastructure and employee well-being

Phyto-remediation

of dolomite rejection dump areas, improving land quality and stability

People & Workplace Safety

**1,553**

Total permanent employees.

**Zero**

Fatality reported from past 3 years

**Zero LTIFR**

Reported from past 3 years

Governance & Data Security

**Zero**

Reported data breaches during the reporting year

**Zero**

Whistle blower complaints during the year



Community Impact

**50K⁺**

People benefited through CSR initiatives

**₹4.18 Crore**

Invested in CSR programs in FY 2024-25, representing a 56% increase over the previous year



Our ESG Strategy and Framework

TRL Krosaki's ESG strategy is designed to enable long-term growth while systematically managing environmental, social, and governance risks inherent to refractory manufacturing. As a supplier to energy and resource-intensive industries, the Company operates within complex industrial ecosystems where sustainability expectations are rapidly evolving. Improving environmental efficiency, strengthening operational discipline, and enhancing our ability to adapt to evolving regulatory requirements, customer expectations, and climate-related developments are therefore essential to maintaining long-term competitiveness.



ESG considerations are embedded in TRL Krosaki's approach to governing its business, allocating capital, and managing operational performance.

TRL Krosaki informs their Strategic priorities through outcome of operational context, stakeholder engagement and periodic materiality assessment. The strategy also takes into account

considering evolving sector practices, global ESG standards, and emerging regulatory and disclosure expectations.

Regular reviews of policies, management systems, implementation effectiveness, and governance mechanisms ensure that TRL Krosaki's ESG roadmap remains practical, credible, and aligned with long-term business objectives.

The ESG strategy focuses on the Company's most material risks and opportunities, including but not limited to:



Reduction of Energy and emissions intensity



Responsible use and conservation of natural resources



Workforce Safety & Capability Development



Product Lifecycle Impacts



Supply Chain Resilience



Governance, Ethics, and Compliance



Five Pillars of ESG Execution



Demonstrate ESG Leadership

by embedding environmental, social, and governance principles into core operations, ensuring strong oversight, accountability, risk management, ethics, and compliance across the value chain.



Drive People Culture and Excellence

by building organisational capability, leadership depth, and workforce engagement to deliver sustained performance and a high-performing, inclusive workplace.



Digitalize for Operational Excellence

by strengthening data visibility, operational control, and decision making across manufacturing, safety, environment, sales, and services.



Deploy Core R&D Capabilities

to translate decarbonisation, efficiency, and performance objectives into customer facing refractory solutions, supporting competitiveness and regulatory readiness.



Enable AI-Driven Insights and Automation

by leveraging advanced analytics and intelligent systems to enhance forecasting, optimise processes, and enable faster, data-driven decision making across functions.

The pillars institutionalise sustainability across TRL Krosaki's decision-making processes and long-term business strategy.



Demonstrate ESG Leadership

Environmental, Social, and Governance considerations are integrated into TRL Krosaki's governance structures, management systems, and operational processes.

The Company maintains a structured framework for monitoring and reducing greenhouse gas emissions, supported by independent verification from accredited agencies. Sustainability performance is overseen through established governance mechanisms that reinforce accountability, transparency, and compliance.

TRL Krosaki has also been recertified under the SA8000 standard, reinforcing its commitment to strong labour practices and social accountability across its operations.

Drive People Culture and Excellence

People development remains a strategic priority for TRL Krosaki.

The Company focuses on building a skilled, engaged, and future-ready workforce through structured leadership development programs, employee engagement initiatives, and workplace improvement efforts.

Key initiatives taken for people development includes but not limited to:

- Future Leadership Programs
- Small Group Activities (SGAs)
- Joint Employee Forums
- HR transformation initiatives across business functions

One flagship program is the Leadership Enhancement Through Action Learning Programme (LEAP), launched in collaboration with Korn Ferry and IIM Bengaluru. The first cohort included 20 senior executives who participated in a year-long leadership development journey, with additional cohorts planned in the coming years.

These initiatives reflect TRL Krosaki's belief that sustained investment in workforce capability is essential for long-term organisational resilience, innovation, and growth.

Digitalize for Operational Excellence

Digital technologies play a critical role in strengthening operational visibility, process control, and decision-making across TRL Krosaki's operations.

Core business functions including manufacturing operations, technology, safety, environment management, sales, and services, are increasingly supported by digital systems that enable improved data capture, analytics, and operational oversight.

On the customer front, advanced digital initiatives have been deployed to improve operational reliability and safety in high-temperature industrial environments. These includes but not limited to:



Online erosion measurement using BF Runner

Remote wrecking solutions for blast furnaces

OPERATIONAL RELIABILITY AND SAFETY

Condition monitoring of coke ovens

Robotic sampling for blast furnace temperature & oxygen analysis



These technologies enhance safety, improve productivity, and strengthen quality control across complex industrial processes.

Deploy Core R&D Capabilities

Research and development remain central to TRL Krosaki's long-term competitiveness and sustainability strategy.

Focused R&D initiatives are being undertaken in collaboration with Krosaki Harima Corporation (KHC) and leading academic institutions to advance research in materials science, refractory performance, and process efficiency.

These efforts support the development of next-generation refractory solutions that:

- Improve product life and durability
- Enhance operational efficiency for customers
- Reduce energy consumption and emissions across high-temperature industrial processes

Through sustained investment in innovation, TRL Krosaki continues to strengthen its technological leadership while contributing to more efficient and sustainable industrial systems.

Enable AI Driven Insights and Automation

Artificial Intelligence (AI) and advanced automation represent a critical next step in TRL Krosaki's digital transformation journey. As industrial processes become increasingly data-driven and interconnected, the Company is working to leverage AI-enabled insights to enhance operational efficiency, improve decision-making, and strengthen competitiveness across its value chain.

Building on its existing digital and IoT foundation, TRL Krosaki is progressively integrating data analytics and intelligent systems into core operations. Real-time data captured through sensors and monitoring systems is being used to improve process visibility, enable predictive interventions, and optimize energy and resource use. These efforts are helping transition from reactive to more proactive and data-informed operational models.



Automation initiatives are also being expanded across manufacturing and service delivery. Systems such as automated inspection technologies, mechanized material handling, and digitally enabled monitoring solutions are improving quality consistency, reducing manual intervention, and enhancing safety across high-temperature industrial environments.

At the same time, TRL Krosaki recognises that the adoption of advanced AI, machine learning, and robotics is an evolving area. As part of its continuous improvement approach, the Company is working to strengthen its capabilities in these areas to remain aligned with emerging industry practices and customer expectations.



Stakeholder Engagement

At TRL Krosaki, stakeholder engagement is an integral part of responsible business management. Sustained dialogue with stakeholders enables the Company to better understand stakeholder expectations, anticipate emerging risks and opportunities, and strengthen trust across its operations and value chain.

Engagement with stakeholders helps in informed decision-making, strengthens governance processes, and helps ensure that TRL Krosaki's sustainability initiatives remain aligned with both business priorities and stakeholder expectations.

Our Key Stakeholders

TRL Krosaki engages with a diverse set of stakeholders whose interests intersect with the Company's Objective. These

stakeholders include employees, customers, suppliers, investors, regulators, and local communities.

Each stakeholder group contributes in shaping TRL Krosaki's sustainability journey.

Employees drive operational performance and

innovation; customers influence product development and sustainability expectations; suppliers support responsible sourcing; regulators define the compliance landscape; and local communities are key partners in ensuring inclusive and sustainable development around operational locations.

Understanding the perspectives of these stakeholders helps TRL Krosaki identify material issues, strengthen risk management, and continuously improve its business practices.

TRL Krosaki engages with a diverse set of stakeholders whose interests intersect with the Company's operations, products, and long-term strategy.





How We Engage

Stakeholder Group	Why We Engage	Engagement Methods	Frequency	Key Topics of Engagement
 Employees	Safety, well-being, skills, culture and retention are fundamental to operational excellence.	Employee surveys and feedback channels; trainings and workshops; joint forums and engagement programs	Ongoing/ Periodic	Health & safety, learning and development, employee well-being, grievance redressal, DEI
 Customers	Customer needs shape product innovation, service quality, and sustainability expectations.	Feedback forms and surveys; technical service interactions; business reviews	Ongoing/ Periodic	Product performance and quality, service responsiveness, safety, sustainability requirements, innovation
 Suppliers	Suppliers influence responsible sourcing, quality, compliance, and supply continuity.	Supplier audits/assessments; supplier workshops; collaborative projects	Periodic/ Annual	Responsible sourcing, environmental and social compliance, ethics, quality, traceability, resilience
 Investors & Partners	Engagement strengthens confidence in governance, performance and long-term value creation.	AGM; annual/periodic reporting; structured meetings and updates	Annual/As required	Governance, strategy, performance, risk management, ESG progress
 Regulators	Ensures compliance and preparedness for evolving legal and policy requirements.	Statutory filings and disclosures; inspections and compliance reporting; consultations as applicable	As per respective regulation	Legal compliance, reporting, permits, standards, evolving requirements
 Local Communities and NGOs	Engagement supports inclusive development and social licence to operate.	Community consultations; partnerships with local organisations; CSR implementation	Periodic/ Ongoing	Education, healthcare, infrastructure, environment, community well-being



How Stakeholder Inputs are Used

Insights from stakeholder engagement are reviewed by functional teams and senior leadership. These insights help the Company strengthen its sustainability management approach and inform key decisions across the organisation.

Through this approach, stakeholder engagement supports continuous improvement while ensuring that TRL Krosaki's sustainability strategy remains aligned with evolving expectations.

Stakeholder inputs are used to:





Materiality Assessment

At TRL Krosaki, the materiality assessment helps identify and prioritise the ESG topics that are most relevant to our stakeholders and to the long-term sustainability of our business.

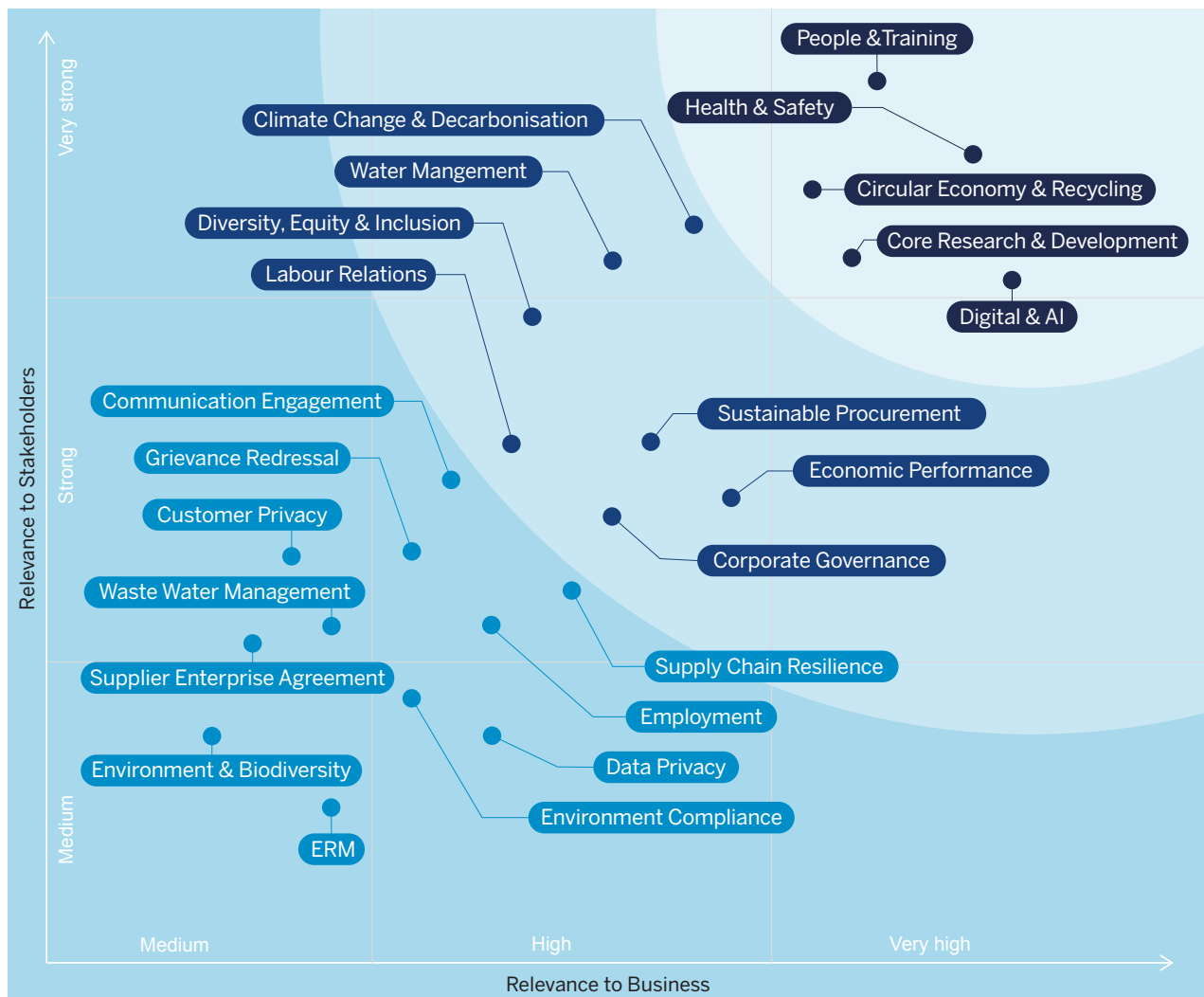
As a company operating in resource and energy-intensive industries, understanding the ESG issues that most significantly influence operational performance, regulatory readiness, stakeholder expectations, and long-term value creation is essential. The materiality process therefore provides a structured basis for aligning our sustainability strategy, risk management approach, and disclosures with the issues that matter most.

Our Materiality Approach

Material topics were identified through a review that combined multiple inputs, including:

- Stakeholder engagement insights from employees, customers, suppliers, investors, regulators, and communities.
- Internal risk assessments and operational performance reviews.
- Analysis of regulatory requirements and disclosure frameworks, including GRI (Global Reporting Initiative) and BRSR (Business Responsibility and Sustainability Reporting).
- Benchmarking against sector peers and emerging industry practices.

Figure1: Materiality Matrix





Top 10 Material Areas



1
Health
& Safety



2
People and
Stakeholder
Training &
Development



3
Digitisation,
Automation and
Usage of Artificial
Intelligence



4
Circular Economy,
Recycling and
Backward
Integration



5
Core Research and
Development



6
Climate Change &
Decarbonisation



7
Water
Management



8
Sustainable
Procurement



9
Economic
Performance



10
Diversity Equity
and Inclusion

Following identification, topics were prioritised based on two key criteria:

- Significance to stakeholders, reflecting the level of concern or expectation expressed through engagement processes.
- Impact on TRL Krosaki's business resilience and value creation, including operational, financial, regulatory, and reputational implications.

Key Areas of Material Focus

The identified material topics broadly fall within the four pillars that shape TRL Krosaki's sustainability priorities.

People and Workplace Responsibility

Workforce safety, fair employment practices, training and capability development, diversity and inclusion, employee well-being, and grievance mechanisms form the foundation of business at TRL Krosaki. These areas support workforce engagement and operational reliability.

Environmental Footprint & Resource Stewardship

Climate change mitigation, circular

economy initiatives, water and wastewater management, environmental compliance, and biodiversity protection are central to managing & conserving natural resource dependencies and reducing environmental impacts across operations.

Innovation, Digital Enablement, and Value Chain Resilience

Research and development, supported by digitalisation and AI-enabled solutions, strengthens product performance and operational efficiency. Supply chain resilience and sustainable procurement extend responsible practices across the value chain through supplier engagement and environmental and social assessments.

Governance, Ethics, and Business Resilience

Corporate governance, ethical business practices, enterprise risk management, and data and customer privacy provide the institutional framework through which risks are managed, accountability is maintained, and responsible business conduct is upheld. Community engagement further supports TRL Krosaki's social license to operate.



How Materiality Guides Action

The materiality assessment provides a foundation for TRL Krosaki's ESG strategy and operational priorities.

Material topics inform:

- The development of ESG policies and strategic initiatives.
- Enterprise risk management and compliance planning.
- Target-setting and performance monitoring.
- Sustainability disclosures and stakeholder communication.

While rankings reflect relative significance at a given point in time, lower-ranked topics remain equally important and continue to be managed through structured programs and long-term improvement plans.

Research and development, supported by digitalisation and AI-enabled solutions, strengthens product performance and operational efficiency.

TRL Krosaki reviews its materiality assessment periodically to ensure continued relevance as stakeholder expectations, regulatory frameworks, and industry dynamics evolve.

Materiality outcomes also inform our ESG risk management approach and supplier engagement priorities, strengthening readiness for customer requirements and ESG rating frameworks.



Demonstrating ESG Leadership



Supporting Industrial Progress Responsibly

As a refractory manufacturer serving core industries, TRL Krosaki recognises its broader responsibility in supporting economic development and infrastructure creation. Through its operations and product offerings, the Company contributes to strengthening industrial ecosystems in India and across global markets, while remaining conscious of the environmental and social responsibilities integral to industrial growth.

TRL Krosaki's refractory solutions enable critical high-temperature processes in sectors such as steel, cement, and glass. By enhancing durability, improving process efficiency, and supporting more reliable operations, our products help customers optimise resource use and advance more efficient industrial performance. These contributions are underpinned by strong governance practices, continuous technology development, and alignment with evolving environmental and regulatory standards, reinforcing our commitment to responsible and sustainable industrial progress.

In India, our role is also aligned with national priorities relating to industrial development, climate action, and supply chain resilience. As a supplier to energy and resource-intensive sectors, we recognise our responsibility to support these ambitions by improving energy efficiency in our own operations, increasing the use of recycled and alternative raw materials,

Our refractory solutions support high-temperature industrial processes across sectors such as steel, cement, and glass.



reducing emissions, and advancing product innovations that help customers improve operational efficiency. At the same time, our focus on domestic manufacturing, local sourcing, employment generation, and skills development supports the objectives of industrial self-reliance and capability building.

As expectations continue to evolve, we remain committed to integrating sustainability into decision-making, strengthening governance systems, and continuously improving operational performance in ways that support long-term value creation.

Our Environmental Priorities

To translate environmental commitments into meaningful action, TRL Krosaki has defined a focused set of priority areas that reflect both the material environmental impacts of its operations and opportunities to enhance long-term resilience and operational efficiency. These priority areas include climate and emissions management, energy efficiency, water stewardship, circularity and waste reduction, responsible supply chain practices, and biodiversity stewardship.



Environmental Vision and Performance

TRL Krosaki recognises the essential role our materials play in enabling high-temperature industrial processes across sectors such as steel, cement, and glass.

These sectors are foundational to infrastructure and manufacturing, and also carry significant environmental footprints. Refractory production is inherently energy and resource intensive, and this operational reality informs our environmental strategy, governance priorities, and long-term decarbonisation direction.

TRL Krosaki considers environmental responsibility a core guiding principle in its decision-making processes. The Company seeks

to balance industrial growth with environmental stewardship, supporting a more sustainable and resilient operating model over the long term.

These environmental priorities are integrated into day-to-day operations through structured management systems, regulatory compliance frameworks, and internal performance monitoring mechanisms that reinforce accountability at all levels of the organisation. In addition, the annual observance of Sustainability Month across the Company strengthens environmental awareness, promotes collective ownership, and fosters a shared culture of responsibility among employees.

Figure 2: Environmental Performance

	Environment Parameter	Key Performance Indicators	Achievement
	CIRCULARITY/ RECYCLED MATERIALS	Increase in Sp. Consumption of Green Material	- Sp. Consumption of Green Material is 183 Kg/MT - GRM as % of total RM cons. – 18.3% - GRM use up by 71% in last 5 years
	ENERGY	Reduction of Specific Energy Consumption	- Sp. Energy Consumption is 1.49 GCal/MT 24% reduction in last 5 years (2020-21)
	WATER CONSUMPTION	Reduction of Specific Water Consumption	- Sp. Fresh Water consumption-1.24 KL/MT 6% reduction in last 5 FY (2020-21) “Zero” freshwater consumption in green belt area
	EFFLUENT DISCHARGE	Quantity of Effluent Discharged	- Zero Liquid Discharge (ZLD) achieved from the Plant. 100% treated wastewater recycled & reused.
	GHG EMISSIONS	Reduction of CO ₂ Emission	- Carbon footprint for 2024-25 is 0.67 Ton CO₂/MT 44% reduction from base year 2017-18
	GREENBELT	Plantation & Greenbelt Coverage	Green belt – covers 35% of total area



We view environmental responsibility as a core principle that guides our decision-making. Our focus is on balancing industrial growth with environmental preservation to support a more sustainable and resilient future.

The following sections that follow outline how TRL Krosaki is progressing across key environmental priorities through innovation, operational discipline, and continuous improvement.

Climate Change and Emissions Management

Climate change is a material business and sustainability consideration for TRL Krosaki, shaping our approach to operational efficiency and long-term resilience. Guided by our Net Zero Vision 2050, we are committed to progressively reducing emissions and supporting the transition to lower-carbon industrial systems. Our climate strategy focuses on improving energy efficiency, strengthening emissions measurement, and integrating cleaner and more efficient technologies across operations. Key initiatives such as upgrading to energy-efficient kilns and furnaces, enhancing process automation and digital monitoring, and deploying solutions including variable frequency drives, LED lighting, and motor optimisation contribute to reduced energy consumption, improved performance control, and lower emissions intensity.

Understanding Our Emissions

To understand our emissions, we looked closely at our operations, not just as a manufacturer of refractories, but as an organisation operating within a complex industrial ecosystem.

Our emissions are primarily linked to the nature of our processes. The production of refractory materials demands extremely high temperatures, making fuel combustion and electricity consumption central to our operations. Recognizing this, we undertook an assessment of our greenhouse gas emissions

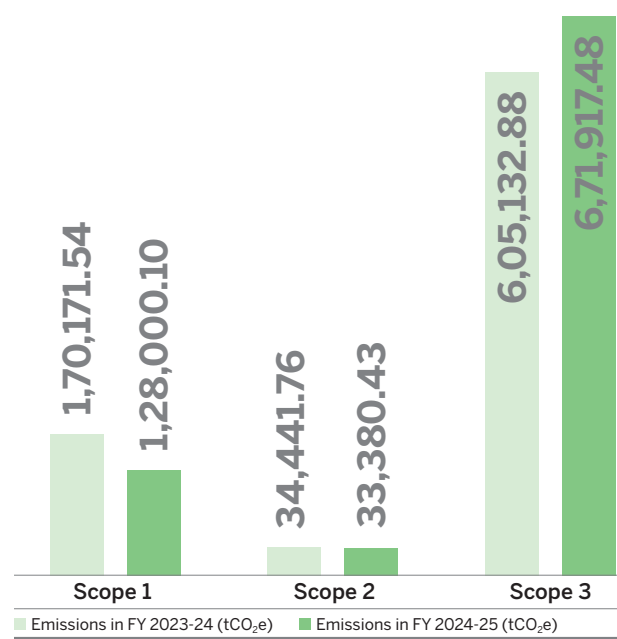
(GHGs) across our manufacturing activities, focusing on those sources over which we have direct control, as well as those linked to purchased energy. To strengthen the robustness of this assessment, we have established a GHG accounting and Life Cycle Assessment (LCA) framework in alignment with ISO 14064-1:2018 “Green House Gases” and ISO 14067:2018 Green House Gases-Carbon Footprint of Products, ensuring methodological consistency and international comparability.

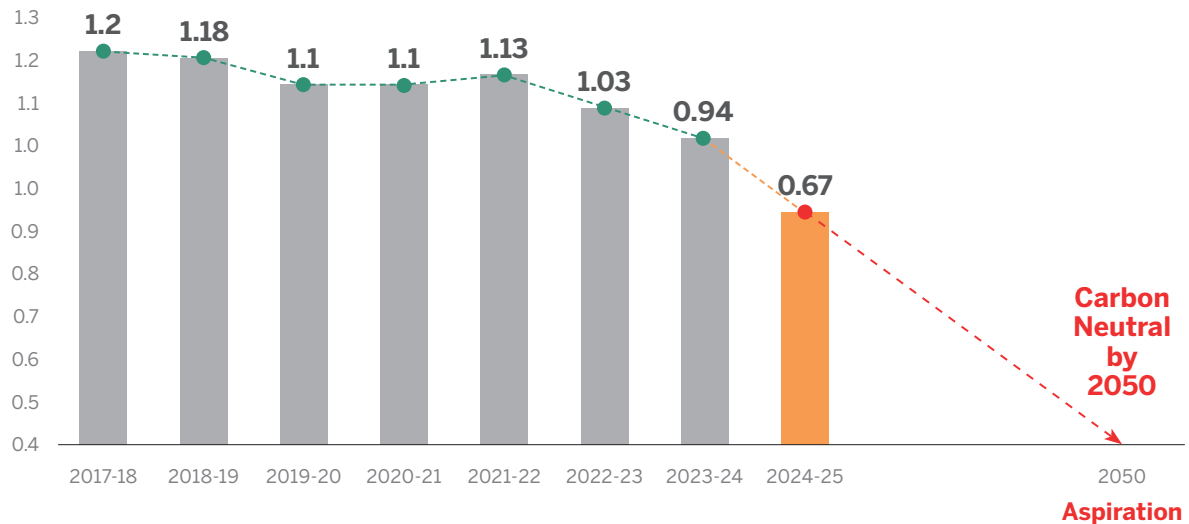
Our emissions inventory includes:

- **Scope 1** Direct Emissions from fuel combustion in kilns, furnaces, and other on-site processes.
- **Scope 2** emissions from purchased electricity used in operations.
- **Scope 3** emissions from value chain activities, which are being progressively integrated into our broader decarbonization approach.

In FY 2024-25, TRL Krosaki's carbon footprint was 0.67 tonnes CO₂ per metric tonne of product, representing a ~44% reduction from our base year of 2017-18. This reflects the cumulative impact of process improvements, energy efficiency initiatives, and increased

Figure 3: GHG Emissions (tCO₂e) in FY 2024-25



**Figure 4: CO₂ Emission Projection (Scope 1 & 2) (TON CO₂/TON of Product)**

adoption of sustainable materials across our operations. These outcomes not only demonstrate the effectiveness of our emissions management approach, but also reinforce our commitment to continuous improvement in minimizing climate impacts while supporting industrial growth.

Air Emissions and Operational Controls

Stack emissions form a critical component of our environmental monitoring framework. These emissions are measured and evaluated in line with applicable regulatory requirements to ensure beyond compliance and operational control. During the reporting period, the average particulate matter (PM) concentration is well within limit as defined in CTO as well as CPCB Norms and OSPCB norms, reflecting the effectiveness of our control measures. The insights gained from stack monitoring support regulatory adherence and help us identify opportunities to improve combustion efficiency, optimize fuel use, and reduce overall emissions intensity.

Our approach to air pollution control is grounded in preventive and operational excellence. We prioritize engineering controls to minimize emissions at source, supported by

systematic fugitive dust suppression measures across material handling and processing areas. Controls to prevent leakage and spillage, along with strong housekeeping practices, further reinforce our commitment to maintaining clean and safe operations. Combined, these measures ensure that air quality management remains an integral part of our day-to-day operational discipline.

In the course of this assessment, we also evaluated the presence of key air pollutants typically associated with high-temperature industrial processes. Based on the nature of our fuels, process chemistry, and operating conditions, nitrogen oxides (NO_x) and sulphur oxides (SO_x) are not considered material (or

Controls to prevent leakage and spillage, along with strong housekeeping practices, further reinforce our commitment to maintaining clean and safe operations.



applicable) to TRL Krosaki's operations. This understanding is supported by our process design and monitoring practices, allowing us to focus our environmental management efforts on the emissions that are most relevant to our business and stakeholders.

Data, Transparency, and the Path Forward

To ensure accuracy and consistency, emissions are calculated using recognized methodologies and emission factors aligned with national and international guidance. This disciplined approach allows us to track performance year on year, identify trends, and measure the effectiveness of our reduction initiatives.

TRL Krosaki recognises that its climate impact extends beyond direct operational boundaries. While the Company's current focus is on establishing a strong and robust foundation through effective management of Scope 1 and Scope 2 emissions, it also acknowledges the importance of adopting a comprehensive value-chain perspective. As a testament to this commitment, TRL Krosaki has undertaken the calculation and third-party verification of its greenhouse gas (GHG) inventory across Scope 1, Scope 2, and Scope 3 emission categories. The verification was conducted by BSI Group India

Our approach to air pollution control is grounded in preventive and operational excellence.

Private Limited, providing independent assurance on the completeness, accuracy, and credibility of the emissions data. This initiative reflects the Company's proactive approach to emissions transparency and reinforces its commitment to supporting long-term decarbonisation and climate-resilient business practices.

For TRL Krosaki, emissions measurement is a tool for accountability, learning, and action. By establishing clear visibility into our stack emissions and overall carbon footprint, TRL Krosaki has taken a decisive step toward a low-carbon future – one guided by data, informed by responsibility, and aligned with our long-term vision for sustainable growth.

Energy efficiency remains one of the most important levers through which TRL Krosaki reduces emissions intensity and improves operational resilience.



Energy Efficiency

Energy is fundamental to refractory manufacturing, powering the high-temperature processes that enable the production of materials designed to perform under extreme conditions. At the same time, energy consumption represents one of the most significant environmental and operational considerations for our business. Improving energy efficiency is therefore a critical lever for reducing emissions intensity, strengthening operational resilience, and supporting sustainable growth.

Our approach begins with understanding how energy is consumed across our operations. Through continuous monitoring of consumption patterns, identification of inefficiencies, and targeted operational improvements, we work to optimise energy use while maintaining product quality and operational reliability.

During FY 2024-25, total energy consumption across our plant and operations stood at 45,915,305 kWh. Complementing this, our energy intensity was maintained at 1.49 GCal per metric tonne of production, reflecting our continued focus on optimizing energy use relative to output. From upgrading lighting and equipment to refining operational controls, each measure is designed to reduce energy use while maintaining the high quality and reliability of our products. Efficiency, we have learned, is not a constraint on performance, but a driver of resilience and cost-effectiveness.



45.91

Million kWh

Energy Consumption in FY 24-25 (Plant)



Transition Toward Cleaner Energy

A key pillar of our energy efficiency strategy is the transition toward cleaner fuels and lower-emission alternatives. Over the years, we have shifted from furnace oil and coal to natural gas for key operations, significantly improving combustion efficiency and reducing associated emissions. In parallel, diesel-powered forklifts are being progressively replaced with battery-operated forklifts, reducing both fuel consumption and localized emissions within our facilities. We are also promoting the use of solar energy for heating and lighting purposes, reinforcing our commitment to cleaner and more sustainable energy solutions.

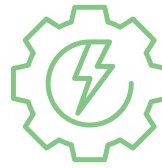
Passive Design and Renewable Energy

Passive design measures and renewable energy adoption form an integral part of our energy stewardship efforts. Across the plant, approximately **1,800 transparent sheets have been installed** to enhance the use of natural daylight, significantly reducing dependence on artificial lighting during daytime operations. This initiative alone has resulted in an estimated annual **electricity savings of around 1.2 lakh kWh**.

Natural ventilation has been strengthened through the installation of nearly 300 turbo ventilators, ensuring effective air circulation across the entire plant while reducing reliance on energy-intensive mechanical ventilation systems.

The use of **renewable energy** is further supported through the installation of solar water heaters and solar lighting systems in public and common-use buildings, including the guest house, club, canteen, distribution board areas, and other shared facilities. These installations reduce electricity consumption for non-process energy needs and embed renewable energy use into everyday operations.

Looking ahead, TRL Krosaki has set a clear direction for energy transition, with plans to **replace 50% of its electrical energy requirements with solar energy by FY 2026-27**. Energy stewardship at TRL Krosaki is also a shared



50%

of TRL Krosaki's electrical energy is planned to be replaced with solar energy by FY 2026-27.



responsibility. Our employees are actively engaged in identifying opportunities for conservation, suggesting improvements, and embedding energy-conscious practices into daily operations. Together, these efforts create a culture where energy is treated as a shared responsibility that connects operational excellence with environmental care.

Green Buildings and Sustainable Infrastructure

Our approach to environmental stewardship extends beyond manufacturing operations to the infrastructure that supports our business activities. We recognise that sustainable buildings can contribute to resource efficiency, improved environmental performance, and enhanced employee well-being.

Our administrative building is among the early facilities in the state to receive LEED certification, reflecting the integration of sustainability considerations into facility design and operation. The building incorporates measures that support efficient resource utilisation and aligns with our broader focus on energy conservation and environmental responsibility.



Operational Initiatives Supporting Energy Efficiency



Initiatives

- Extensive use of **natural lights** across the plant
- **1,800** numbers of Transparent Sheets fixed Job
- **1.2 LKWH/Yr.** Electricity Savings [Approx.]



Current Status

- Extensive use of natural ventilation of the workplace
- 300 numbers of Turbo Ventilators fixed
- Entire plant covered



Remarks

- Use of Solar Water heaters & Lights
- Installed in Public Buildings
- Guest House, Club, Canteen, DB, etc. covered

Water Stewardship

Water is an essential resource for refractory manufacturing, supporting processes such as cooling, shaping, and refining materials used in high-temperature industrial applications. Recognising that water is a finite resource with both environmental and social value, TRL Krosaki is committed to managing water responsibly and ensuring that operations coexist sustainably with surrounding ecosystems and communities.

Water Sources and Use

Our water comes from two primary sources: rainwater harvested on-site and surface water withdrawn from a nearby nallah (a natural drainage channel or small stream that carries rainwater or surface runoff). Understanding how and where water is used across our operations has allowed us to identify opportunities for greater efficiency and conservation. Through careful monitoring,



process improvements, and reuse systems, we have minimized freshwater withdrawal and maximized recycling. In FY 2024-25, our total water consumption was 293,915.71 kilo liters.

Zero Liquid Discharge and Water Recycling

Significantly, all our manufacturing facilities operate on a Zero Liquid Discharge (ZLD) basis, ensuring that 100% of treated wastewater is recycled and reused within our operations, thereby conserving freshwater resources. No untreated effluent is discharged outside the plant boundary, and water is either reused in processes, utilities, or plantation activities after appropriate treatment. This closed-loop approach is central to our philosophy of water stewardship and reflects our commitment to minimizing environmental impact.

Strengthening Water Security

To strengthen long-term water security, we have invested in robust water infrastructure. Freshwater reservoirs with capacities of **60,000 KL** and **34,000 KL**, along with a treated wastewater

Rainwater harvesting facilities further augment our water availability, allowing us to capture and store rainwater for operational use and recharge purposes.



reservoir of **35,000 KL**, have been created to ensure resilience against seasonal variability and supply disruptions. Rainwater harvesting facilities further augment our water availability, allowing us to capture and store rainwater for operational use and recharge purposes.

Efficient Water Use and Irrigation

Efficient water-use technologies are also deployed beyond core manufacturing processes. Treated wastewater is utilized for greenbelt and plantation development through sprinkler and drip irrigation systems, which significantly reduce water losses and improve distribution efficiency. Approximately 1.96 lakh square meters of green belt area is covered under these sprinkler and drip irrigation systems, enabling effective use of treated wastewater while supporting biodiversity.

Water Quality Protection

We are committed to safeguarding water quality through responsible water and effluent

management practices. Effluent from our operations is treated and monitored to ensure it meets or exceeds regulatory requirements, safeguarding local ecosystems and communities. Our ZLD operations mean that water is managed responsibly within the facility itself, reflecting our belief that environmental stewardship extends beyond usage to the care and protection of every drop that flows through our processes.

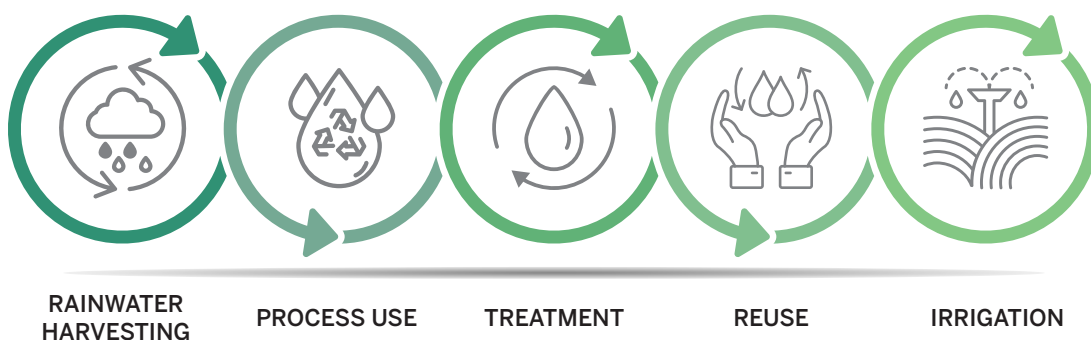
Water stewardship at TRL Krosaki is also a shared responsibility. Employees, suppliers, and partners are encouraged to adopt water-conscious practices, contributing to a culture of conservation and sustainability. Looking ahead, we are committed to continuous improvement, reducing freshwater use further, enhancing recycling, and integrating water stewardship into every aspect of our operations. By treating water as both a critical input and a shared responsibility, we are ensuring that TRL Krosaki continues to operate efficiently while safeguarding this essential resource for future generations.




293,915.71
KL Total Water
Consumption


100%
Wastewater
Recycled (ZLD)

In addition to managing water and energy resources efficiently, TRL Krosaki is also strengthening circularity across its operations through responsible materials management and waste reduction.





Waste Generation and Management

Our approach to waste management focuses on minimising waste generation and maximising opportunities for reuse and recycling. During FY 2024-25, the total waste generated was approximately **47,275.70 MT**, comprising **46,897.51 MT of non-hazardous waste** and **358.48 MT of hazardous waste**. Out of the total waste generated, **47,210.99 MT** was diverted from disposal through

Waste Category

■ FY 2023-24 ■ FY 2024-25



HAZARDOUS WASTE
1,463.84 MT
358.48 MT



NON-HAZARDOUS WASTE
50,850.94 MT
46,897.51 MT



BATTERY WASTE
13.71 MT
14.91 MT



E-WASTE
0.11 MT
1.18 MT

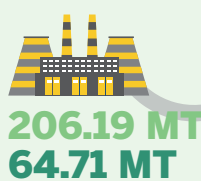


BIO MEDICAL WASTE
2.86 MT
3.62 MT

TOTAL

52,331.46 MT | 47,275.70 MT

Waste Management



206.19 MT
64.71 MT

Amount of waste directed to disposal



Amount of waste directed from disposal (Recycle/Reuse)

52125.27 MT
47210.99 MT



recycling and reuse initiatives, while only **64.71 MT** was directed towards final disposal through approved channels in full compliance with regulatory requirements, ensuring safe disposal and preventing environmental contamination.

Circularity & Waste Management

Refractory manufacturing relies on mineral resources and high-temperature processes, making responsible materials management an important component of TRL Krosaki's sustainability strategy. While some level of waste is inherent in industrial operations, our focus is on minimising material losses, increasing the use of recycled inputs, and recovering value wherever possible.



Our approach to circularity is anchored in resource efficiency, reuse, and responsible waste management, ensuring that materials remain in productive use for as long as possible while reducing environmental impacts across operations.

Circular Manufacturing Practices

The impacts of waste generation are considered across the full spectrum of our operations and value chain. Within our own activities, waste arises primarily from raw material handling, refractory manufacturing processes, quality rejections, and maintenance operations.

Our approach to waste management is therefore anchored in prevention, resource efficiency, and responsible handling. The journey toward circularity begins with resource efficiency at the source, particularly in the way raw materials are selected and utilized. Through careful process planning, material optimization, and operational improvements, we work to minimize material losses before they occur.

A key focus area is maximizing the use of green raw materials, where recycled and secondary materials are used to replace prime raw materials without compromising product performance. In

In FY 2024-25, approximately 45,952 MT of green raw materials (recycled materials) were utilized across our operations, significantly reducing dependence on virgin resources.

FY 2024-25, approximately 45,952 MT of green raw materials (recycled materials) were utilized across our operations, significantly reducing dependence on virgin resources. Refractory materials are carefully formulated and handled to maximize yield, and production processes are continuously refined to ensure efficiency. By reducing waste at the very beginning, we are able to conserve natural resources and lower the environmental footprint of our operations.

Innovation in reuse and recycling is central to our circular approach. We have initiated the recycling of rejected burnt dolomite bricks, reintegrating them into suitable applications within the production cycle.



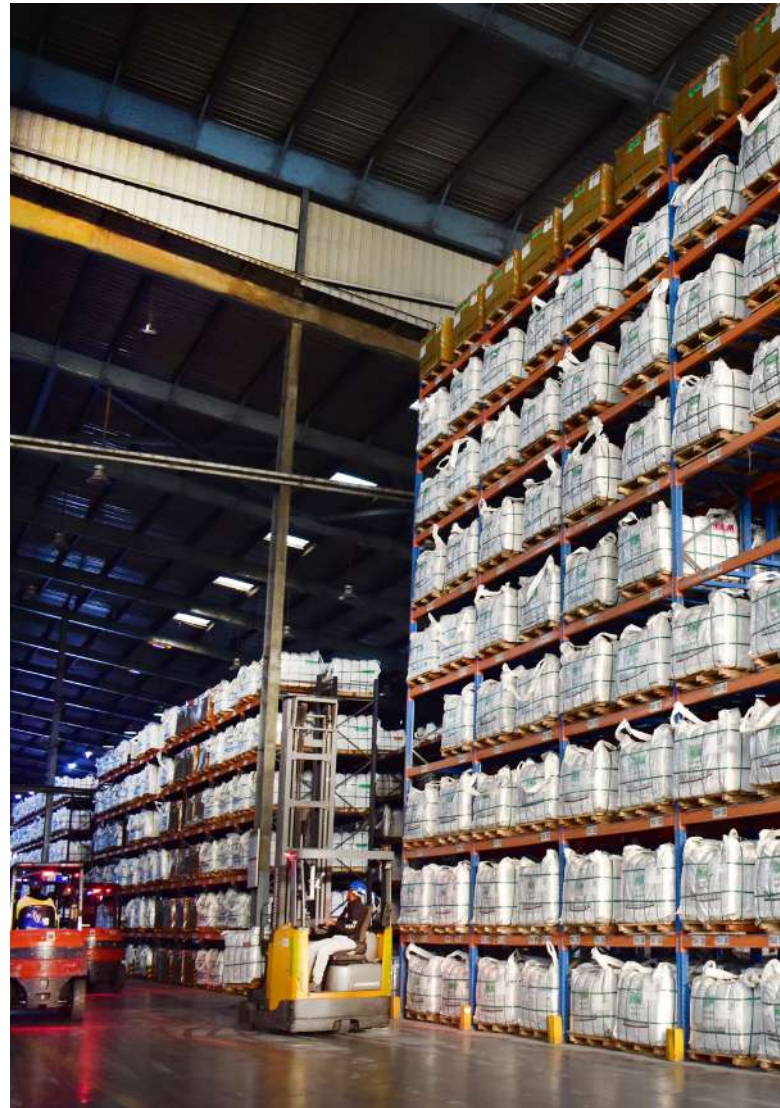
Packaging and Logistics Innovation

We are also looking beyond manufacturing processes to identify opportunities to reduce waste across supporting operations such as packaging and logistics. Packaging materials play an important role in protecting our products during transportation, but they also contribute to resource consumption and waste generation. As part of our broader effort to improve material efficiency, we reviewed the use of packaging materials across our supply chain and explored alternatives that could reduce environmental impact while maintaining product safety.

To address this, TRL Krosaki has initiated several measures to improve packaging efficiency and reduce environmental impact. One initiative involves piloting the use of reusable steel pallets as an alternative to conventional wooden pallets.



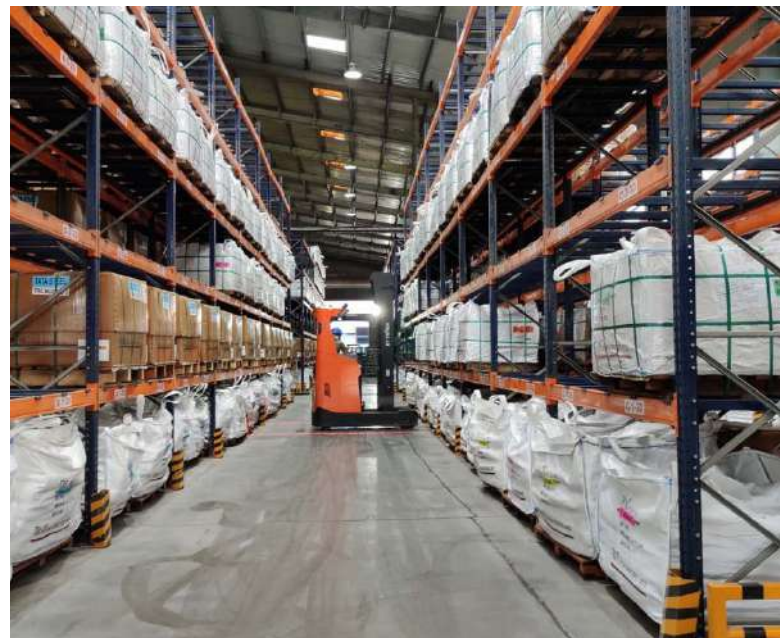
Unlike wooden pallets, which are typically used for limited cycles, steel pallets can be reused multiple times across shipments. Initial trials with key customers have shown encouraging results, with materials delivered safely and pallets returned for reuse. By gradually expanding this approach, we aim to reduce the consumption of wooden packaging materials and extend the useful life of packaging assets.



In parallel, we are also examining ways to improve the design of existing wooden pallets to increase load capacity. By enabling more material to be transported in a single pallet, we can reduce the number of pallets required and improve logistics efficiency. We have also introduced honeycomb paper boards as an alternative cushioning material in place of thermocol for certain shipments, particularly for export markets where regulatory requirements encourage more sustainable packaging solutions. These efforts not only reduce waste generation but also improve overall material efficiency, ensuring that valuable mineral resources remain in productive use for as long as possible.



As a manufacturer dependent on mineral resources, industrial inputs, and logistics networks, TRL Krosaki recognises that the sustainability of its operations is closely linked to the practices of its suppliers.



Supply Chain Sustainability

As a manufacturer dependent on mineral resources, industrial inputs, and logistics networks, TRL Krosaki recognises that the sustainability of its operations is closely linked to the practices of its suppliers. Responsible sourcing and strong supplier partnerships are therefore essential for maintaining operational resilience, ensuring regulatory compliance, and strengthening environmental and social performance across the value chain.

Value Chain Circularity

The impacts of waste generation are considered across the full spectrum of our operations and

value chain. Upstream, the sourcing and processing of raw materials highlight the importance of responsible material selection and increased use of recycled inputs, while downstream, end-of-life management of refractory products presents opportunities for improved recovery, reuse, and value retention within the material lifecycle. Recognizing these interconnected impacts TRL Krosaki address waste not only at the point of generation, but also at the stages where material choices and process decisions can prevent waste from occurring in the first place.

Our circular material strategy delivers tangible climate benefits. The increased use of recycled



and green raw materials, combined with waste reduction and reuse initiatives, contributed to an estimated CO₂ emissions reduction of approximately 27,000 tonnes during FY 2024-25.

Circular thinking extends beyond our walls. We actively engage with suppliers and partners to promote sustainable materials management throughout the value chain. By considering the lifecycle of materials—from sourcing to production to end-of-life—we aim to minimize the environmental impact of our products and encourage broader adoption of circular practices.

This ensures that our manufacturing processes are not only efficient and safe, but also aligned with our broader commitment to environmental stewardship, creating lasting value for both our business and the planet.

Circularity across operations is closely linked to responsible sourcing and supplier engagement, which play an important role in strengthening sustainability across the value chain.

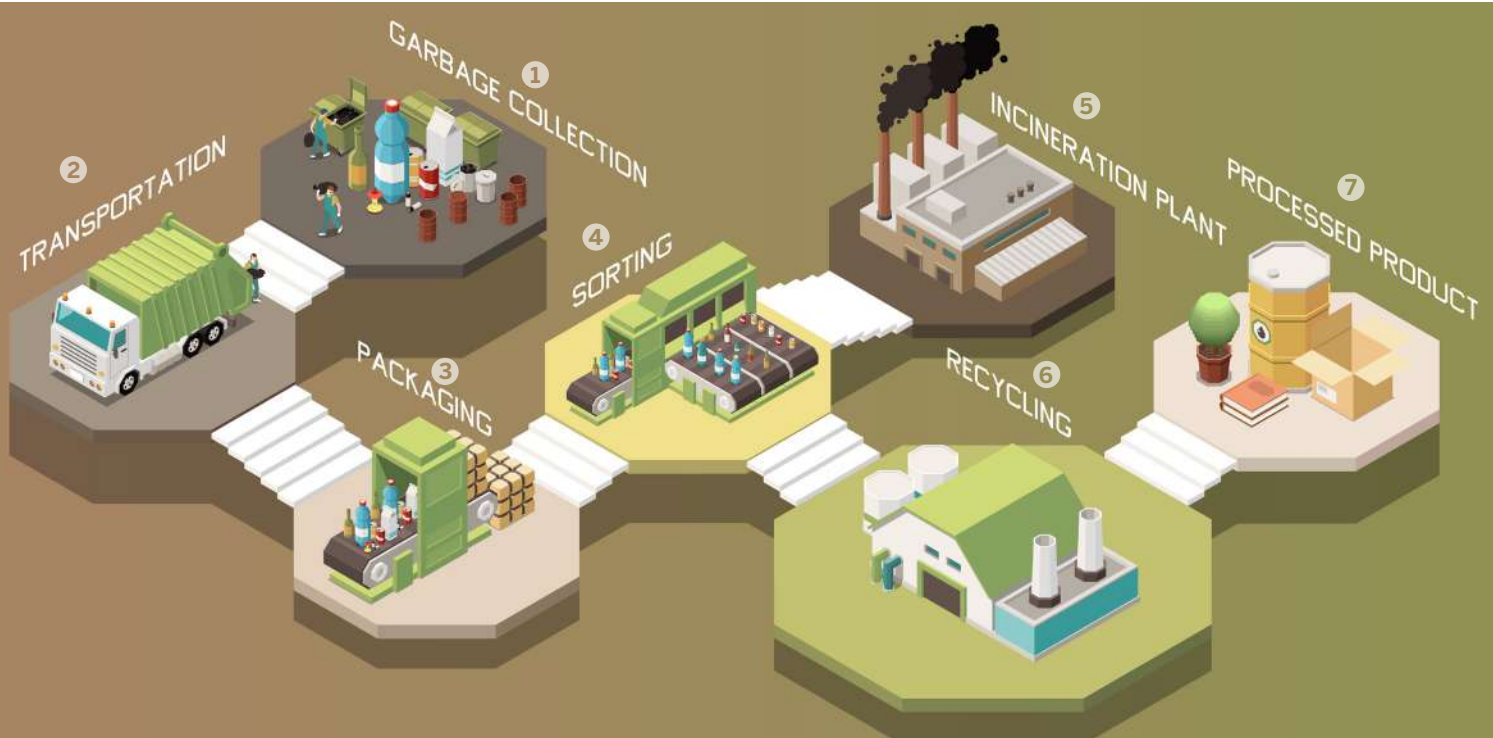
Supplier ESG Capability Assessment

To strengthen sustainability performance across its supply base, TRL Krosaki has introduced a structured Supplier ESG Capability (ESC) assessment framework. Under this framework, suppliers are evaluated against defined sustainability criteria covering environmental management practices, ethical conduct, regulatory compliance, and operational reliability.

ESG capability threshold score of 50. As supplier capabilities and internal systems mature, TRL

Circularity across operations is closely linked to responsible sourcing and supplier engagement, which play an important role in strengthening sustainability across the value chain.

Circular Economy Diagram





Krosaki intends to progressively strengthen this requirement by increasing the threshold from 50-60 and subsequently to 70. This phased approach enables continuous improvement while providing suppliers with the time and support needed to strengthen their sustainability practices.

Supplier Engagement & Risk Management

Supplier assessments are complemented by structured engagement and follow-up actions designed to address identified gaps and encourage improved performance. Through this process, TRL Krosaki systematically identifies, monitors, and manages environmental, social, and governance risks within its supply chain.

These efforts are integrated into the organisation's broader governance and enterprise risk management processes, helping ensure transparency, accountability, and continuity of supply while aligning procurement practices with evolving sustainability expectations.

Sustainable Procurement

Sustainable procurement is an important component of our approach to responsible supply chain management. We integrate ESG considerations into supplier onboarding and evaluation processes through our P-Collab e-Procurement Platform, which assesses suppliers on environmental management, labour practices, human rights, governance, and responsible sourcing. The assessment also evaluates whether suppliers have sustainability requirements in place for their own supply chains, helping strengthen responsible practices across the value chain.

We further promote responsible procurement through green IT purchasing practices, including the procurement of RoHS-compliant equipment and energy-efficient hardware. In addition, findings from our Life Cycle Assessment (LCA) and Product Carbon Footprint assessments have reinforced the importance of sustainable sourcing in reducing value chain impacts,

To strengthen sustainability performance across its supply base, TRL Krosaki has introduced a structured Supplier ESG Capability (ESC) assessment framework.

supporting resource conservation, and contributing to our long-term sustainability objectives. Through these initiatives, we seek to strengthen supply chain resilience, enhance transparency, and support responsible value creation across our supplier network.

Local Sourcing & Supply Chain Resilience

Where feasible, TRL Krosaki prioritises responsible local sourcing, supporting regional economies while reducing logistics risks and transport-related environmental impacts. Clear expectations relating to ethical conduct, regulatory compliance, and responsible business practices are communicated to suppliers and reinforced through assessments, engagement, and ongoing monitoring.

Through these measures, TRL Krosaki aims to strengthen supply chain transparency, promote responsible sourcing practices, and build long-term resilience across its value chain.

Biodiversity

TRL Krosaki recognises that industrial operations must coexist responsibly with the natural ecosystems that surround them. While refractory manufacturing primarily takes place within controlled industrial environments, land use, water management, and resource extraction can influence local ecosystems if not managed carefully. Protecting biodiversity and maintaining ecological balance around our facilities is therefore an important element of our environmental stewardship approach.



Understanding Local Ecosystems

Understanding of the ecosystems surrounding our operations through site-level assessments and environmental monitoring. These assessments help identify areas of ecological significance, local flora and fauna, and environmental sensitivities that may be influenced by operational activities.

TRL Krosaki does not own or operate any facilities located within or immediately adjacent to protected areas or regions of high biodiversity value. This understanding informs operational planning and ensures that land use, raw material sourcing, and environmental management practices are implemented in a way that minimises ecological impacts.

Enhancing Green Cover & Local Habitats

In addition to minimising potential impacts, TRL Krosaki actively works to enhance green cover across its operational locations. Maintaining vegetation within plant premises contributes to improved microclimates, soil stability, and habitat creation for local species. Plantation

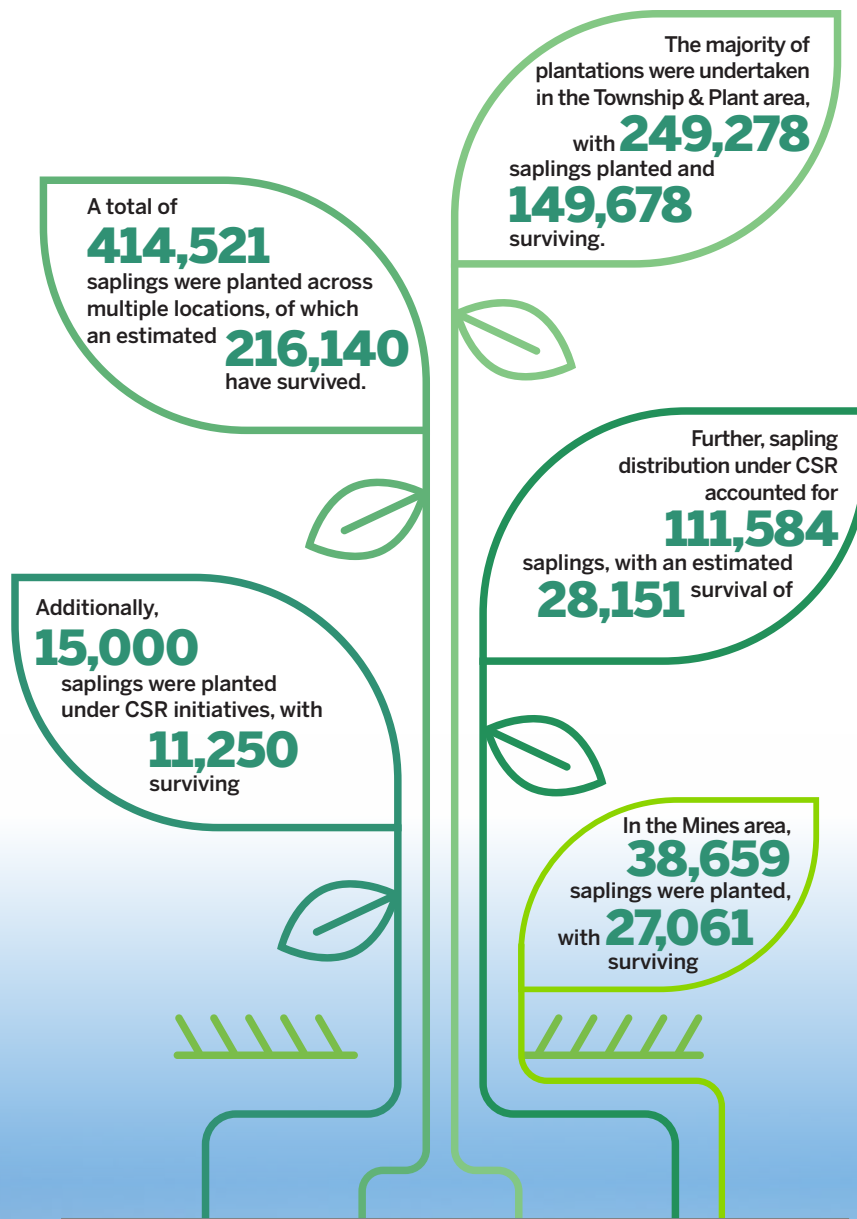
initiatives form an important part of this effort. Across our locations, tree density is estimated at approximately 123 trees per employee, reflecting the significant level of green cover maintained within operational areas. These initiatives complement broader environmental management practices, including protection of local water bodies and responsible land use.

Community Engagement & Conservation

Beyond plant boundaries, TRL Krosaki participates in community-led environmental initiatives that support biodiversity conservation and environmental awareness. Through collaboration with local stakeholders, we promote shared responsibility for protecting ecosystems and strengthening ecological resilience in surrounding areas.



**123 Trees
per Employee**



Looking Ahead

Our environmental journey will continue to be shaped by deliberate innovation, disciplined execution, and a deep sense of responsibility toward the ecosystems influenced by industrial activity. As regulatory expectations evolve and industries pursue lower-carbon pathways, we are strengthening our focus on sustainable materials, energy-efficient processes, and reduced reliance on carbon-intensive inputs. Each advancement builds on the last, reflecting a long-term commitment to embedding environmental considerations into every stage of product design and manufacturing. Through this steady progression, TRL Krosaki seeks not only to support the transition toward cleaner industrial operations, but also to contribute enduring value to a more sustainable and balanced future.





Drive People
and Culture
Excellence



Drive People and Culture Excellence

At TRL Krosaki, people are at the centre of our long-term success. Guided by the belief that “**Investing in People Powers Sustainable Growth,**” we focus on building a workplace where employees are empowered to learn, grow, and contribute meaningfully to the organisation’s progress.

Our approach to people and culture extends beyond skill development to include employee engagement, workplace well-being, and a culture built on respect, collaboration, and shared purpose. Through learning programmes, leadership development initiatives, and inclusive workplace practices, we aim to nurture a resilient workforce capable of supporting the organisation’s long-term growth.

Strong employee relations form an important foundation of our workplace culture. **95.3% of total labour workforce are covered under a Memorandum of Settlement** through collective bargaining arrangements, reflecting a collaborative and stable labour-management environment.

Through these efforts we aim to create a workplace where employees feel valued, supported, and motivated to contribute to TRL Krosaki’s continued success.



As of 31 March 2025,
TRL Krosaki had

1,553

on-roll employees, reflecting steady growth in workforce capacity over recent years.



Workforce Overview

TRL Krosaki employs a diverse workforce across its manufacturing facilities and corporate functions. As of 31 March 2025, the Company had 1,553 on-roll employees, reflecting steady growth in workforce capacity over recent years.

**Total Employees for the last 3 Years (On-Roll)**

	Category	FY 2022-23	FY 2023-24	FY 2024-25
On Roll	Officer	593	629	681
	Workmen	844	878	872
	Total	1,437	1,507	1,553

The increase in officer-level employees reflects the strengthening of technical, managerial, and operational capabilities required to support the company's growth and innovation agenda.

Workforce Composition

Officers represent the managerial and technical leadership of the organisation. As of FY 2024-25, TRL Krosaki employed 681 officers, distributed

Workforce Composition (Officers) (As of 31.03.25)

Level	No. of Officers	Percentage
Officer	87	12.8
Workmen	195	28.6
Junior level	399	58.6
Total	681	100

across different organisational levels as follows: TRL Krosaki aims to maintain a balanced leadership pipeline, supporting both operational execution and future leadership development.

Female employees for the last 3 Years %

	Category	FY 2022-23	FY 2023-24	FY 2024-25
Gender Diversity	Overall Nos.	99	98	104
	Overall %	7.0	6.50	6.70
	Officers Nos	58	61	69
	Officers %	10.1	9.70	10.13
	Workmen Nos	41	37	35
	Workmen %	4.8	4.21	4.01

Off-Roll Employees

	FY 2022-23	FY 2023-24	FY 2024-25
Off-Roll Retainers	318	354	459

Contract Employees

	FY 2022-23	FY 2023-24	FY 2024-25
Contract Labours	2,115	1,986	1,797





Contract labour details with Regional and Gender Diversity

Contract Labour Details as on 31.03.2025

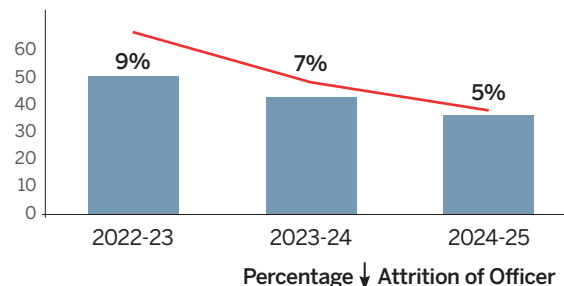
Category	State (Odisha)			Outside	Total (State + Outside)	Gender Diversity	
	From Jharsuguda District	Other Districts	Total			Male	Female
Highly Skilled	51	17	68	3	71	71	0
Skilled	344	33	377	14	391	324	67
Semi Skilled	671	61	732	10	742	646	96
Unskilled	856	57	913	0	913	779	134
Total	1,922	168	2,090	27	2,117	1,820	297



Employee Retention

Employee retention remains an important indicator of workforce stability and organisational health. TRL Krosaki has observed a consistent decline in officer attrition over recent years, reflecting improvements in employee engagement, career development opportunities, and workplace well-being.

Leadership continuity has also played a role in strengthening employee confidence and organisational stability. Long tenures at senior leadership levels provide consistent strategic direction and contribute to a culture of trust and shared purpose across the organisation.



Workforce Demographics

Employees by Region

Our workforce spans more than 15 states across India and extends to one country overseas, reflecting our diverse and inclusive representation.



Workforce Attrition Rate Gender Wise

Total	Female	Male
5.40%	0.28%	5.12%

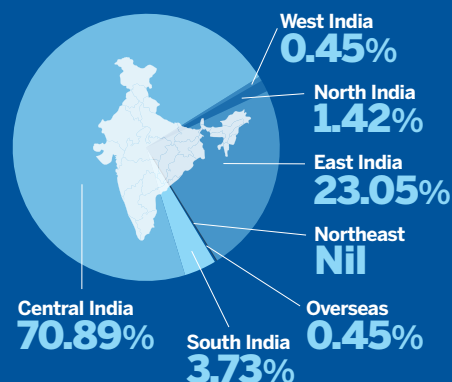
Employees by Region

Indian	Japanese
99.55%	0.45%

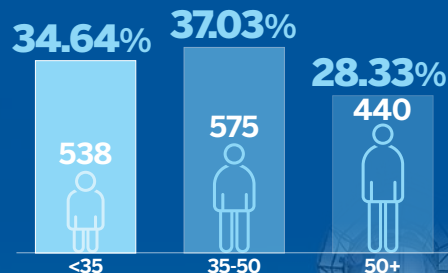
Language Diversity

Odia	Non-Odia
70.45% 1,094	29.55% 459

Regional Representation



Age Diversity



Occupational Health and Safety

Ensuring a safe and healthy workplace is a fundamental priority at TRL Krosaki. Guided by our **commitment to Zero Harm and a Zero Tolerance** approach to safety lapses, we continuously strengthen systems, processes, and employee awareness to maintain high standards of workplace safety.

Safety Performance Highlights



Zero Reportable Accidents
in the past three years



Zero Occupational Diseases
in the past three years



Zero Lost Time Injury Frequency Rate (LTIFR)
in the past three years



Zero fatalities recorded during the reporting period. **Zero reportable accidents** in the past three years

These outcomes reflect the strength of our safety culture and the effectiveness of our safety management systems.

Safety Management Systems

TRL Krosaki has implemented an Occupational Health and Safety (OHS) management system aligned with ISO 45001:2018, ensuring a systematic approach to identifying, assessing, and managing workplace risks.

Hazard Identification and Risk Assessment (HIRA) processes are conducted regularly to evaluate risks associated with both routine and non-routine operations. These assessments enable the implementation of appropriate control measures and ensure continuous improvement in safety performance.



All facilities are equipped with fire-fighting infrastructure and emergency response systems. Regular safety drills, mock exercises, and training programmes are conducted to strengthen emergency preparedness across the organisation.

Safety Training and Awareness

During FY 2024-25, **254 training programmes** were conducted across the organisation focusing on occupational health, safety, and environmental practices for employees and contract workers.

A special campaign titled “**Behaviour Based Safety (BBS) 2.0**” was launched to further strengthen the safety culture. This initiative involves an empowered **Safety Awareness Team (SAT)** comprising workmen who actively promote safe practices across the organisation.

Safety Capability Development

In collaboration with the National Safety Council and other external experts, specialised training programmes were conducted to strengthen safety competence across operational teams.

Certification programmes covered critical safety areas including:



First Aid



Fire Fighting



Crane Operations



Confined Space Work



Working at Height

These initiatives strengthen operational safety awareness and ensure that employees are well prepared to manage workplace risks.

Safety Recognition

During FY 2024-25, TRL Krosaki received several prestigious recognitions for its safety performance.



Indian Chambers of Commerce OHS Excellence Award 2024 – Winner (Platinum Category)



NSCI Safety Awards 2024 – Prashansa Patra for Excellence in Safety



CII Eastern Region SHE Excellence Award 2023-24 – 1st Runner Up

In addition, key customers such as Tata Steel, JSW Steel, AMN Steel, and SAIL Bhilai recognised TRL Krosaki's strong safety performance at their operational sites.



Employee Health and Well-being

TRL Krosaki places strong emphasis on promoting the health and well-being of employees through preventive healthcare programmes, workplace wellness initiatives, and supportive infrastructure.

A dedicated hospital at Belpahar provides healthcare services to employees and contractual staff, including annual health check-ups. The results are consolidated into a **Health Index**, which is reviewed periodically to identify health risks and design targeted interventions.

Based on insights from health monitoring, the company organises wellness initiatives focused on:



Lifestyle Improvement



Preventive Healthcare Awareness



Mental Well-being



Meditation and Stress Management

Workplace conditions are also designed to promote employee comfort and safety. Facilities include ergonomic workstations, advanced dust extraction systems, high-quality personal protective equipment (PPE), and an in-house RO water filtration system.

Beyond workplace infrastructure, employees and their families benefit from township amenities including healthcare facilities, sports infrastructure, green parks, and community recreation spaces, supporting an overall quality of life environment.

Employee Benefits & Financial Security

TRL Krosaki provides a comprehensive set of employee benefits designed to support financial security, health, and long-term well-being.





These include both defined contribution and defined benefit plans, such as:

- Provident Fund
- Pension and Superannuation schemes
- Gratuity benefits
- Post-retirement medical support
- Group savings and insurance programmes

Post-employment benefits are actuarially valued and disclosed in the financial statements in accordance with applicable accounting standards. Regular reviews ensure that these provisions remain aligned with long-term financial commitments.

Employees also benefit from a range of welfare facilities including subsidised canteen services, medical support provided through the company hospital, residential township facilities, and transportation and communication allowances where applicable.

Post Retirement Benefits

TRL Krosaki ensures comprehensive support for employees as they transition into retirement, with a strong focus on dignity, care, and convenience. Post-retirement medical facilities are extended to employees and their spouses, along with priority opportunities for wards of retired employees to appear in job interviews based on vacancies. Retiring employees receive a cash retirement gift directly credited to their bank account on their last working day, in addition to a free housing facility for one month and complimentary transportation of household materials. Importantly, the company guarantees immediate and smooth settlement of dues as per appropriate process, covering Provident Fund, Gratuity, Superannuation (as applicable), Group Savings and Life Insurance schemes, Leave encashments, and un-claimed Leave Travel Concessions.



Plan	Liability / Contribution	Amount (₹ Lakhs)
Gratuity (Funded)	Present Value of Obligation	5,709.98
	Fair Value of Plan Assets	4,983.65
	Net Liability Recognised	726.33
	Employer Contribution FY25	800.00
Post-Retirement Medical (Unfunded)	Net Liability	909.40
Director Pension (Unfunded)	Net Liability	489.24

Quality of Life

TRL Krosaki places strong emphasis on **Quality of Life Initiatives**, with a dedicated agenda to continuously enhance the lifestyle of its workforce by ensuring equal and inclusive access to modern facilities. Employees and their families benefit from a state-of-the-art dedicated township, advanced recreation options such as clubs, eco-parks, water bodies, and green belts, as well as essential services including three modern schools and a hospital. Complementing these are best-in-class policies on leave and holidays, a five-day working week, and flexible shifts that support work-life balance.

Beyond infrastructure and policies, TRL Krosaki fosters a vibrant community spirit through regular get-togethers, team-building events, and celebrations held throughout the year. The company actively showcases talent from within its employees and their families by organizing musical and cultural events, cultural programmes during company functions, and annual functions at schools and associated institutions. These initiatives collectively nurture well-being, inclusivity, and a sense of belonging across the organization.

Fair Wages and Local Economic Participation

At TRL Krosaki, entry-level wages across our operations meet or exceed applicable statutory minimum wage requirements. We consider this

a baseline commitment to fair employment.. Wage structures are determined based on role requirements, skill levels, and local regulations, and are applied consistently without differentiation by gender. Wage levels are periodically reviewed to ensure continued compliance.

Local hiring is an important element of the Company's workforce strategy. A substantial proportion of the overall workforce originates from the local state (Odisha) and surrounding regions. While a specific percentage of senior management hired locally is not tracked separately, localisation is reflected across management and operational roles, supported by a high level of local engagement within the contract workforce.

Annual Total Compensation Ratio

The company maintains equal remuneration practices for male and female employees, ensuring that wage structures are based on role requirements, skills, and experience rather than gender.

Compensation Ratio

The median compensation of senior executives (E5 and E6 levels) is ₹49.5 lakhs, compared to a median of ₹5.5 lakhs for other employees, resulting in a compensation ratio of 9:1.

Skill Category	Statutory Daily Wage (₹)	Company Wage Position
Unskilled	462	Above minimum
Semi-Skilled	512	Above minimum
Skilled	562	Above minimum
Highly Skilled	612	Above minimum
Gender Pay	Male/Female	Equal remuneration

Employee Engagement

TRL Krosaki fosters a vibrant and inclusive culture through diverse initiatives such as sports events at the Ratan Tata Stadium and schools involving both employees and children, mass celebrations of occasions, and observance of



national and local festivals. The company also organizes important celebrations including Women's Day, Children's Day, Environment Day, Founder's Day, Independence Day, Republic Day, and various World Healthcare Days, each centered on meaningful themes, thereby strengthening community spirit and employee participation across the organization.

Our employee engagement efforts are crafted to build a culture of trust, collaboration, and continuous development ensuring that every individual feels respected, supported, and motivated. During the past year, we introduced a variety of initiatives aimed at strengthening engagement across all levels of the organization.



Rewards and Recognition

Celebrating achievements through performance-based awards, long service awards, small group activities.



Learning and Development

Offering blended learning opportunities, leadership training, and upskilling programs tailored to individual career paths.



Wellness & Work-Life Balance

Promoting physical and mental well-being through health camps, flexible work arrangements, and wellness sessions.



Employee Voice

Conducting regular surveys and feedback to ensure transparent communication and responsive action. Ethics Survey, Company Proficiency Survey, Joint Employee Forums, Grievance Mechanism with openly displayed access through toll free numbers, mobile numbers, email IDs of internal and external officials accessible to all employees, contractual staff, vendors and stakeholders.



Inclusive Culture

Encouraging cross-functional collaboration (several cross functional business teams and cultural teams), number of cultural celebrations, and inclusive team-building activities.



Industrial Relations

To build on our long-standing tradition of industrial harmony and collaboration—recognized as a key driver of the company's growth—we introduced a distinctive initiative for active people participation:

Joint Employee Forums (JEF)

TRL Krosaki introduced the **Joint Employee Forums (JEF)** as a participative and consultative platform to strengthen employee engagement and foster innovation. By encouraging cross-functional dialogue, JEF promotes teamwork, continuous improvement, and collaboration between management and worker representatives. At the Belpahar Plant, six JEF groups comprising 130 members—including officers, workmen, and women employees—have been formed. Together, they have conducted 25 meetings, generating 150 actionable points focused on areas such as operational safety, digitalization and automation, ESG initiatives, and enhancing employee well-being. Several initiatives were successfully implemented, and contributors were recognized for their efforts in operational safety, innovation, and culture building.

Beyond JEF, TRL Krosaki reinforced its commitment to industrial harmony through milestone agreements and collaborative practices. An all-time high bonus agreement was signed to acknowledge the contributions of workmen, while trade union membership verification and elections were conducted with professionalism and cooperation, earning praise from employees and government agencies alike. In 2025, a historic wage agreement was finalized, registering a record increment that surpassed all previous benchmarks, further underscoring the company's dedication to employee welfare, harmony, and collective progress.

Pulse Surveys

At TRL Krosaki, we periodically seek feedback from employees through Pulse surveys, conducted once every two years by the HR department. These surveys provide an insight



into how employees experience their roles, the workplace environment, and opportunities for growth within the organisation.

The surveys cover key aspects of the employee experience, including career progression and development, rewards and recognition, role clarity, supervisor effectiveness, and team culture. Employees are also asked to share their views on work life balance, grievance handling, and their overall sense of belonging within the organisation.

Responses are captured through a set of questions using a Likert scale, which allows for analysis of trends and identify areas of concerns. In addition, employees are encouraged to provide qualitative feedback, offering further perspective on their workplace experience. The insights are used to strengthen existing policies, refine workplace practices, and introduce improvements where necessary.

Grievance Management

TRL Krosaki upholds an **open-door policy** that allows employees, contractual staff, community members, and vendors to easily approach top management with their concerns. Leadership



remains highly accessible, actively listening to suggestions and addressing issues to strengthen the company's culture, motivation, and systems.

In addition, the company has established **formal grievance mechanisms** to ensure transparency and fairness. Grievances can be raised through procedures displayed prominently across the shopfloor, with grievance boxes placed at key locations and opened weekly by designated members of HR, the Social Performance Team, and relevant departmental offices. Contact details of Ethics Counsellors, the ASHI (POSH) Chairperson, SA-8000 Management Representatives, Welfare Officers, certifying bodies, and a toll-free ethics

TRL Krosaki upholds an open-door policy that allows employees, contractual staff, community members, and vendors to easily approach top management with their concerns.

helpline are clearly displayed, with all employees trained on their use. Furthermore, several participative committees—including JEF, Plant Safety & Implementation Committees, the Social Performance Team (SPT), Safety Awareness Team (SAT), and the Canteen Committee—operate with representation from both officers and workmen, reinforcing collaboration and accountability across the organization.

Employees, stakeholders, and community members are encouraged to raise any concerns related to ethics, compliance, or governance. Concerns may be reported in confidence to the designated authority as follows:

Ethics Counsellor

TRL Krosaki ensures that clear and accessible reporting channels are available for raising concerns. Individuals may reach out confidentially to the Company's Ethics Counsellor through dedicated communication channels designed for reporting concerns related to ethical conduct, misconduct, or violations of the Code of Conduct.

For those who prefer an alternative route, a toll free helpline is also available to allow concerns to be shared directly and confidentially. In specific situations, individuals may escalate their concerns to the Chairperson of the Audit Committee to ensure independent oversight.

Through these multiple reporting channels, we aim to make it easier for employees and other stakeholders to speak up and report concerns in a safe and confidential manner.



Training & Development

At TRL Krosaki, learning and development plays a critical role in building a future-ready workforce capable of adapting to technological change and evolving industry demands. Our approach focuses on **continuous upskilling, leadership capability building, and the development of specialised technical expertise** required in a complex industrial environment.

By fostering a culture of lifelong learning, we empower employees at every level of the organisation to enhance their skills, strengthen operational capabilities, and contribute

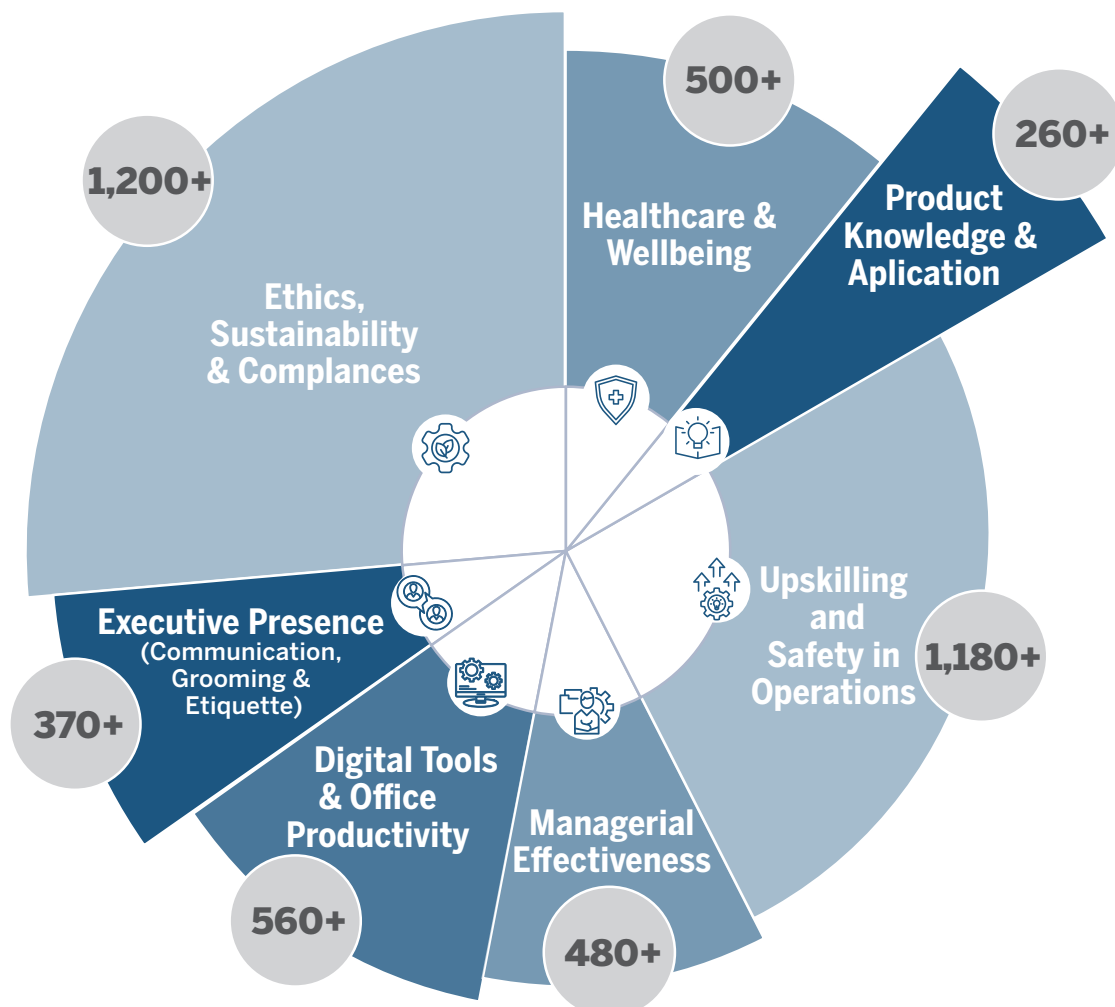
to innovation and sustainable growth. The Company does not operate with a fixed annual training budget. Instead, **learning investments are determined based on identified capability gaps and organisational priorities**. Where specialised expertise is required, TRL Krosaki collaborates with external institutions and subject-matter experts to deliver targeted learning programmes.

Training Overview

During FY 2024-25, TRL Krosaki significantly expanded its learning initiatives across technical, managerial, and safety domains.

Key Programmes Completed - FY 2024-25

Themes and the Total No. of employees participated in key programmes under the themes





Training Highlights FY 2024-25

Training programmes covered a wide range of themes including core refractory technologies, leadership and management development, ethics and sustainability, digital productivity tools, and occupational health and safety.



298

Total Training Sessions



~32,800

Total Manhours



~9,000

Total Participation



~4,100

Total Man-days



More than 70% of training programmes, particularly in functional and EHS domains are delivered by internal faculty, enhancing knowledge sharing and strengthening organisational capability.

Career Development

Employee development is closely linked to the organisation's performance management framework. During the probation period, employees receive structured development support, followed by annual performance appraisals that help identify learning needs and career pathways.

High-potential employees are periodically identified and provided with individual development plans (IDPs) designed to accelerate leadership readiness and strengthen long-term retention.

Career progression is further supported through:

- Job rotation and role expansion opportunities.
- Cross-functional committee participation.
- Specialised internal and external training programmes.
- International exposure and knowledge exchange initiatives.

These initiatives help build a pipeline of capable leaders while strengthening functional expertise across the organisation.

Learning and Development Programs

TRL Krosaki designs tailored learning pathways for different categories of employees to ensure that development needs are addressed throughout the employee lifecycle.

Induction and Early Career Development

- Fresh graduates undergo three months of structured training followed by two years of on-the-job mentoring.
- Lateral hires receive 15 days of induction training and one year of mentoring, supported by periodic refresher programmes.
- Contract workers receive daily toolbox talks and on-the-job training, strengthening safety awareness and operational capability.

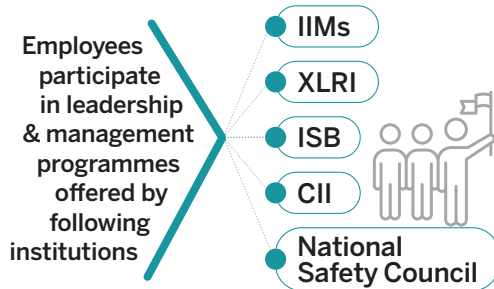
Internal Faculty Development

TRL Krosaki actively develops internal subject-matter experts (SMEs) who serve as in-house trainers across functional areas. In collaboration with institutions such as XLRI, the company continues to strengthen its internal faculty development programme.



Leadership Development

TRL Krosaki invests in structured leadership development programmes delivered in collaboration with leading academic institutions and global consulting firms.



Technical capability development is also supported through collaborations with organisations such as:

- KHC Japan • IITs • FANUC • Siemens • ICAI

LEAP Leadership Programme

In partnership with Korn Ferry, TRL Krosaki launched the Leadership Enhancement Through Action Learning Programme (LEAP) to build the next generation of organisational leaders.

The first LEAP cohort includes 20 senior executives, who are participating in a year-long programme delivered in collaboration with Korn Ferry, IIM Bengaluru, and Pegasus. The participants are expected to graduate in FY 2025-26, while a second batch of 25 executives is planned for the next phase of the programme.

Digital Learning Innovation – XR Labs

TRL Krosaki has also introduced XR-LABS, an extended reality learning environment that integrates:



Virtual Reality (VR)



Augmented Reality (AR)



Mixed Reality (MR)

These technologies enable immersive training experiences for operational processes, plant tours, and safety simulations.

Additional digital learning modules are currently being developed to support training across critical operational and technical areas.

Training Effectiveness Evaluation

TRL Krosaki evaluates the effectiveness of its training programmes using a structured two-tier approach.

Standard Evaluation Methods

- Participant feedback & reaction assessments
- Pre- and post-training tests
- Self-assessments
- Departmental feedback during performance reviews

These mechanisms allow the organisation to monitor learning outcomes and identify areas for improvement.

Customised Evaluation Methods

For specialised programmes, customised evaluation approaches are used to assess real-world impact. These include:

- Project assignments and presentations
- Live operational assessments



- Cross-team and cross-audit evaluations
- Tracking of business outcomes such as improved operational performance, reduced incidents, enhanced client engagement, and stronger employee retention.

Through this evaluation framework, TRL Krosaki ensures that training initiatives translate into measurable improvements in organisational capability and operational performance.

Community Engagement

At TRL Krosaki, Corporate Social Responsibility (CSR) is an integral part of our commitment to sustainable and inclusive growth. Our community initiatives focus on improving quality of life in the regions where we operate by strengthening access to education, healthcare, livelihoods, and essential infrastructure.

In FY 2024-25, the company significantly expanded its CSR initiatives, with total CSR expenditure reaching ₹4.18 crore, representing an **increase of approximately 56% compared to the previous year**. These investments supported initiatives across education, healthcare, environmental protection, livelihoods, rural infrastructure, sports, and cultural development.



₹150 Lakh

Invested between 2019 and 2024 in community development programmes benefiting rural communities in the vicinity of our operations.



Education and Youth Development

Education remains a key pillar of TRL Krosaki's community development efforts.

To improve learning infrastructure, the company constructed a **new school building in Belpahar**, providing improved educational facilities for 207 students who previously studied in a deteriorating structure.

To strengthen science education, **science laboratories were established in four high schools** across Lakhanpur Block, **benefiting 668 students** by enabling hands-on learning in science and mathematics.

Career guidance programmes were also conducted in **12 high schools and +2 colleges**, **reaching 1,327 students**. These programmes introduced students to 45 career pathways and provided personalised counselling through career fairs and expert sessions.

In addition, TRL Krosaki **supported high-performing students through residential coaching camps for the top 50 students** in Jharsuguda district, contributing to improved academic performance in the state matriculation examinations.

The company also supports students through financial assistance programmes. Under the **Merit-cum-Means Scholarship scheme**, **tuition fees were covered for 230 economically disadvantaged students**. Additional educational support, including lodging, boarding, books, uniforms, and **ITI education was provided to 18 students from SC/ST and BPL families**, enabling them to pursue secondary education.

Healthcare and Sanitation

Improving healthcare access and sanitation remains an important priority for TRL Krosaki's CSR initiatives.

Under Project Drishti, the company organised **24 rural eye care camps, benefiting 3,778**



542
School Children and



111
Drivers received Free Spectacles



184
Cataract Surgeries were performed for Senior Citizens

individuals across surrounding communities. As part of these efforts:

TRL Krosaki also **established a Sickle Cell Anaemia Centre** in Jharsuguda, where 341 individuals were screened, with 27 positive cases receiving medical counselling and follow-up care.

Additional healthcare initiatives included **10 rural health camps**, including two mega camps conducted with specialist doctors, **benefiting 1,731 individuals**. Immunisation programmes covering 337 infants and mothers were also organised.

To support adolescent health, the Advika Programme provided health monitoring, hygiene awareness, and **sanitary products to 500 adolescent girls** in Belpahar.

Sanitation and safe drinking water infrastructure were also strengthened through the **installation of school toilets and water purifier-cum-chillers in rural public spaces**.

Livelihoods and Agricultural Support

TRL Krosaki supports rural livelihoods through skill development programmes and sustainable agricultural initiatives.

The company established a **solar-powered lift irrigation system** in Suldia village, **benefiting 55 marginal farmers across more than 65**



acres of farmland. Through training in modern agricultural practices and crop diversification, farmers are now able to cultivate multiple crops annually and improve income stability.

Skill development initiatives were also conducted through partnerships with institutions such as the **Rural Self Employment Training Institute (RSETI)**. During the year, **1,126 rural youth received skill-based training, with 84% successfully securing employment or self-employment opportunities.**

Solar Cold Storage for Farmers

To reduce post-harvest losses and strengthen agricultural incomes, TRL Krosaki installed a solar-powered cold storage facility in Panchgaon village, Jharsuguda district. **Before this intervention, more than 56% of farmers lacked reliable storage facilities, leading to significant post-harvest losses of 20-50% for perishable vegetables.**

The solar cold storage facility now enables farmers to store vegetables for up to three weeks, allowing them greater flexibility in selling their produce and improving market prices.

Early community feedback indicates that approximately 75% of farmers using the facility experienced income increases of nearly 30%, demonstrating the positive economic impact of improved storage infrastructure.

Community Infrastructure & Social Cohesion

TRL Krosaki also supports community infrastructure that strengthens social cohesion and cultural life in rural areas. CSR initiatives include the construction and renovation of community halls, cultural venues, and recreational spaces that serve as gathering points for festivals, weddings, health camps, and training programmes. Community facilities such as **Kalyan Mandaps and multipurpose halls** provide important venues for social and cultural events while also supporting local economic activity through services provided by small businesses and vendors.

The Company also supported the **renovation of the Mirror Theatre in Gumadera**, including stage improvements and **installation of Bluescope steel roofing**, helping preserve local theatre and cultural traditions. **Recreational facilities** such as P.R. Chaki Club and Ganesh Club provide spaces for sports, cultural activities, and community engagement, contributing to improved quality of life and stronger community bonds.

Township as Community Infrastructure

The township developed by TRL Krosaki also serves as an important hub of social infrastructure for surrounding communities. Facilities including healthcare services, educational institutions, recreational spaces, and sports infrastructure are accessible not only to employees but also to members of the wider community.

Through these initiatives, TRL Krosaki seeks to strengthen social infrastructure, improve access to essential services, and contribute to the long-term development of the regions where it operates.



TRL K ROSAKI

Digitalization,
Governance
and Responsible
Value Chain



Governance at TRL Krosaki: A Foundation for Sustainable Value

At TRL Krosaki, governance provides the foundation through which our values are translated into disciplined execution, accountability, and long-term value creation. As we strengthen our work on people development, community impact, sustainability, and innovation, robust governance systems ensure that these efforts are supported by responsible decision-making, risk awareness, and regulatory discipline.

Our governance approach is designed to align business performance with stakeholder expectations while safeguarding the trust placed in us by employees, customers, investors, suppliers, and communities. As the Company continues to evolve, governance remains central to enabling resilient performance, operational discipline, and future-ready growth.

Governance Philosophy and Approach

We view governance as a strategic enabler of sustainable growth. Our governance framework is designed to ensure resilience, accountability, and responsible decision-making across all levels of the organisation, while supporting consistent execution in a dynamic industrial and regulatory environment.

Sustainability considerations, enterprise risk management, and performance oversight are integrated into how the business is planned, executed, and monitored. This ensures that strategic priorities, operational decisions, and capital allocation are informed by a clear understanding of risks, opportunities, and stakeholder expectations rather than short-term considerations alone. Governance is embedded through structured oversight mechanisms, clearly defined roles and responsibilities, and integrated management systems that connect strategy,

risk, operations, and sustainability into a cohesive decision-making framework.

Governance Structure and Board Oversight

The Board of Directors provides strategic leadership and serves as the highest authority for governance and oversight at TRL Krosaki. The Board guides long-term strategy, oversees business and sustainability performance, and ensures that material risks and opportunities are identified, assessed, and managed in a timely and effective manner.

As of FY 2024-25, the Board comprised 11 directors, including independent, executive, and non-executive members, with representation from India and Japan. This composition brings together diverse industry experience, functional expertise, and global perspectives. The presence of independent directors and a woman director further strengthens diversity, independence, and the robustness of oversight.

The Board is supported by committees with clearly defined mandates covering financial reporting, internal controls, enterprise risk management, and ethical conduct. Sustainability- and risk-related matters are reviewed at both the Board and committee levels to ensure alignment with long-term value creation objectives.

Our governance approach is designed to align business performance with stakeholder expectations while safeguarding the trust placed in us by employees, customers, investors, suppliers, and communities.



BOARD OF DIRECTORS

H. M. Nerurkar
Chairman



Prasanta Kumar Naik
Managing Director



Raghupathy Rao Ranganath
Independent Director



Sudhansu Pathak
Independent Director



Hisatake Okumura
Director



Sachihiko Asaya
Director



Chaitanya Bhanu
Director



Alok Verma
Director



Takashi Matsunaga
Director



Ai Iwasaki
Woman Director



Sunanda Sengupta
Executive Director





Governance Strategy, and Risk Oversight

The Board plays an active role in overseeing the integration of sustainability considerations and risk management into TRL Krosaki's growth strategy. Strategic initiatives and operational plans are evaluated on financial performance, and risk exposure, long-term resilience, and alignment with business priorities and sustainability commitments.

The Audit Committee oversees enterprise risk management and periodically reviews risk assessments, mitigation actions, and overall risk maturity. The Audit Committee actively reviews graphs that plot actual maturity scores against their targets across various **Enterprise Risk Management (ERM) parameters**. **During FY 2024-25, the Company achieved a risk maturity score of 4.01 out of 5**, exceeding the target set by the Audit Committee. This reflects progress in embedding risk-informed decision-making across functions and positioning risk management as a strategic enabler rather than a compliance exercise.

The Board also reviews sustainability-related disclosures to ensure that reported information is accurate, complete, and aligned with governance, risk management, and performance oversight processes.

Enterprise Risk Management

Risk management is embedded across the enterprise and integrated into how we plan, operate, and govern the business. As our operating landscape evolves, so do the risks and opportunities that shape long-term performance. Our approach ensures that risk awareness informs strategy rather than simply responding to disruption.

Our framework aligns with internationally recognised principles and supports risk-informed decision-making at all levels. Risks are identified through bottom-up inputs from departments, top-down leadership perspectives, and external environment assessments to ensure comprehensive coverage of



emerging and evolving risks. Each risk is assigned clear ownership, supported by defined mitigation and contingency plans.

Risk registers, early warning indicators, and digital dashboards are used to monitor trends, track mitigation effectiveness, and assess residual exposure on an ongoing basis. Risks and mitigation progress are reviewed periodically by senior management and the Audit Committee and reported to the Board. This structured review and escalation process enables timely intervention, strengthens organisational resilience, and helps ensure that risks remain within the Company's defined appetite.

As a result of these oversight and compliance mechanisms, the Company did not receive any fines or monetary penalties during the reporting period.

Ethics, Integrity, and Responsible Business Conduct

Ethical conduct and integrity form the foundation of TRL Krosaki's governance framework and organisational culture. Expectations regarding ethical behaviour, integrity, and compliance are clearly communicated across the organisation and reinforced through structured training, awareness initiatives, and ongoing engagement.



During FY 2024-25, **ethics and workplace conduct awareness programmes** were conducted for employees and contractor personnel across locations to strengthen understanding of expected behaviours and reporting mechanisms. As per the **Ethics Report for Q4 FY 2024-25, no ethical concerns or POSH complaints were received or pending during the reporting period.**

By reinforcing ethical standards and promoting accountability, TRL Krosaki strengthens stakeholder confidence, mitigates conduct-related risks, and protects its long-term licence to operate.

Whistleblower Mechanism and Accountability

We maintain a structured whistleblower mechanism that enables employees, directors, vendors, and other stakeholders to report concerns related to misconduct, unethical behaviour, fraud, or violations of our Code of Conduct without fear of retaliation. Our Whistleblower Policy, aligned with the Companies Act, 2013, establishes a formal vigil mechanism supported by clearly defined reporting channels and oversight processes.

Concerns may be reported confidentially to the Ethics Counsellor via email, phone, written communication, or in person. In specified cases, direct access to the Chairperson of the Audit Committee is available. A dedicated toll-free number is also operational for reporting ethical concerns, including matters related to sexual harassment. All reported cases are reviewed through defined procedures that ensure confidentiality, impartial investigation, timely resolution, and appropriate escalation.



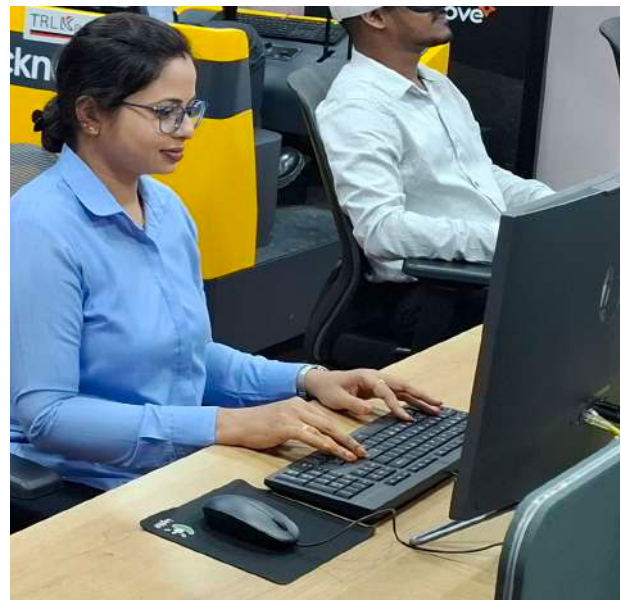
During FY 2024-25, no whistleblower complaints were received.

We have also constituted a Whistle Blower Protection Committee to safeguard individuals who report concerns in good faith. Retaliation, harassment, or victimisation against whistleblowers is strictly prohibited. Through these mechanisms, we reinforce accountability, strengthen ethical governance, and promote a culture of transparency across our organisation.

Digitalization for operational excellence

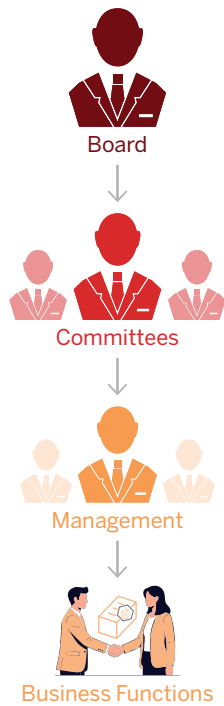
Digitalization is a key enabler of operational excellence and governance effectiveness at TRL Krosaki. As digital systems increasingly support our core business processes, the Company is strengthening the integration of data-driven tools and platforms to enhance efficiency, strengthen controls, and improve decision-making across functions.

Advanced analytics and dashboards are used to strengthen forecasting, operational performance monitoring, and risk assessment, providing timely insights for management action. Integration across our systems enhances workflow productivity and improves transparency, while strengthening cybersecurity and access controls.





GOVERNANCE STRUCTURE



Governance Highlights

11
Board
members**4.01/5**
Risk
Maturity**Zero**
fines/
monetary
penalties**Zero**
whistleblower
complaints**Zero**
ethical
concerns/POSH
complaints

Beyond efficiency, digital solutions also contribute to our sustainability outcomes and business agility by improving traceability, enabling proactive risk identification, and supporting responsive engagement with customers and stakeholders. Through these initiatives, digitalization reinforces governance maturity and resilient growth, strengthening the “G” foundation of ESG performance.

Data Privacy

As digital systems increasingly support operational efficiency and business growth, we place strong emphasis on safeguarding our information assets and protecting stakeholder data. We have established governance mechanisms to

manage data privacy and cybersecurity risks through defined controls, continuous monitoring, and employee awareness initiatives. These practices are further strengthened by our ISO/IEC 27001:2022 certification, reflecting our commitment to globally recognized information security standards.

We conduct independent assessments and internal reviews to identify vulnerabilities and strengthen safeguards across our digital systems and data processes. This structured approach enhances resilience, supports regulatory compliance, and reinforces confidence among our customers, partners, and other stakeholders.

Delivering Economic Value

At TRL Krosaki, economic value extends beyond financial performance. Every tonne produced, order fulfilled, and investment made supports livelihoods, enables suppliers, contributes to public revenues, and strengthens the local economies in which we operate.



During FY 2024–25, no data privacy complaints were received.



The value created through our manufacturing and commercial activities flows across multiple stakeholder groups. It is reflected in wages and benefits paid to employees, payments to suppliers and service providers, taxes contributed to government authorities, and investments in community development.

Beyond direct financial distribution, our economic contribution also includes employment generation, infrastructure investments, climate-aligned capital allocation, and the indirect economic impacts generated through our operations and CSR initiatives. By aligning sustainability priorities with financial discipline, we aim to strengthen business resilience while supporting inclusive economic growth.

Direct Economic Contribution and Value Distribution

TRL Krosaki generates economic value through its manufacturing and commercial operations and distributes this value across key stakeholder

Category	Particulars	Amount (₹ lakh)
Direct Economic Value Generated	Revenue from Operations	2,60,005.38
	Other Income	2,451.33
	Exceptional Income (Sale of Assets)	12,972.22
	Total Income	2,75,428.93
Economic Value Distributed	Operating Costs	2,05,571.06
	Employee Wages & Benefits	20,657.15
	Finance Costs (Interest)	1,158.29
	Dividends Paid	5,956.50
	Payments to Government (Current Tax)	8,877.97
	Community Investments (CSR)	418.00
Economic Value Retained	Profit for the Year	34,219.83



groups. Economic value distribution includes operating costs, employee wages and benefits, payments to providers of capital, taxes paid to government authorities, and investments in community development. Economic value retained is reinvested to support business continuity, growth initiatives, and long-term financial stability.

Type of Assistance	Scheme/Source	Amount (₹ lakh)
Export Incentives	Duty Drawback & RoDTEP	550.22
Capital Goods	EPCG Scheme	288.87
EPCG Obligation	Outstanding Export Obligation	5,642.16
Cash Flow Impact	Govt grant inflow (Investing)	288.87
CSR-linked Support	MoRD / NABARD (RSETI)	Training reimbursements
Infrastructure Grant	Central Govt (Eligibility)	₹1 Crore



Government Financial Assistance

When we talk about government assistance, it is important to see it in context. We operate within national development frameworks that are designed to strengthen manufacturing and exports. As part of that ecosystem, the Company receives support through export-related incentives, capital goods schemes, and certain project-linked programmes.

These are not discretionary benefits. They are structured schemes tied to clear obligations. Export incentives are recognised as operating income in line with applicable regulations. Capital goods incentives are accounted for as per accounting standards and are linked to the fulfilment of export commitments. The treatment in our books reflects both compliance requirements and the substance of the underlying activity.

We also participate in government-supported livelihood and skill development initiatives

through its CSR programmes, where training costs and infrastructure support are reimbursed or co-funded by government agencies.

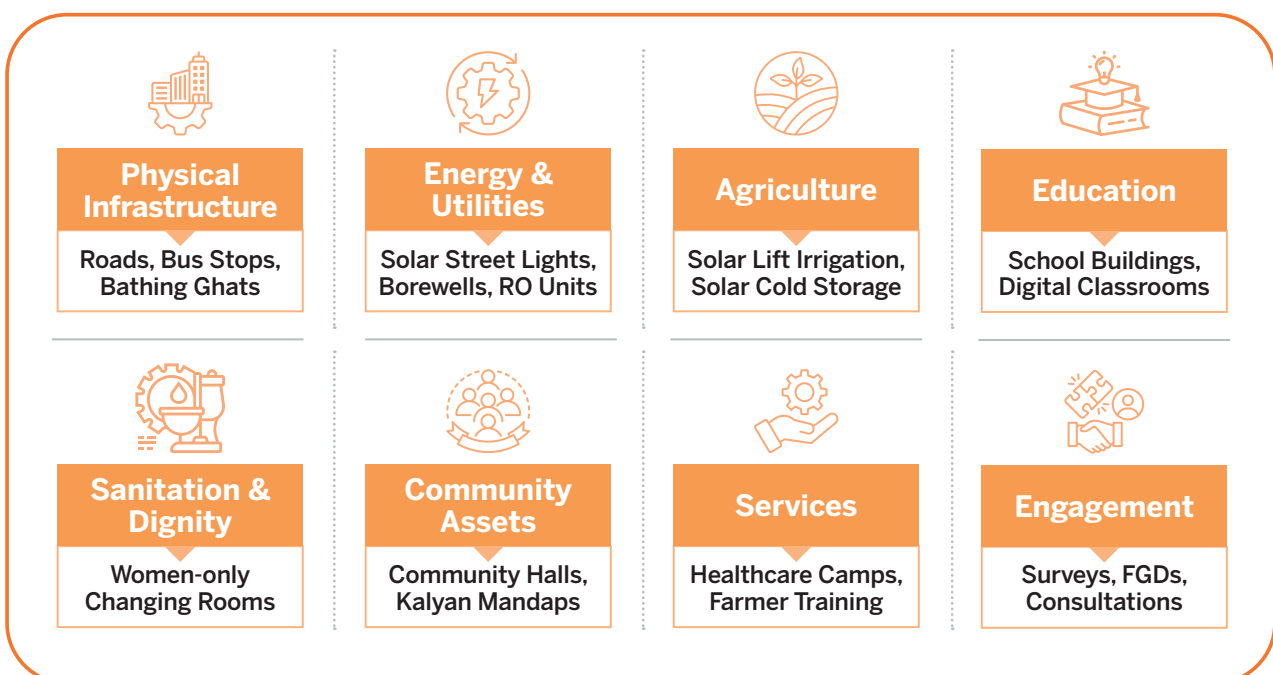
Infrastructure Investments and Services Supported

Around our plants, economic activity does not happen in isolation. It depends on access to basic infrastructure. That is why TRL Krosaki invests in assets that help communities participate more actively in the local economy.

Our support has included irrigation systems, cold storage facilities, community halls, educational infrastructure, healthcare facilities, and digital learning resources. These are practical interventions.

When these essentials are in place, livelihoods become more secure and local economies become less vulnerable to disruption. Our role is to support that enabling environment in Belpahar and other regions where we operate.

AREA AND KEY INTERVENTIONS





Significant Indirect Economic Impacts

The Company generates indirect economic impacts through its CSR and community development initiatives. Agricultural interventions have improved farm productivity and incomes, while skill development programmes have supported employment and self-employment among rural youth. Investments in education, health, and environmental quality contribute to long-term workforce readiness and economic resilience.

These impacts extend across farming households, small businesses, service providers, and future workforce cohorts, supporting inclusive regional development beyond the Company's direct operations.

Impact Area	Quantified Outcome
Agriculture	₹50,000–₹1,40,000 annual income increase
Skill Development	10,718+ individuals trained (RSETI)
Employment	Self-employment & wage employment
Local Economy	Vendor & service provider income
Supply Chain	MSME dues ₹1,598.11 Lakhs
Human Capital	Improved education, health outcomes

Approach to Tax

At TRL Krosaki, tax is managed as an integral part of responsible business conduct and financial governance. The Company's tax approach supports statutory compliance while aligning with business operations, risk management, and long-term value creation.

Tax compliance is embedded within the Company's governance and enterprise risk management processes. Direct and indirect tax obligations, including income tax, goods and services tax, professional tax, customs duties, and other statutory levies, are monitored through our digital compliance system called **Legatrix**. These systems support timely filings, accurate



payments, and ongoing tracking of regulatory changes across jurisdictions. Oversight of tax matters forms part of the broader financial governance framework, with audit and review mechanisms supporting transparency and consistency in tax reporting.

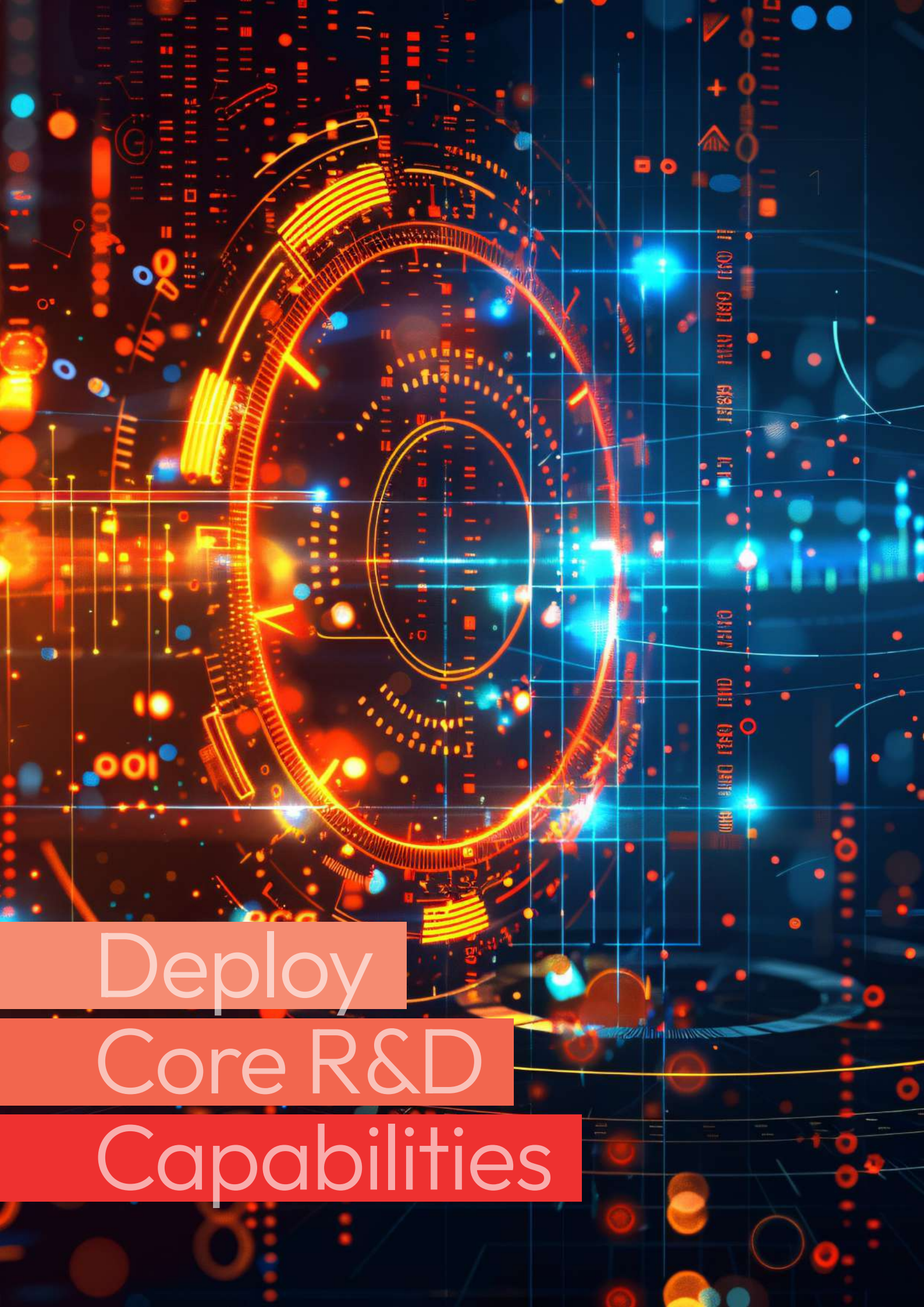
Tax accounting practices are aligned with applicable Indian Accounting Standards. Current and deferred tax positions are reviewed at each reporting date, and deferred tax assets and liabilities are measured using tax rates expected to apply when temporary differences reverse. Deferred tax balances are offset only where legally permitted and where they relate to the same tax authority. The Company applies statutory provisions relating to carried-forward losses, capital gains, and non-deductible expenditures, including CSR-related costs, in line with regulatory requirements.

TRL Krosaki's tax approach is aligned with applicable law and the economic substance of transactions, and the Company does not support aggressive tax practices.

Looking Ahead

TRL Krosaki will continue to strengthen its approach to sustainable value creation by integrating economic performance with robust governance practices. We will focus on enhancing transparency, strengthening risk management and compliance frameworks, and reinforcing ethical business conduct across operations and the value chain. Alongside continued investments in digital transformation, innovation, and people development, these efforts will ensure that our growth is supported by strong governance systems, accountability, and long-term stakeholder trust.





Deploy
Core R&D
Capabilities



Advancing Innovation in Refractory Technology

At TRL Krosaki, research and development is a strategic capability that enables product innovation, operational excellence, and long-term sustainability. Operating in an industry defined by extreme temperatures and demanding industrial environments, continuous innovation in materials science and process engineering is essential to maintaining performance, reliability, and competitiveness.

Our R&D efforts focus on developing next-generation refractory solutions that enhance operational efficiency, extend product life, and reduce the environmental footprint of high-temperature industrial processes. By integrating advanced materials research with real-world industrial applications, TRL Krosaki ensures that its products remain at the forefront of performance and sustainability.

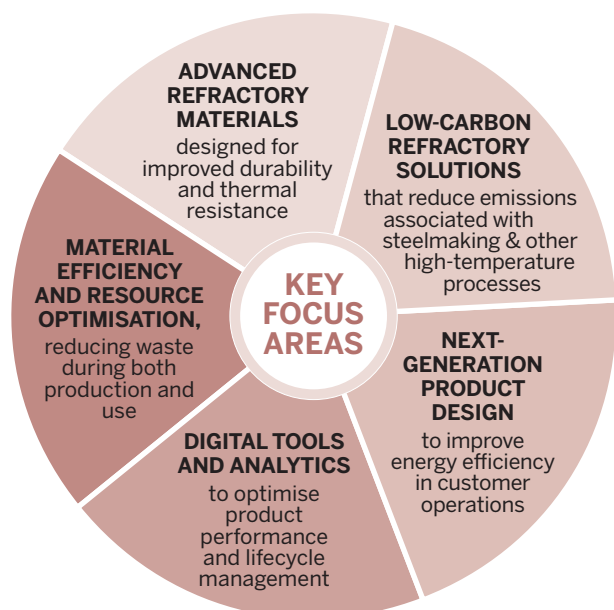
By integrating advanced materials research with real-world industrial applications, TRL Krosaki ensures that its products remain at the forefront of performance and sustainability.

Focus Areas of Research and Innovation

Our R&D initiatives focus on advancing refractory technologies that support both industrial productivity and environmental responsibility.

Through these efforts, TRL Krosaki continues to develop solutions that strengthen industrial performance while contributing to broader sustainability objectives.

Key focus areas include





Several Innovations Demonstrate this Approach

Nano-Carbon Refractory Technology

By incorporating nano-carbon in carbonaceous refractories, TRL Krosaki has reduced **fixed carbon content** by nearly **50%** while maintaining comparable product performance. This innovation reduces carbon dependency and supports more efficient material usage.

Low-Carbon Steelmaking Solutions

In steelmaking applications, TRL Krosaki is replacing conventional MgO-C bricks with Al₂O₃-rich spinel bricks in steel ladles used for ultra-low carbon steel production. This transition enables a reduction in **CO₂ emissions of approximately 11-14%**, while maintaining operational performance.

Cleaner Manufacturing Processes

The elimination of **carbonaceous materials** in the unburnt dolomite tempering process represents another step toward cleaner and more responsible refractory manufacturing.



Product Innovation for Sustainable Industrial Processes

A key priority for our R&D teams is the development of refractory products that support lower-carbon and resource-efficient industrial processes.

TRL Krosaki produces green refractory solutions designed to minimise waste and reduce the environmental footprint of high-temperature manufacturing operations.

These innovations demonstrate how advanced materials engineering can support both industrial productivity and environmental performance. By integrating sustainability considerations into product design, TRL Krosaki helps customers improve energy efficiency, reduce emissions, and optimise resource use across high-temperature industrial processes.

Collaboration with IISc Bangalore

Collaboration with leading research institutions plays an important role in advancing our innovation agenda.

TRL Krosaki has established a strategic collaboration with the Indian Institute of Science (IISc), Bangalore, focused on advancing refractory material science and next-generation industrial applications. This partnership enables the Company to leverage cutting-edge academic research while accelerating the translation of scientific discoveries into commercially viable products.

Through this collaboration, TRL Krosaki is exploring:

- Advanced refractory material formulations
- Improved thermal performance and durability
- Alternative raw materials for future refractory technologies
- Environmentally responsible product design

By working closely with academic researchers, industry partners, and customers, TRL Krosaki strengthens its innovation ecosystem and



accelerates the development of sustainable industrial solutions.

Cross-Functional Innovation and Industry Collaboration

Innovation at TRL Krosaki is driven through close collaboration between R&D teams, product engineers, manufacturing experts, and customers.

This cross-functional approach enables faster product development cycles and ensures that new solutions are aligned with real operational requirements in industries such as steel, cement, and other high-temperature manufacturing sectors.

In addition to internal collaboration, TRL Krosaki works with:

- Research institutions and universities
- Technology partners
- Industrial customers
- Supply chain stakeholders

These partnerships allow the Company to test, refine, and scale innovative refractory solutions that deliver both technical performance and sustainability benefits.



The Way
Forward



As TRL Krosaki looks ahead, our focus remains on strengthening the core capabilities that enable sustained performance in an increasingly dynamic and demanding industrial landscape. Our direction is defined by a set of interconnected focus areas embedded into how the business operates, adapts, and grows.

The four strategic pillars continue to guide our priorities for the coming year. A key area of emphasis remains people and stakeholder development. Building a capable, safety-focused, and adaptable workforce will be central to long-term resilience. This will be supported by training, cross-functional exposure, and continued focus on employee well-being. At the same time, we will deepen engagement with customers, suppliers, and partners, recognising that long-term sustainability is closely linked to stakeholder relationships across the value chain.

Operational and technological excellence will continue to be treated as a baseline requirement for competitiveness. Our approach to digitalisation and automation remains purposeful. We prioritise interventions that enhance process reliability, improve safety, strengthen data visibility, and drive efficiency across operations.

Strengthening our core research and development capabilities will remain a critical priority as industries such as steel transition towards lower-carbon production pathways. The demand for advanced materials, improved product performance, and environmentally responsible solutions is expected to accelerate. In this

The demand for advanced materials, improved product performance, and environmentally responsible solutions is expected to accelerate.



context, continued investments in R&D, along with strategic collaborations, will play a central role in enabling TRL Krosaki to remain competitive and relevant in a changing industrial ecosystem.

At the same time, we will continue to advance our sustainability agenda, with a focus on resource efficiency, reducing emissions intensity, strengthening responsible sourcing practices, and enhancing transparency in ESG performance and disclosures.

These priorities are supported by a governance framework that enables disciplined execution, continuous monitoring, and alignment with long-term objectives. Together, they reflect a balanced approach to growth where people, performance, innovation, and responsibility are integrated to build a future-ready organisation.

Looking ahead to FY 2025-26, TRL Krosaki remains committed to strengthening its fundamentals while preparing for emerging industry shifts. By maintaining focus on operational discipline, innovation, stakeholder trust, active risk management, and sustainability, we aim to create long-term value that is both economically robust and environmentally responsible.



Annexure

Annexures (GRI Index, BRSR Index)

GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
General Disclosures					
GRI 2: General Disclosures 2021	2-1 organisational details	BRSR General - I Details of Listed Entity	Section 1 - About This Report; Section 2 - Our Journey: TRL Krosaki - An Overview		pp.2; pp.4-9
	2-2 Entities included in the organisation's sustainability reporting	BRSR General - I Details of Listed Entity	Section 1 - About This Report		pp.2
	2-5 External assurance	BRSR General - I Details of Listed Entity 14-15			Not in narrative (see Independent Assurance Statement)
	2-6 Activities, value chain and other business relationships	BRSR General - II Products & Services	Section 2 - Our Journey: Our Key Products and Services; Industries We Serve; Value Chain	 	pp.4-9
	2-7 Employees	BRSR General - IV Employees	Section 9 - Drive People & Culture Excellence: Workforce Overview	 	pp.42-59
	2-8 Workers who are not employees	BRSR General - IV Employees	Section 9 - Drive People & Culture Excellence: Workforce Overview (Off-Roll & Contract Employees)		pp.42-59
	2-9 Governance structure and composition	BRSR General - IV Employees	Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Structure and Board Oversight		pp.60-65
	2-10 Nomination and selection of the highest governance body		Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Structure and Board Oversight		pp.60-65
	2-11 Chair of the highest governance body		Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Structure and Board Oversight		pp.60-65
	2-12 Role of the highest governance body in overseeing the management of impacts	P4 L1	Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Strategy and Risk Oversight		pp.60-65
	2-13 Delegation of responsibility for managing impacts	P4 L1 P5 E4	Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Philosophy and Approach		pp.60-65
	2-14 Role of the highest governance body in sustainability reporting		Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Strategy and Risk Oversight		pp.60-65
	2-15 Conflicts of interest	P1 E6 P1 L2	Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct		pp.60-65
	2-16 Communication of critical concerns		Section 9 - Drive People & Culture Excellence: Grievance Management	 	pp.42-59
	2-17 Collective knowledge of the highest governance body	P1 E1	Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Structure and Board Oversight		pp.60-65



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
GRI 2: General Disclosures 2021	2-18 Evaluation of the performance of the highest governance body		Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Structure and Board Oversight		pp.60-65
	2-19 Remuneration policies	P5 E3	Section 9 - Drive People & Culture Excellence: Employee Benefits & Financial Security; Post Retirement Benefits	 	pp.42-59
	2-20 Process to determine remuneration		Section 9 - Drive People & Culture Excellence: Employee Benefits & Financial Security	 	pp.42-59
	2-21 Annual total compensation ratio	P5 E3	Section 9 - Drive People & Culture Excellence: Fair Wages and Local Economic Participation: Annual Total Compensation Ratio	 	pp.42-59
	2-22 Statement on sustainable development strategy		Section 3 - Message from Leadership: Foreword from the Managing Director	 	pp.10-11
	2-23 Policy commitments	P1 E4 P5 E8	Section 4 - ESG at TRL Krosaki: Our ESG Strategy and Framework	 	pp.12-17
	2-24 Embedding policy commitments	P1 E1 P5 E1 P5 E8	Section 4 - ESG at TRL Krosaki: Our ESG Strategy and Framework: Four Pillars of ESG Execution	 	pp.12-17
	2-25 Processes to remediate negative impacts	BRSR General -VII Transparency and Disclosures P5 E5 P5 E7 P5 L1 P8 E3	Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct; Section 9 - Drive People & Culture Excellence: Grievance Management	 	pp.60-65; pp.42-59
	2-26 Mechanisms for seeking advice and raising concerns	BRSR General -VII Transparency and Disclosures	Section 9 - Drive People & Culture Excellence: Grievance Management; Section 10 - Digitalization, Governance and Responsible Value Chain: Whistleblower Mechanism and Accountability	 	pp.42-59; pp.60-65
	2-27 Compliance with laws and regulations	P1 E2-3 P6 E12	Section 10 - Digitalization, Governance and Responsible Value Chain: Enterprise Risk Management		pp.60-65
	2-28 Membership associations	P7 E1 P7 L1	Section 9 - Drive People & Culture Excellence: Industrial Relations		pp.42-59
	2-29 Approach to stakeholder engagement	P4 E1-2 P4 L3	Section 5 - Stakeholder Engagement	 	pp.18-20
	2-30 Collective bargaining agreements	P3 E7	Section 9 - Drive People & Culture Excellence: Industrial Relations	 	pp.42-59
Material Topics					
GRI 3: Material Topics 2021	3-1 Process to determine material topics	P4 E2 P4 L2 P5 L2	Section 6 - Materiality Assessment: Our Materiality Approach		pp.21-23
	3-2 List of material topics		Section 6 - Materiality Assessment: Key Areas of Material Focus (Materiality Ranking Table)		pp.21-23



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
GRI 3: Material Topics 2021	3-3 Management of material topics	P3 E12 P3 E15 P5 E8 P5 E10 P5 L1-2 P5 L4 P6 E9 P6 L6 P7 E2 P8 E3 P8 L1 P9 E6 P9 L2	Section 6 - Materiality Assessment: How Materiality Guides Action		pp.21-23
Economic Performance					
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed		Section 11 - Delivering Economic Value: Direct Economic Contribution and Value Distribution	  	pp.66-69
	201-2 Financial implications and other risks and opportunities due to climate change		Section 8 - Environmental Vision and Performance: Climate Change and Emissions Management	 	pp.24-41
	201-3 Defined benefit plan obligations and other retirement plans	P3 E2	Section 9 - Drive People & Culture Excellence: Post Retirement Benefits	 	pp.42-59
	201-4 Financial assistance received from government		Section 11 - Delivering Economic Value: Government Financial Assistance	 	pp.66-69
Market Presence					
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	P5 E2	Section 9 - Drive People & Culture Excellence: Fair Wages and Local Economic Participation	  	pp.42-59
	202-2 Proportion of senior management hired from the local community		Section 9 - Drive People & Culture Excellence: Fair Wages and Local Economic Participation	 	pp.42-59
Indirect Economic Impacts					
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported		Section 11 - Delivering Economic Value: Infrastructure Investments and Services Supported	  	pp.66-69
GRI 203: Indirect Economic Impacts 2016	203-2 Significant indirect economic impacts		Section 11 - Delivering Economic Value: Significant Indirect Economic Impacts	  	pp.66-69



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
Procurement Practices					
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	P8 E4	Section 8 - Environmental Vision and Performance: Supply Chain Sustainability: Local Sourcing and Supply Chain Resilience	  	pp.24-41
Anti-corruption					
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption		Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct		pp.60-65
	205-2 Communication and training about anti-corruption policies and procedures	P1 E4 P5 E1	Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct; Whistleblower Mechanism and Accountability		pp.60-65
	205-3 Confirmed incidents of corruption and actions taken	P1 E5	Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct		pp.60-65
Anti-competitive Behavior					
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	P7 E2	Section 10: Digitalization, Governance and Responsible Value Chain: Enterprise Risk Management		pp.60-65
Tax					
GRI 207: Tax 2019	207-1 Approach to tax		Section 11 - Delivering Economic Value: Approach to Tax	 	pp.66-69
	207-2 Tax governance, control, and risk management		Section 11 - Delivering Economic Value: Approach to Tax	 	pp.66-69
	207-3 Stakeholder engagement and management of concerns related to tax		Section 11 - Delivering Economic Value: Approach to Tax	 	pp.66-69
	207-4 Country-by-country reporting		Section 11 - Delivering Economic Value: Approach to Tax		pp.66-69
Materials					
GRI 301: Materials 2016	301-1 Materials used by weight or volume	BRSR General -VII Transparency and Disclosures	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Circular Manufacturing Practices	 	pp.24-41
GRI 301: Materials 2016	301-2 Recycled input materials used	BRSR General -VII Transparency and Disclosures P2 L3	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Circular Manufacturing Practices	 	pp.24-41
	301-3 Reclaimed products and their packaging materials	BRSR General -VII Transparency and Disclosures P2 L5	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Packaging and Logistics Innovation		pp.24-41



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
Energy					
GRI 302: Energy 2016	302-1 Energy consumption within the organisation	P6 E1 P6 L1	Section 8 - Environmental Vision and Performance: Energy Efficiency	  	pp.24-41
	302-2 Energy consumption outside of the organisation		Section 8 - Environmental Vision and Performance: Energy Efficiency	 	pp.24-41
	302-3 Energy intensity	P6 E1	Section 8 - Environmental Vision and Performance: Energy Efficiency	 	pp.24-41
	302-4 Reduction of energy consumption		Section 8 - Environmental Vision and Performance: Energy Efficiency; Passive Design and Renewable Energy	  	pp.24-41
	302-5 Reductions in energy requirements of products and services		Section 12 - Deploy Core R&D Capabilities: Product Innovation for Sustainable Industrial Processes	 	pp.70-75
Water and Effluents					
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource		Section 8 - Environmental Vision and Performance: Water Stewardship: Water Sources and Use		pp.24-41
	303-2 Management of water discharge-related impacts		Section 8 - Environmental Vision and Performance: Water Stewardship: Water Quality Protection		pp.24-41
	303-3 Water withdrawal	P6 E3 P6 L3	Section 8 - Environmental Vision and Performance: Water Stewardship: Water Sources and Use	 	pp.24-41
	303-4 Water discharge	P6 L2	Section 8 - Environmental Vision and Performance: Water Stewardship: Zero Liquid Discharge and Water Recycling	 	pp.24-41
	303-5 Water consumption	P6 E3	Section 8 - Environmental Vision and Performance: Water Stewardship	 	pp.24-41
Biodiversity					
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Section 8 - Environmental Vision and Performance: Biodiversity: Understanding Local Ecosystems	 	pp.24-41
	304-2 Significant impacts of activities, products and services on biodiversity		Section 8 - Environmental Vision and Performance: Biodiversity: Understanding Local Ecosystems	 	pp.24-41
	304-3 Habitats protected or restored		Section 8 - Environmental Vision and Performance: Biodiversity: Enhancing Green Cover and Local Habitats	 	pp.24-41



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
GRI 304: Biodiversity 2016	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations		Section 8 - Environmental Vision and Performance: Biodiversity: Understanding Local Ecosystems		pp.24-41
Emissions					
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	P6 E6 P6 L4	Section 8 - Environmental Vision and Performance: Understanding Our Emissions	  	pp.24-41
	305-2 Energy indirect (Scope 2) GHG emissions	P6 E6 P6 L4	Section 8 - Environmental Vision and Performance: Understanding Our Emissions	  	pp.24-41
	305-3 Other indirect (Scope 3) GHG emissions	P6 E6 P6 L4	Section 8 - Environmental Vision and Performance: Understanding Our Emissions	 	pp.24-41
	305-4 GHG emissions intensity	P6 E6 P6 L4	Section 8 - Environmental Vision and Performance: Understanding Our Emissions	 	pp.24-41
	305-5 Reduction of GHG emissions		Section 8 - Environmental Vision and Performance: Climate Change and Emissions Management	 	pp.24-41
	305-6 Emissions of ozone-depleting substances (ODS)		Section 8 - Environmental Vision and Performance: Air Emissions and Operational Controls	 	pp.24-41
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	P6 E5	Section 8 - Environmental Vision and Performance: Air Emissions and Operational Controls	 	pp.24-41
Waste					
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	P6 E8	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Waste Generation and Management	 	pp.24-41
	306-2 Management of significant waste-related impacts	P2 E3-5 P6 E9	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Waste Generation and Management	 	pp.24-41
	306-3 Waste generated	P6 E8	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Waste Generation and Management	 	pp.24-41
	306-4 Waste diverted from disposal	P6 E8	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Waste Generation and Management	 	pp.24-41
GRI 306: Waste 2020	306-5 Waste directed to disposal	P6 E8	Section 8 - Environmental Vision and Performance: Circularity and Waste Management: Waste Generation and Management		pp.24-41



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
Supplier Environmental Assessment					
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	P6 L9	Section 8 - Environmental Vision and Performance: Supply Chain Sustainability: Supplier ESG Capability Assessment	 	pp.24-41
	308-2 Negative environmental impacts in the supply chain and actions taken	P6 L8-9	Section 8 - Environmental Vision and Performance: Supply Chain Sustainability: Supplier Engagement and Risk Management	 	pp.24-41
Employment					
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	BRSR General - IV Employees	Section 9 - Drive People & Culture Excellence: Workforce Overview; Employee Retention	 	pp.42-59
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	P3 E1a	Section 9 - Drive People & Culture Excellence: Employee Benefits & Financial Security	  	pp.42-59
	401-3 Parental leave	P3 E1a P3 E5	Section 9 - Drive People & Culture Excellence: Employee Benefits & Financial Security	 	pp.42-59
Labor/Management Relations					
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes		Section 9 - Drive People & Culture Excellence: Industrial Relations	 	pp.42-59
Occupational Health and Safety					
GRI 403: Occupational Health & Safety 2018	403-1 Occupational health and safety management system	P3 E10a	Section 9 - Drive People & Culture Excellence: Occupational Health and Safety: Safety Management Systems	 	pp.42-59
	403-2 Hazard identification, risk assessment, and incident investigation	P3 E10b P3 E12	Section 9 - Drive People & Culture Excellence: Occupational Health and Safety: Safety Management Systems	 	pp.42-59
	403-3 Occupational health services	P3 E10c	Section 9 - Drive People & Culture Excellence: Employee Health and Well-being	 	pp.42-59
	403-4 Worker participation, consultation, and communication on occupational health and safety		Section 9 - Drive People & Culture Excellence: Occupational Health and Safety: Safety Training and Awareness; Industrial Relations: Joint Employee Forums	 	pp.42-59
	403-5 Worker training on occupational health and safety	P3 E8 P5 E1	Section 9 - Drive People & Culture Excellence: Occupational Health and Safety: Safety Training and Awareness; Safety Capability Development	 	pp.42-59
	403-6 Promotion of worker health	P3 E10d	Section 9 - Drive People & Culture Excellence: Employee Health and Well-being	 	pp.42-59
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	P3 L5	Section 9 - Drive People & Culture Excellence: Occupational Health and Safety: Safety Management Systems	 	pp.42-59



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
GRI 403: Occupational Health & Safety 2018	403-8 Workers covered by an occupational health and safety management system		Section 9 - Drive People & Culture Excellence: Occupational Health and Safety: Safety Management Systems	 	pp.42-59
	403-9 Work-related injuries	P3 E11-12 P3 E15	Section 9 - Drive People & Culture Excellence: Occupational Health and Safety	 	pp.42-59
	403-10 Work-related ill health	P3 E12 P3 E15	Section 9 - Drive People & Culture Excellence: Occupational Health and Safety	 	pp.42-59
Training and Education					
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	P3 E8 P5 E1	Section 9 - Drive People & Culture Excellence: Training & Development: Training Overview	 	pp.42-59
GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	P3 E8 P3 L4	Section 9 - Drive People & Culture Excellence: Training & Development: Learning and Development Programs; Leadership Development; Digital Learning Innovation - XR Labs	 	pp.42-59
	404-3 Percentage of employees receiving regular performance and career development reviews	P3 E9	Section 9 - Drive People & Culture Excellence: Training & Development: Career Development	 	pp.42-59
Diversity and Equal Opportunity					
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	BRSR General - IV Employees	Section 9 - Drive People & Culture Excellence: Workforce Demographics; Digitalization, Governance and Responsible Value Chain: Governance Structure and Board Oversight	  	pp.42-59
	405-2 Ratio of basic salary and remuneration of women to men	P5 E2	Section 9 - Drive People & Culture Excellence: Fair Wages and Local Economic Participation	  	pp.42-59
Non-discrimination					
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken		Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct	  	pp.60-65
Freedom of Association and Collective Bargaining					
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		Section 9 - Drive People & Culture Excellence: Industrial Relations	 	pp.42-59



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
Child Labor					
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor		Section 8 - Environmental Vision and Performance: Supply Chain Sustainability: Supplier ESG Capability Assessment	 	pp.24-41
Forced or Compulsory Labor					
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor		Section 8 - Environmental Vision and Performance: Supply Chain Sustainability: Supplier ESG Capability Assessment	 	pp.24-41
Security Practices					
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	P5 E1	Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct	 	pp.60-65
Rights of Indigenous Peoples					
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples		Section 9 - Drive People & Culture Excellence: Community Engagement	 	pp.42-59
Local Communities					
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	P8 E3 P8 L1	Section 9 - Drive People & Culture Excellence: Community Engagement	  	pp.42-59
	413-2 Operations with significant actual and potential negative impacts on local communities		Section 9 - Drive People & Culture Excellence: Community Engagement	  	pp.42-59
Supplier Social Assessment					
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	P5 L4	Section 8 - Environmental Vision and Performance: Supply Chain Sustainability: Supplier ESG Capability Assessment	 	pp.24-41
	414-2 Negative social impacts in the supply chain and actions taken	P3 L5-6 P5 L4-5	Section 8 - Environmental Vision and Performance: Supply Chain Sustainability: Supplier Engagement and Risk Management	 	pp.24-41
Public Policy					
GRI 415: Public Policy 2016	415-1 Political contributions		Section 10 - Digitalization, Governance and Responsible Value Chain: Governance Philosophy and Approach		pp.60-65
Customer Health and Safety					
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories		Section 4 - ESG at TRL Krosaki: Our ESG Strategy and Framework: Core R&D-led Innovation and Capabilities	 	pp.12-17
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		Section 9 - Drive People & Culture Excellence: Occupational Health and Safety		pp.42-59



GRI Standard/ Other Source	Disclosure	BRSR Disclosures	Location	SDG Link	Page No. (in this Report)
Marketing and Labeling					
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	P9 E2	Section 8 - Environmental Vision and Performance: Supply Chain Sustainability	 	pp.24-41
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling		Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct	 	pp.60-65
	417-3 Incidents of non-compliance concerning marketing communications		Section 10 - Digitalization, Governance and Responsible Value Chain: Ethics, Integrity, and Responsible Business Conduct	 	pp.60-65
Customer Privacy					
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	P9 E3	Section 10 - Digitalization, Governance and Responsible Value Chain: Data Privacy	 	pp.60-65



Annexures (Assurance Statement)



INDEPENDENT ASSURANCE STATEMENT

To,
The Directors and Management,
TRL Krosaki Refractories Limited,
Belpahar, Dist-Jharsuguda-768218,
Jharsuguda, Odisha, India.

TRL Krosaki Refractories Limited (hereinafter referred to as "TRLK") engaged TUV India Private Limited ("TUVI") to conduct an independent external assurance of the non-financial Environmental, Social, and Governance (ESG) indicators disclosed in TRLK's Sustainability Report, submitted to Assurance Team on 22/04/2026 (hereinafter referred to as "the Report"), for the reporting period April 1, 2024 to March 31, 2025. The Report has been prepared in accordance with Global Reporting Initiative (GRI) Standards 2021. The scope of the assurance engagement covered the ESG disclosures and performance data presented for the stated reporting period. TUVI performed a limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) – Assurance Engagements Other Than Audits or Reviews of Historical Financial Information – which is specifically applicable to the assurance of non-financial and sustainability information.

Management's Responsibility

TRLK has developed the Report content and is responsible for monitoring its ESG data and identifying material sustainability issues relevant to its operations. This includes the identification, establishment, and reporting of performance management systems, data governance, and quality control measures. TRLK's management is accountable for the accuracy and completeness of the ESG data, as well as the processes involved in collecting, analysing, and reporting the information disclosed through both web-based and printed formats. This responsibility also extends to the maintaining the integrity of the company's website where such information may be presented. TRLK's management is also responsible for preparing the ESG Report in accordance with Global Reporting Initiative (GRI) Standards. It is incumbent upon TRLK to ensure that the Report is free from any material misstatements, whether intentional or unintentional, thereby maintaining the trust and confidence of stakeholders in the disclosed information. Furthermore, TRLK is responsible for ensuring the archiving and reproducibility of the disclosed ESG data, making it available to stakeholders upon request.

Scope and Boundary

The assurance engagement encompasses a review of the evidence on a sample basis, for identified ESG indicators. The assurance engagement conducted by TUV India Private Limited covered the following key activities:

- 1. Assurance of Report Content and Material Topics**
Assessed the application of the Report's content with reference to material topics identified through an applied materiality approach, and evaluated the quality of information disclosed, as guided by the principles outlined in the Global Reporting Initiative (GRI) Standards, over the defined reporting period.
- 2. Review of Governance Policies and Practices**
Examined key governance-related policies and practices referenced in the Report, including but not limited to the Conflict of Interest policy, Intellectual property and Information security policy, Fraud policy, Human rights and Labour policy, and the Whistle Blower mechanism, along with related initiatives and performance disclosures.
- 3. Review of GRI Standards Requirements**
Reviewed the non-financial disclosures presented in the Report for alignment with the applicable requirements of the GRI Standards.
- 4. Assurance of Environmental and Social Data**
As part of this limited assurance engagement, TUVI performed Assurance procedures on a sample basis, consistent with the requirements of ISAE 3000 (Revised). The nature and extent of procedures included inquiries, analytical procedures, and selective testing of supporting documentation for selected ESG disclosures and KPIs. The sample selection and sample size were determined using professional judgment, taking into account factors such as the nature of the disclosure, data availability, prior-year observations, and perceived risk, within the constraints of a limited assurance engagement. The procedures did not involve testing all data points included in the reporting boundary. Accordingly, the assurance obtained is limited in nature and provides a lower level of assurance than a reasonable assurance engagement. TUVI verified the reliability of selected disclosures related to environmental and social topics, by sampling and testing supporting data and documentation.
- 5. Assessment of Specified Information for Stakeholder Relevance**
Evaluated the specified ESG information selected for assurance to ensure it reflects material concerns and is meaningful and relevant to the Report's intended stakeholders.

TUVI has verified the selected disclosures on sample basis and not all disclosures were independently assured. The reporting boundary for the disclosures refer Annexure 1 for the list of KPIs covered under assurance, is limited to sites detailed below:

- i. Registered Office: Administration Building, PO Belpahar, District Jharsuguda, Odisha – 768218, India
- ii. Belpahar Manufacturing Unit: PO Belpahar, District Jharsuguda, Odisha – 768218, India
- iii. Salem Manufacturing Unit: Karrupur, District Salem, Tamil Nadu- 636012, India.
- iv. Quartzite Mines: Chhuinipali, PO Kapilapur District Jharsuguda, Odisha- 768226, India.

The Assurance activities included an on-site assessment conducted on 9 and 10 April 2026 at TRLK's manufacturing site located at Belpahar PO Belpahar, District Jharsuguda, Odisha – 768218, and an online assessment of the Salem

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Manufacturing Unit at Karrupur, District Salem, Tamil Nadu-636012 and the Quartzite Mines at Chhuinpali, PO Kapilapur District Jharsuguda, Odisha- 768226. Accordingly, the assurance conclusion is based on a combination of on-site, remote and desk-based procedures within the defined scope of this limited assurance engagement.

Limitations

TUV India Private Limited (TUVI) did not perform assurance procedures on any forward-looking statements disclosed in the ESG data, including but not limited to targets, forecasts, expectations, or ambitions. Future commitments/targets were not subjected to assurance procedures. Accordingly, TUVI provides no conclusions or opinions regarding this prospective information. Throughout the assurance process, TUVI encountered no limitations to the agreed scope of the engagement. TUVI was engaged by TRLK and is accountable solely to TRLK's management in the context of this assurance engagement. Data Assurance was conducted on a sample basis, and the responsibility for the authenticity and completeness of the data rests entirely with TRLK. TUVI expressly disclaims any liability or co-responsibility for errors or omissions in the reported data, or for any decisions made by third parties based on this assurance statement. This assurance statement does not constitute an endorsement of any environmental or social claims related to TRLK's products, services, manufacturing processes, packaging, or product disposal. TUVI does not authorize the use of this assurance statement for the purpose of greenwashing or to support any misleading claims. This independent assurance statement is intended solely for the use of the intended users identified above in connection with the Company's GRI reporting. Because the statement has been prepared for a specific purpose and on the basis of criteria agreed for that purpose, it may not be suitable for any other purpose. Any use or reliance by parties other than the intended users is at their own risk, and no duty of care, responsibility, or liability is accepted to such parties.

Our Responsibility

The responsibility of TUVI under this assurance engagement is to perform independent limited assurance and to express a conclusion based on the procedures conducted. The engagement was carried out with reference to the agreed scope of work, specifically focused on selected non-financial Environmental, Social, and Governance (ESG) indicators. This engagement did not include an evaluation of the adequacy or effectiveness of TRLK's overall sustainability strategy, governance, or management systems, nor an assessment of the sufficiency of the Report against the overarching principles of the GRI Standards or the ISAE 3000 (Revised) standard, beyond the elements explicitly covered within the defined scope. The ESG data was verified on a sample basis, and the responsibility for the accuracy, completeness, and authenticity of the information remains solely with TRLK. The reporting organization is also accountable for the archiving and retention of all related data for a reasonable period to support transparency and traceability.

TUVI does not assume liability or co-responsibility for:

1. Any inaccuracies or erroneous data reported by TRLK;
2. Any decisions made by individuals or entities based on this assurance statement.

This assurance is provided on the assumption that all data and information made available to TUVI by TRLK were complete, accurate, and true to the best of TRLK's knowledge. The procedures performed were limited in nature and are not intended to support regulatory scrutiny, investor or lender decision-making, capital market transactions, or other high-stakes ESG uses requiring reasonable assurance.

Assurance Methodology

TUVI adopted a risk-based approach, focusing on Assurance efforts on issues of high material relevance to TRLK business and its stakeholders. During the assurance engagement, TUVI applied a risk-based approach, concentrating Assurance efforts on the Key Performance Indicators (KPIs) disclosed within the Report. The primary objective was to evaluate the reliability of the reported information and the effectiveness of the underlying data management systems, information flows, and internal controls.

As part of the engagement, TUVI conducted the following activities:

1. **Review of Stakeholder Engagement and Materiality Process:** TUVI reviewed the approach adopted by TRLK for the stakeholder engagement and materiality determination process. Assessed TRLK's approach to stakeholder engagement and the process for identifying and prioritizing material ESG topics, ensuring alignment with established reporting frameworks and principles.
2. **Assurance of Disclosures and Internal Controls:** Verified selected disclosures and assertions made in the Report, and evaluated the robustness and adequacy of the related data management systems, information flows, and internal control procedures.
3. **Document Review and Data Assessment:** TUVI examined and reviewed, on a sample basis, the documents, data, and other supporting evidence provided by TRLK for all reported non-financial disclosures, including the disclosure on management approach, performance KPIs, and related information.
4. **Stakeholder Interviews:** Engaged with key personnel, including data owners and decision-makers across relevant functions of TRLK, during the on-site and remote Assurance phase to gather insights and corroborate information.
5. **Assessment of ESG Policy Implementation:** Conducted sample-based evaluations of the implementation of ESG-related policies as described in the Report to verify adherence and effectiveness.
6. **Assurance of Data Generation and Management Processes:** Reviewed, on a sample basis, the procedures for generating, collecting, managing, and reporting both quantitative data and qualitative information included in the ESG disclosures for the reporting period.
7. **Sampling Procedures:** A risk-based sampling methodology was applied to select disclosures and data sets for testing, considering the materiality of disclosures, the inherent risk associated with the data type, the volume and complexity of underlying transactions, the significance of operational sites and activities, and prior-year observations where applicable. Samples were selected through a combination of judgmental sampling based on risk and material disclosures, targeted sampling of high-value or high-impact data, and limited random sampling where appropriate. The sample size was determined based on professional judgment, taking into account the Company's control environment and the nature of the reported indicators. For the purpose of this limited assurance engagement, a quantitative materiality threshold of

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5% was applied to each Selected Sustainability Information KPI. Misstatements exceeding 5% of the total reported value for a KPI were considered material. Qualitative factors were also considered in accordance with ISAE 3000 (Revised).

8. **Recalculation Procedures:** Recalculation procedures were performed on selected quantitative ESG indicators to verify mathematical accuracy and consistency with the stated methodologies. This included re-performance of the aggregation of environmental and social performance data, Assurance of unit conversions, recomputation of totals and subtotals in reporting templates, checking formula integrity within spreadsheets, reviewing emission factor application where relevant, and validating intensity ratios and derived indicators.
Where estimation techniques were used, TÜV reviewed the appropriateness of key assumptions and assessed their reasonableness on a sample basis. These procedures were carried out to confirm that the reported quantitative indicators were calculated accurately and consistently.
9. **Walkthrough Procedures:** Walkthroughs were conducted to understand the TRK's data collection, collation, and reporting processes through discussions with designated ESG coordinators and process owners, understanding roles and responsibilities related to ESG reporting, reviewing documented policies, procedures, and internal guidelines, mapping the data flow from source documents to consolidated disclosures, assessing the reporting boundary and operational coverage, and understanding the use of IT systems and manual consolidation processes. These procedures were performed to assess the design of processes and identify potential areas of risk or control gaps.
Testing of the operating effectiveness of controls was not performed beyond inquiry and limited Assurance, in line with a limited assurance engagement. Accordingly, the walkthrough procedures focused on process understanding rather than detailed control testing.
10. **Data Validation Procedures:** Data validation procedures were performed on selected disclosures to assess reliability, completeness, and consistency by inspecting supporting documents such as invoices, meter readings, utility bills, waste manifests, HR records, training registers, and regulatory filings, and by cross-verifying reported data with primary source records. They also included analytical review of year-on-year trends and significant variances, reconciliation between site-level data and consolidated disclosures, and Assurance of reported figures against internal databases and management reports.
Where discrepancies or unusual variances were identified, management explanations were obtained and corroborative documentation was reviewed. These procedures were intended to support the reliability and consistency of the selected disclosures.
11. **Data Governance and Internal Controls:** Sustainability data is generated at plant level, validated by corporate sustainability team, and subjected to internal review before external assurance. This hierarchical data validation process supports data accuracy, traceability, and transparency within the reporting framework.
12. The Report was evaluated against the following criteria: adherence to the principles of stakeholder inclusiveness, materiality, responsiveness, completeness, neutrality, relevance, sustainability context, accuracy, reliability, comparability, clarity, and timeliness, as prescribed in the GRI Standards 2021 and International Standard on Assurance Engagements (ISAE) 3000 (Revised).

Action Plan

The following improvement areas were identified and communicated to TRL Krosaki Refractories Limited (TRLK). These recommendations are aligned with management's existing objectives and sustainability initiatives, and several have already been recognized by TRK. The assurance team supports continued management focus on these areas to further advance the organization's sustainability performance:

1. **Controlled documents:** The policies may be maintained as controlled documents, with defined procedures for version control, approval, distribution, and periodic review.
2. **Transparency:** TRK may consider making relevant ESG policies publicly available to enhance transparency and alignment with GRI disclosure expectations.
3. **Smart data acquisition system:** It was observed that TRK's current data acquisition for sustainability KPIs relies on manual collection and periodic consolidation from site-level spreadsheets. A centralized/smart data acquisition is not currently implemented across all operating sites. This would facilitate periodic monitoring, improve data accuracy, and streamline performance reviews.

Limited Assurance Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the ESG disclosures and related information identified in the scope of our engagement and included in TRK's Sustainability Report for the reporting period from April 1, 2024 to March 31, 2025 have not been prepared, in all material respects, in accordance with GRI Standards 2021 (detailed disclosures attached in annexure-1), within the defined reporting boundaries. Our procedures for this limited assurance engagement were less extensive than those performed in a reasonable assurance engagement and consisted primarily of inquiries, analytical procedures, and sample-based testing of supporting evidence.

Disclosures Evaluation

TÜV is of the opinion that TRK's sustainability disclosures generally meet the requirements of the GRI Standards. The following reporting elements have been addressed:

- Universal Standards:
 - 1) GRI 1: Foundation 2021 – Requirements and principles for using the GRI Standards.
 - 2) GRI 2: General Disclosures 2021 – Information on TRK's organizational profile, strategy, ethics and integrity, governance, stakeholder engagement, and reporting practices.
 - 3) GRI 3: Material Topics 2021 – Information on TRK's identification and management of material topics.
- Topic-Specific Standards:

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- 1) GRI 300 Series (Environmental topics)
- 2) GRI 400 Series (Social topics) – These were applied to report the company's impacts on relevant environmental and social issues. TUVI finds that the material topics and associated topic-specific Standards are identified and addressed in TRLK's ESG disclosures.

Principles Observed in the Assurance Process

- **Independence:** TUVI conducted this engagement in compliance with the International Ethics Standards Board for Accountants (IESBA) Code of Ethics, including all independence requirements. Prior to engagement acceptance and throughout the reporting period ended 31st March 2025, TUVI performed an independence and conflict-of-interest evaluation in accordance with TUVI's Independence Policy. This assessment confirmed that TUVI, its assurance team members, and related entities had no financial, business, employment, or other relationships with TRLK that would compromise independence. TUVI has not provided any non-assurance services to TRLK during the reporting period that could create threats to independence. TUVI did not participate in the preparation of ESG disclosures, data collection, or development of internal controls, except for the issuance of this assurance statement. The assurance team was selected and rotated to eliminate risks of self-interest, self-review, advocacy, familiarity, and intimidation. Compliance with independence requirements was confirmed through TUVI's internal quality control procedures.
- **Quality Control:** TUVI maintains a comprehensive system of quality control, in line with the International Standard on Quality Control (ISQC) / International Standards on Quality Management framework (ISQM 1 / internal TUV quality system) as applicable within TUV system. The assurance team adhered to the IESBA Code's principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour. All procedures were conducted in accordance with applicable ethical and professional standards. This assurance statement was subject to independent technical review prior to issuance.

Evaluation against Reporting Principles

Stakeholder Inclusiveness: Stakeholder identification and engagement is carried out by TRLK on a periodic basis to bring out key stakeholder concerns as material topics of significant stakeholders. Nothing has come to our attention that causes us to believe that the Report does not comply, in all material respects, with the stakeholder inclusiveness requirements.

Sustainability Context: TRLK established the relationship between ESG and organizational strategy within the Report, as well as the context in which disclosures are made. Nothing has come to our attention that causes us to believe that the Report does not comply, in all material respects, with the requirements of the sustainability context principle.

Materiality: As part of this limited assurance engagement, TUVI reviewed the design and documented application of TRLK's materiality determination process, including process structure, stakeholder categories considered, and methodologies applied, as described in the Report. This assurance engagement does not extend to, and TUVI has not provided assurance on, the materiality outcomes, material topics identified, their scores, prioritization, or the completeness of topics reported. Our procedures were limited to evaluating whether the process was designed and applied as described. Based on the procedures performed, nothing has come to our attention that causes us to believe that TRLK's description of the materiality determination process is not prepared, in all material respects, with reference to the materiality principle of the GRI Standards.

Responsiveness: TUVI believes that the responses to the material aspects are articulated in the report, including disclosures on TRLK policies and management systems, including governance. Nothing has come to our attention that causes us to believe that the Report does not meet the requirements.

Timeliness and Balance: Nothing has come to our attention that causes us to believe that TRLK does not communicate its sustainability performance through periodic internal and external reporting during the reporting period, as described in the Report. Nothing has come to our attention that causes us to believe that sustainability-related information is not reported to the Board of Directors for consideration in relation to sustainability objectives, goals, and targets, within the scope of this limited assurance engagement.

Completeness: Nothing has come to our attention that causes us to believe that the selected non-financial KPIs disclosed in the Report have not been prepared, in all material respects, in accordance with the applicable requirements of the GRI Standards 2021.

Reporting Principles for defining report quality: The majority of the data and information were verified by TUVI's assurance team during on-site, remote and desk-based Assurance activities and the remote assessment found to be accurate. The disclosures related to ESG issues and performances are reported in a balanced manner and are clear in terms of content and presentation. Nothing has come to our attention that causes us to believe that the Report does not meet the requirements.

Reliability: The majority of the data and information were verified by TUVI's assurance team and found to be accurate. Some non-material inaccuracies in the data identified during the Assurance process were found to be attributable to transcription, interpretation, and aggregation errors. The errors were not material and these errors have been management corrected prior to issuance during the assurance process. Therefore, in accordance to the GRI Standards 2021, for the selected disclosures within the defined scope and reporting boundary TUVI concludes that nothing has come to its attention that causes TUVI to believe that the Report does not meet the requirements.

Neutrality: The disclosures related to ESG issues and performance are reported in a neutral tone, in terms of content and presentation. Nothing has come to our attention that causes us to believe that the Report does not meet the requirements. This assurance statement does not endorse any environmental and social claims related to the product, manufacturing process, packaging, disposal of product as well as advertisements by the reporting organization. TUVI does not permit use of this statement for greenwashing or misleading claims.

Our Assurance Team and Independence

TUVI is an independent and neutral third-party organization providing sustainability assurance services through a team of qualified environmental and social specialists. TUVI affirms its independence and impartiality in relation to this assurance engagement and confirms that no conflict of interest exists. During the reporting year, TUVI did not undertake any other

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engagements with TRLK that could compromise the objectivity, independence, or impartiality of our findings, conclusions, or recommendations. TUVI was not involved in the preparation of any content or data presented in TRLK's Report, with the sole exception of this independent assurance statement. Furthermore, TUVI maintains complete neutrality and impartiality with respect to all individuals interviewed during the course of the assurance process.



For and on behalf of TUV India Private Limited

Date: 16/06/2026
Mumbai, India

Project No.: 8124786100



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Annexure 1 - TUVI has verified the below disclosures on sample basis.

Topic	Verified Indicators	GRI Disclosure
General Disclosures	Organizational details	2-1
	Entities included in the organization's sustainability reporting	2-2
	External assurance	2-5
	Activities, value chain and other business relationships	2-6
	Employees	2-7
	Workers who are not employees	2-8
	Governance structure and composition	2-9
	Nomination and selection of the highest governance body	2-10
	Chair of the highest governance body	2-11
	Role of the highest governance body in overseeing the management of impacts	2-12
	Delegation of responsibility for managing impacts	2-13
	Role of the highest governance body in sustainability reporting	2-14
	Conflicts of interest	2-15
	Communication of critical concerns	2-16
	Collective knowledge of the highest governance body	2-17
	Evaluation of the performance of the highest governance body	2-18
	Remuneration policies	2-19
	Process to determine remuneration	2-20
	Annual total compensation ratio	2-21
	Statement on sustainable development strategy	2-22
	Policy commitments	2-23
	Embedding policy commitments	2-24
	Processes to remediate negative impacts	2-25
	Mechanisms for seeking advice and raising concerns	2-26
	Compliance with laws and regulations	2-27
	Membership associations	2-28
	Approach to stakeholder engagement	2-29
	Collective bargaining agreements	2-30
Material Topics	Process to determine material topics	3-1
	List of material topics	3-2
	Management of material topics	3-3
Economic Performance	Direct economic value generated and distributed	201-1
	Financial implications and other risks and opportunities due to climate change	201-2
	Defined benefit plan obligations and retirement plans	201-3
	Financial assistance received from government	201-4
Market Presence	Ratios of standard entry level wage by gender compared to local minimum wage	202-1
	Proportion of senior management hired from the local community	202-2
Indirect Economic Impacts	Infrastructure investments and services supported	203-1
	Significant indirect economic impacts	203-2
Procurement Practices	Proportion of spending on local suppliers	204-1
Anti-Corruption	Operations assessed for risks related to corruption	205-1
	Communication and training about anti-corruption policies and procedures	205-2
	Confirmed incidents of corruption and actions taken	205-3
Anti-Competitive Behavior	Legal actions for anti-competitive behavior, anti-trust	206-1
Tax	Approach to tax	207-1
	Tax governance, control, and risk management	207-2
	Stakeholder engagement and management of concerns related to tax	207-3
	Country-by-country reporting	207-4
Materials	Materials used by weight or volume	301-1
	Recycled input materials used	301-2
	Reclaimed products and their packaging materials	301-3
Energy	Energy consumption within the organization	302-1
	Energy consumption outside the organization	302-2
	Energy intensity	302-3
	Reduction of energy consumption	302-4
	Reductions in energy requirements of products and services	302-5
Water and Effluents	Interactions with water as a shared resource	303-1
	Management of water discharge-related impacts	303-2
	Water withdrawal	303-3
	Water discharge	303-4
	Water consumption	303-5
Biodiversity	Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas	304-1
	Significant impacts on biodiversity	304-2

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Topic	Verified Indicators	GRI Disclosure
Emissions	Habitats protected or restored	304-3
	IUCN Red List and protected species	304-4
	Direct (Scope 1) GHG emissions	305-1
	Energy indirect (Scope 2) GHG emissions	305-2
	Other indirect (Scope 3) GHG emissions	305-3
	GHG emissions intensity	305-4
	Reduction of GHG emissions	305-5
	Emissions of ozone-depleting substances (ODS)	305-6
Waste	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	305-7
	Waste generation and significant waste-related impacts	306-1
	Management of significant waste-related impacts	306-2
	Waste generated	306-3
	Waste diverted from disposal	306-4
Supplier Environmental Assessment	Waste directed to disposal	306-5
	New suppliers that were screened using environmental criteria	308-1
Employment	Negative environmental impacts in the supply chain and actions taken	308-2
	New employee hires and employee turnover	401-1
	Benefits provided to full-time employees that are not provided to temporary or part-time employees	401-2
	Parental leave	401-3
Labor/Management Relations	Minimum notice periods regarding operational changes	402-1
Occupational Health and Safety	Occupational health and safety management system	403-1
	Hazard identification, risk assessment, and incident investigation	403-2
	Occupational health services	403-3
	Worker participation, consultation, and communication on occupational health and safety	403-4
	Worker training on occupational health and safety	403-5
	Promotion of worker health	403-6
	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	403-7
	Workers covered by an occupational health and safety management system	403-8
	Work-related injuries	403-9
	Work-related ill health	403-10
Training and Education	Average hours of training per year per employee	404-1
	Programs for upgrading employee skills and transition assistance programs	404-2
	Percentage of employees receiving regular performance and career development reviews	404-3
Diversity and Equal Opportunity	Diversity of governance bodies and employees	405-1
	Ratio of basic salary of women to men	405-2
Non-discrimination	Incidents of discrimination and corrective actions taken	406-1
Freedom of Association and Collective Bargaining	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	407-1
Child Labor	Operations and Supplier at significant risk for incidents of child labor	408-1
Forced or Compulsory Labor	Operations and supplier at significant risk for incidents of forced or compulsory labor	409-1
Security Practices	Security personnel trained in human rights policies or procedures	410-1
Rights of Indigenous Peoples	Incidents of violations involving rights of indigenous peoples	411-1
Local communities	Operations with local community engagement, impact assessments, and development programs	413-1
	Operations with negative impacts on communities	413-2
Supplier Social Assessment	New suppliers that were screened using social criteria	414-1
	Negative social impacts in the supply chain and actions taken	414-2
Public Policy	Political contributions	415-1
Customer Health and Safety	Assessment of the health and safety impacts of product and service categories	416-1
	Incidents of non-compliance concerning the health and safety impacts of products and services	416-2
Marketing and Labelling	Requirements for product and service information and labelling	417-1
	Incidents of non-compliance concerning product and service information and labelling	417-2
	Incidents of non-compliance concerning marketing communications	417-3
Customer Privacy	Substantiated complaints concerning breaches of customer privacy and losses of customer data	418-1

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