

# SUSTAINABILITY REPORT



# 2024



# Table of Contents

<b>Introduction</b>	<b>1</b>	<b>Environmental</b>	<b>15</b>	<b>Governance and Ethics</b>	<b>34</b>
Table of Contents	1	Environmental Performance	16	Governance	35
CEO Message	2	Climate Action	17	Grievance & Whistleblowing Mechanism	36
About This Report	3	Product Sustainability	19	Responsible Supply Chain	37
2024 Sustainability Highlights	4	Water Stewardship	20	Data Privacy & Cybersecurity	38
		Circular Economy & Water	21		
		Biodiversity	23		
<b>Cladtek Overview</b>	<b>5</b>			<b>Continuous Improvement</b>	<b>39</b>
Understanding Our Journey	6	<b>Social</b>	<b>24</b>	Operational Excellence	40
Our Story	7	Social Responsibility	25	Research, Development, & Innovation (RD&I)	41
Mission, Vision, Values	8	Our People	26		
ESG Governance & Accountability	9	Diversity, Equity, and Inclusion	27		
		Human Rights	28	<b>Performance Data and Metrics</b>	<b>43</b>
		Health and Safety	29	Framework Mapping Index	44
<b>Sustainability Strategy</b>	<b>10</b>	Training and Development	31	Environmental Performance Data	45
Our Sustainability Strategy	11	Community Engagement	33	Social Performance Data	47
Risk Management and Internal Controls	12			Governance Performance Data	48
Listening to What Matters	13				
Materiality Assessment	14				

# CEO Message

## From the CEO: Strengthening Our Foundations, Embracing Our Responsibility



Lee Wilson  
Group CEO

Dear Stakeholders,

As we present Cladtek's third Sustainability Report, I reflect on 2024 as a year of resilience, growth, and purpose – one that holds special significance as we celebrated our **20th anniversary**. Two decades ago, we began our journey with a vision to transform the cladding industry, and today we stand as a global leader, recognised not only for our operational excellence but also for our unwavering commitment to sustainability.

Operationally, our global facilities reached new heights. Across all regions, production targets were **met or exceeded**, even in the face of material delays, complex customer requirements, and shifting market dynamics. Our teams rose to the challenge with innovation, dedication, and an unwavering commitment to quality – earning the trust of some of the world's leading energy companies.

On the sustainability front, 2024 was a turning point. We became the **first cladding company** in the world to achieve an **Environmental Product**

**Declaration certification**, reinforcing our commitment to product transparency. We also made strong progress towards our climate goals, achieving a **12% reduction** in total carbon emissions compared to our 2021 baseline, keeping us on track to meet our 2030 target of a 30% reduction across Scope 1, 2, and 3 emissions.

---

For our people, we delivered **over 40,000 training hours globally**, strengthened our diversity and inclusion programmes, and maintained strong safety performance with **zero lost-time injuries in 2024** and expanded our well-being programs to include mental health awareness and ergonomic initiatives.

In our communities, we honoured our 20th anniversary with initiatives that reflected our values – from mangrove restoration on Earth Day to Cladtek Academy programs that invest in skills for the future, to charitable drives distributing essential goods to those in need.

As we look ahead, the road to 2030 will demand **innovation, collaboration, and courage**. Our anniversary year reminded us of how far we have come, but also how much more we can achieve together – for our customers, our communities, and our planet.

# About this Report



This is Cladtek's **third Sustainability Report**, outlining our progress in aligning business performance with our sustainability goals and targets. The report covers the period from January 1 to December 31, 2024.

We continuously refine our approach and strategies in response to evolving regulations and stakeholder expectations, while regularly reviewing our material topics. Our strategies are grounded in global best practices and aligned with our core business objectives. This report reflects our commitment to transparency and accountability.

Our goal is to communicate clearly with stakeholders, including employees, customers, investors, business partners, and local communities, about how Cladtek is integrating sustainability into daily operations and long-term strategy.

## Reporting Scope

This report covers the activities of Cladtek's operations across the following locations:

- Manufacturing facility in **Batam, Indonesia**,
- Manufacturing facility in **Rio de Janeiro, Brazil**,
- Manufacturing facility in **Dammam, Saudi Arabia**,
- Corporate office in **Singapore**,
- Regional office in **UAE**.

## Reporting Standards

This report has been prepared in reference to the GRI Standards, 2021 Universal version (Core option). It is also aligned with recognised international frameworks and internal company systems, including:

- GHG Protocol for carbon emissions reporting
- United Nations Sustainable Development Goals (UNSDGs)
- ISO standards such as ISO 14001 and ISO 45001
- Internal ESG Pack and related company policies

## Data and Assurance

This report is intended for general informational purposes only and does not constitute financial, investment, or legal advice, nor does it create any contractual obligations. All data and statements are based on our internal systems and records, unaudited and internally verified at the time of publication. As our monitoring and reporting processes evolve, certain figures may be updated in subsequent disclosures to enhance accuracy and completeness. The report covers Cladtek's wholly-owned operations unless otherwise stated. Whilst we strive for accuracy, no representation or warranty, express or implied, is made as to the completeness or reliability of the information presented.

# 2024 Sustainability Highlights



Cladtek Sustainability Report 2024

# Cladtek Overview



# Understanding Our Journey



**Paul Montague**  
Chairman & EVP Business  
& Product Development

In industrial innovation, Cladtek, founded in Perth, Australia, has become a beacon of industrial innovation with over 20 years of experience. With a global workforce of more than 2,000 employees, we proudly stand as the largest provider of installed Mechanically Lined Pipe and Weld Overlay capacity in the market.

### Cladtek's Products & Services

As the largest supplier of CRA weld overlay clad products, we have established ourselves as a global leader in the industry. Our pioneering work in producing Mechanically Lined Pipe (MLP) positions us at the forefront of CRA technology, delivering products that are essential to a wide range of industries.

We offer a full suite of solutions for CRA clad piping systems, covering everything from pipes, fittings, flanges, pressure vessels, and valves, to induction bends and fabrication services.

Our products and services cater to a broad spectrum of applications, including conventional oil and gas operations, both onshore and offshore, as well as subsea and subsurface activities. In the renewables sector, we support geothermal energy, hydrogen production, and carbon capture, utilisation, and storage (CCUS) technologies, reflecting our commitment to the evolving energy landscape.

We are proud to share that we hold certification for ISO 9001, ISO 14001, ISO 45001, API Q1, API 5L, API 5LC, API 5LD, API 6A, API 6D, ASME U, U2, R Stamp.

### Market Presence:

In the two decades, we have delivered products and services across the globe, including Oceania, Asia, North America, Africa, South America, and Europe. As we continue to grow, we are expanding our reach to new markets around the world.



CBM - Cladtek Indonesia



CTB - Cladtek Brazil



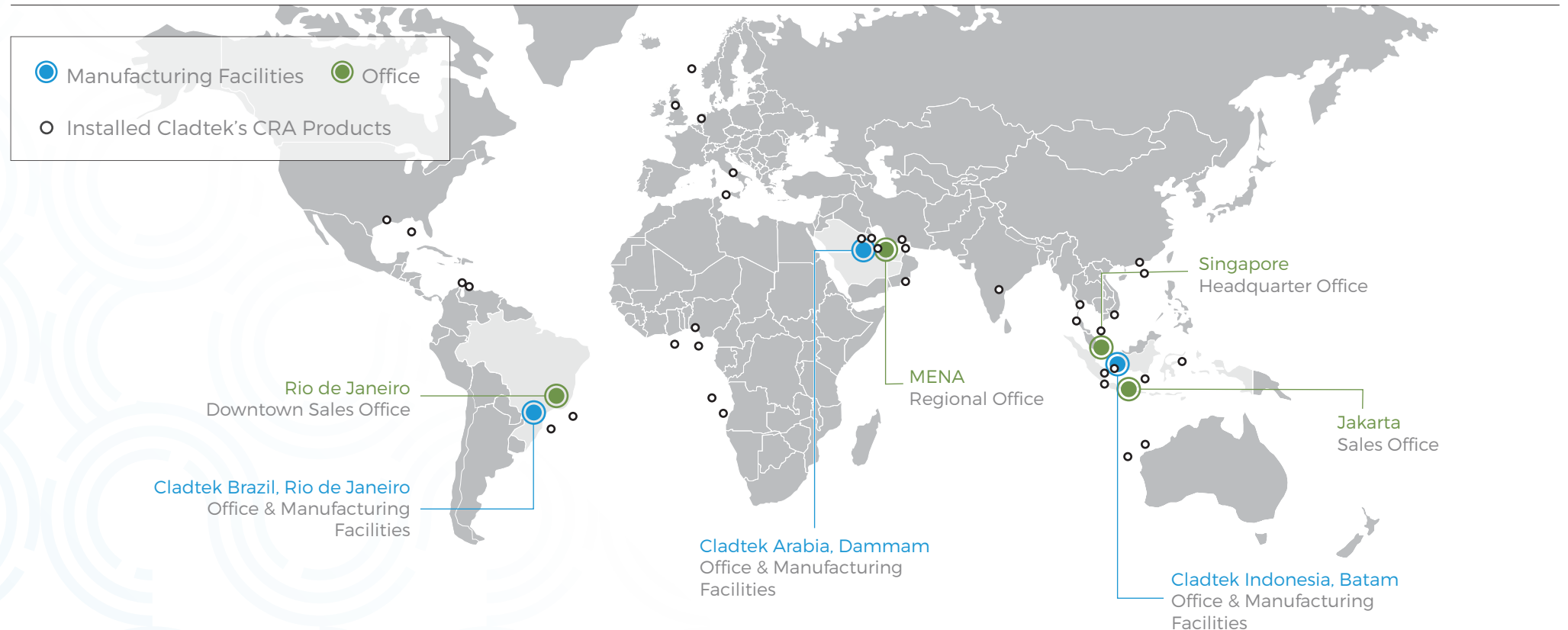
CA - Cladtek Arabia

# Our Story

The cladtek story is one that has been engineered out of innovation and ingenuity. Since inception in 2005 the focus has always been on developing processes and technology to provide outstanding solutions that are scalable and cost-effective.

## The sheer numbers present a formidable story

- Over 600,000 metres of Mechanically Lined Pipe
- Supplied more than 200,000 metres of weld overlay pipe
- Approx 100,000 weld overlay flanges
- 25,000 units of Induction bends, pressure valves and spool fabrication





## Our Vision

Be the world's leading supplier of additive manufacturing solutions.

## Our Mission

Deliver innovative, sustainable, additive manufacturing solutions that extend the life time and the value of clients assets.

## Our Values

We are committed to delivering the best value to our customers, and we up hold the five core values:



### 1. Unity:

Unity means we're stronger together. We embrace every voice, work as one team, and turn challenges into shared wins.



### 2. Excellence:

We're all about Excellence. We constantly aim for the best in everything we do, pushing boundaries to deliver outstanding results.



### 3. Sustainability:

Our commitment to Sustainability means we're building a better tomorrow. We act responsibly to protect our planet and ensure a positive impact for generations to come.



### 4. Innovation:

Innovation is how we move forward. We're always curious, always creative, and always looking for new ways to solve problems and create value.



### 5. Value:

Value is at our core. We deliver real benefits to our customers, our people, and our communities, ensuring our work always makes a positive difference.

# ESG Governance and Accountability

## Driving Integration, Upholding Responsibility

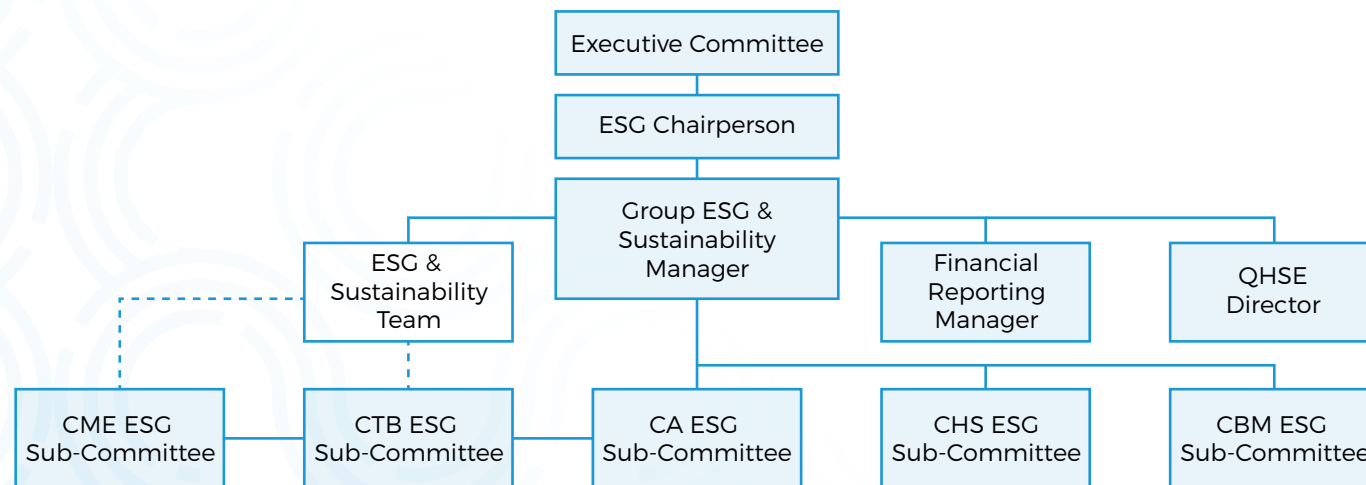
Effective ESG governance and accountability are foundational to Cladtek's commitment to responsible and transparent business practices. Our governance framework is designed to provide clear oversight, assign responsibility, and drive accountability for ESG performance across all levels of the organisation.

### Oversight

**Executive Management** – Integrates ESG into business strategy and resource allocation.

### Operational Leadership

- **ESG & Sustainability Department** – Leads program design, implementation, monitoring, and reporting.
- **Cross-Functional ESG Committee** – Comprises leaders from Operations, HSE, HR, Procurement, and Legal to ensure alignment and collaboration.
- **Regional Sustainability Leads** - Appointed in Indonesia, Brazil, Saudi Arabia, Singapore, and Dubai to tailor initiatives to local contexts while maintaining global standards.



# Sustainability Strategy



# Our Sustainability Strategy

## Vision for a Sustainable Future

**Our sustainability journey** is guided by a clear vision: to lead the steel pipe manufacturing industry with innovative practices that prioritise environmental stewardship, social responsibility, and economic viability. **Our goal** is to integrate sustainability into every aspect of our operations, creating value for our stakeholders while minimising our environmental footprint.

## Cladtek's sustainability strategy is built around three core pillars:



- **Environmental Excellence:**  
We are committed to minimising our environmental footprint by optimising resource efficiency, reducing waste, and controlling emissions across our operations.
- **Social Responsibility:**  
We strive to create a positive and inclusive environment for our employees, communities, and stakeholders by upholding fair labor practices, embracing diversity, and actively engaging with the communities where we operate.
- **Economic Resilience:**  
We aim to deliver strong and sustainable financial performance, ensuring that our business growth aligns with long-term ESG commitments and creates lasting value.

These pillars form the foundation of our ESG approach, guiding how we integrate sustainability into daily operations, strategic decision-making, and long-term planning.

As we move forward, our ESG strategy will evolve beyond internal performance to include broader influence—strengthening supply chain engagement, increasing transparency through enhanced disclosures, and making more visible contributions to environmental and social progress.



# Risk Management and Internal Controls

## Safeguarding Our Business Resilience and Stakeholder Trust

At Cladtek, risk management is an integral part of how we make decisions and ensure long-term business resilience. Our **Integrated Risk Management Framework** identifies, assesses, and mitigates environmental, social, governance, operational, and financial risks across all regions where we operate.

### 2024 Actions and Achievements

We strengthened our risk management framework by embedding ESG considerations—such as emissions, regulatory compliance, labor rights, supply chain ethics, and stakeholder trust—into our overall risk assessment process.

In 2024, Cladtek identified and addressed several key ESG-related risks, including:

- **Climate and Resource Risks** – such as energy use, emissions, and resource availability.
- **Compliance and Legal Risks** – including the risk of non-compliance with environmental, labor, and other regulatory requirements.
- **Stakeholder Expectation Risks** – related to rising demands from investors, customers, and communities for transparency and sustainability performance
- **Cyber security and IT Risks** – involving threats to data security, system integrity, and digital infrastructure.

These risks were evaluated through research, internal audits, and leadership dialogues. Risk ownership was assigned, and responsible teams were tasked with implementing control measures and monitoring follow-up actions.



### Looking Ahead

In 2025, we aim to further strengthen our ESG risk management through the following initiatives:

- **Enhance cross-functional collaboration** by aligning ESG risks with operational, financial, and strategic risk frameworks in partnership with our risk and audit teams.
- **Broaden ESG awareness and capability** by expanding training programmes beyond risk owners to include key departments such as procurement, operations, human resources, and finance.
- **Benchmark ESG risk practices** regularly against industry leaders and recognised ESG rating agencies such as MSCI, EcoVadis, and Sustainalytics to ensure continuous improvement and global relevance.

We also aim to expand our risk horizon to include biodiversity, community relations, and advanced cyber risk. We will also introduce scenario planning exercises to stress-test our resilience under different climate and market conditions.

# Listening to What Matters

## Co-creating solutions through active dialogue

At Cladtek, we believe that sustainability is meaningful only when it addresses the issues that matter most – both to our business and to the stakeholders we impact. Stakeholder engagement is a continuous, two-way dialogue that helps us align our strategy with their expectations while addressing material issues.

Stakeholder engagement is the bridge between **risk identification** and **materiality prioritisation**. The views, needs, and concerns expressed by our stakeholders inform not only our sustainability strategy but also the risk factors we monitor closely.

We engage with a diverse network of stakeholders—employees, customers, suppliers, regulators, communities, NGOs, and investors—through surveys, interviews, forums, and collaborative projects. This process ensures we capture a balanced perspective that feeds directly into our **materiality assessment**.

## Who Are Our Stakeholders?

We define stakeholders as individuals or groups who are impacted by, or have the ability to influence, Cladtek's operations and decision-making. In 2024, our engagement efforts focused on strengthening internal alignment while laying the groundwork for broader and more inclusive outreach.

Stakeholder input is critical in shaping our ESG direction – helping us set meaningful goals, anticipate and manage risks, and enhance overall performance across environmental, social, and governance dimensions.



### Regulatory Bodies and Government Agencies

- Compliance Audits and Reporting
- Policy Advocacy and Dialogue
- Public-Private Partnerships
- Regulatory Training and Awareness



### Investors

- Annual General Meetings (AGM)
- Sustainability Reports and Disclosures



### Employees

- Employee Satisfaction Surveys
- Grievance Mechanisms
- Town Hall Meetings and Open Forums
- Training and Development Programs



### Suppliers

- Supplier Audits and Assessments
- Supplier Conferences and Workshops
- Collaborative Innovation Projects
- Supplier Development Programs



### Customers

- Customer Satisfaction Surveys
- Regular meetings with Project Team



### Local Communities

- Community Outreach Programs
- Stakeholder Consultations
- Collaboration with local NGOs,
- Community Investment and Sponsorships
- Environmental and Social Impact Assessments

# Materiality Assessment

## Turning stakeholder insight into strategic ESG priorities

The **Materiality Assessment** is the point where risk management and stakeholder engagement converge. By combining data from our risk register with stakeholder feedback, we identify the ESG topics most relevant to both Cladtek’s long-term success and stakeholder expectations.

In 2024, we refreshed our assessment to account for evolving market conditions, regulatory landscapes, and societal priorities. We gathered input through surveys, interviews, and workshops with internal and external stakeholders. This information was mapped against business impact and risk exposure to produce our **Materiality Matrix**.

### Key Shifts in 2024

- **Climate Action** moved to the top priority, reflecting its dual role as a high-impact business risk and a key stakeholder expectation
- **Responsible Supply Chain** gained prominence due to increasing due diligence requirements from customers and regulators.
- **Diversity, Equity, and Inclusion** rose in priority, aligning with our workforce globalisation and stakeholder calls for more inclusive leadership representation.

### Material Topics Identified (2024 Review)

- Climate Change and Emissions
- Health, Safety, and Well-being.
- Product Quality and Innovation
- Ethics and Business Integrity
- Responsible Supply Chain
- Diversity, Equity, and Inclusion (DEI)
- Waste and Resource Efficiency

Materiality Chart



These topics guide not only this report, but also our internal planning, resource allocation, and long-term ESG goals. A more comprehensive stakeholder-driven assessment will be completed in 2025 as part of our continued ESG integration.

# Environmental



CLADTEK ARABIA CO.

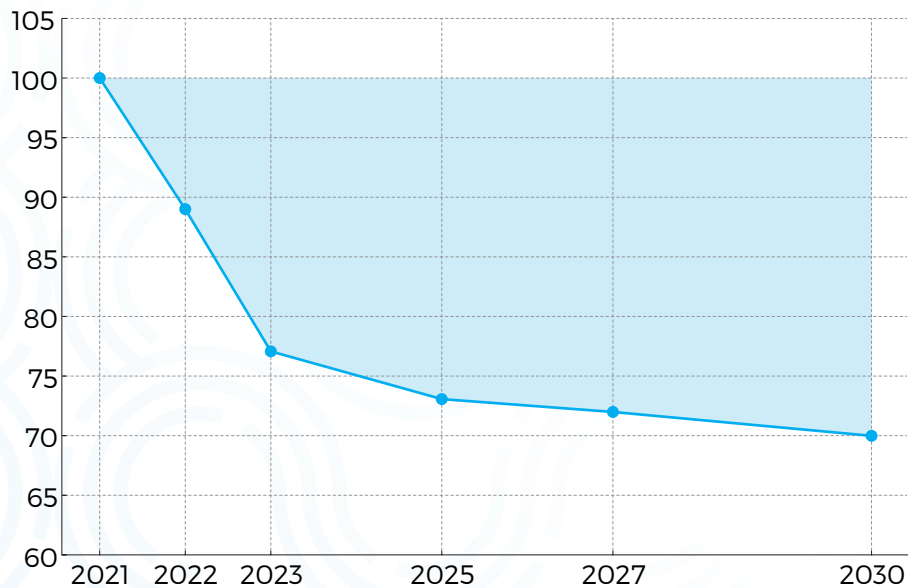
شركة كلادتك العربية

# Environmental Performance

## Progress in 2024 and Our Path Forward

At Cladtek, environmental stewardship is not a separate initiative – it is integrated into the way we operate, innovate, and grow. We recognise that our activities, from the sourcing of raw materials to the delivery of finished products, have a direct and indirect impact on the planet. As one of the world's largest manufacturers of corrosion-resistant alloy (CRA) clad and mechanically lined pipes, fittings, and components, we have both a responsibility and an opportunity to lead in sustainable manufacturing for the energy sector.

## Cladtek's CO<sub>2</sub> Reduction Pathway to 2030



## Our Environmental Goals

- **Carbon Reduction** – Achieve a **30% reduction in our total carbon footprint (Scope 1, 2, and 3)** by 2030 from a 2021 baseline
- **Water Stewardship** – Reduce **water intensity by 30%** across all operations by **2030**, and implement site-specific water efficiency targets for all facilities.
- **Circular Economy & Waste** – Maintain **landfill waste below 25%** of total operational waste.
- **Biodiversity** – Maintain **zero biodiversity-related incidents or infringements** across all operations.

## Our Strategy and Implementation Approach

Our environmental strategy is implemented through a structured framework that combines leadership commitment, cross-functional collaboration, and measurable performance tracking. The ESG & Sustainability Department works closely with Operations, HSE, Procurement, and R&D to identify improvement opportunities, set measurable targets, and monitor progress.

### This includes:

- **Mitigation** focuses on reducing greenhouse gas (GHG) emissions across our entire value chain, from direct operational emissions (Scope 1) to purchased electricity (Scope 2) and value chain emissions (Scope 3).
- **Efficiency** drives improvements in how we use energy, water, and materials, ensuring we deliver more output with fewer resources and less waste.
- **Innovation** centres on designing and delivering products with lower life cycle impacts, supporting our customers' own decarbonisation and sustainability targets.

# Climate Action

## Driving Decarbonisation Across Our Operations and Value Chain

As a global manufacturer supplying the oil & gas, CCUS/CCS, and geothermal sectors, we recognise that our industry plays a crucial role in enabling the energy transition. Our target is to **reduce total GHG emissions (Scope 1, 2, and 3) by 30% by 2030**, using 2021 as the baseline. This commitment aligns with **SBTi** methodology and supports global climate goals.

### Emission Overview

We measure, monitor, and report GHG emissions according to the **GHG Protocol Corporate Standard**, covering:

- **Scope 1** – Direct emissions from fuel combustion in operations
- **Scope 2** – Indirect emissions from purchased electricity
- **Scope 3** – Other indirect emissions from our value chain, including upstream and downstream activities

### Performance Trend (tCO<sub>2</sub>e):

Year	Scope 1	Scope 2	Scope 3*	Total	Intensity**
2021	667	16,153	81,697	98,516	6.13
2022	1,120	13,868	70,576	85,564	4.54
2023	1,782	13,771	59,947	75,500	6.66
2024	3,723	19,900	62,777	86,394	2.35

\***Scope 3** covers selected categories relevant to Cladtek’s operations, including purchased goods, upstream transportation, and business travel.

\*\***Carbon Emission Intensity:** Emissions per tonne of goods sold

### Achievement Summary (2024 vs. 2021 baseline):

- ↓ **12.3% reduction** in total emissions.
- ↓ **23.1% reduction** in Scope 3 emissions.
- ↓ **61.7% reduction** in carbon intensity.

- Scope 3 emissions, representing the largest portion of Cladtek’s footprint, significantly lower than the baseline year 2021. This reflects ongoing progress in supply chain engagement and efficiency improvements, despite the slight year-on-year increase.
- Most notably, carbon intensity dropped significantly in 2024. This sharp improvement reflects stronger efficiency in production output relative to emissions.



# Climate Action

## Driving Decarbonisation Across Our Operations and Value Chain

### 2024 Actions and Achievements

In 2024, Cladtek began turning its long-term environmental goals into practical action. Building on the goals outlined in our previous sustainability report, we made progress across several strategic areas—including energy efficiency improvements, renewable energy planning, employee training and engagement, and the initial development of supplier collaboration and carbon offset strategies.

- Continued annual carbon footprint assessments for Scopes 1, 2, and 3 to monitor progress towards the 2030 target of a 30% reduction from the 2021 baseline.
- Maintained ISO 14001 certification with no nonconformities related to climate or energy management.
- Conducted internal awareness campaigns on climate change and the role of adaptation and mitigation.



### Looking Ahead

- As we look to 2025, our focus will shift from planning and piloting to execution and scaling across key environmental programmes.
- Collaborate with government authorities regarding solar panel installation requirements.
- Finalised potential solar panel vendors and conducted regulatory assessment for installation at Batam site; determined feasibility subject to further technical and financial review.
- Engage employees in reducing personal carbon footprints and train them to calculate their own.
- Continue annual efficiency improvements across high-consumption equipment.
- Engage with strategic suppliers to gather emissions data and explore low-carbon product and develop a roadmap for supplier decarbonisation targets.



# Product Sustainability

## Lower Impact Solutions for Our Customers

### 2024 Actions and Achievements

- Maintained third-party verified **Environmental Product Declarations (EPDs)** for CRA Clad Pipe and MLP. An EPD is a standardised, independently verified document that details a product's environmental performance over its entire life cycle – from raw material extraction through manufacturing, use, and end-of-life.
- EPDs are important because they provide **credible, transparent, and comparable data**, helping customers make informed choices, meet green procurement requirements, and support their own sustainability reporting.
- Updated Life Cycle Assessments (LCAs) to include 2024 efficiency improvements, confirming reduced embodied carbon for selected products.
- Shared EPD and LCA data with customers for ESG disclosures and decarbonisation planning.
- Collaborated with customers on product innovations for lighter, more material-efficient designs.



Mechanically Lined Pipe



Weld Overlay Lined Pipe

### Looking Ahead

- Extend EPD coverage to other products
- Continue R&D for lower-carbon manufacturing processes, including lower-temperature heat treatments and material-efficient designs.
- Partner with industry bodies to set sustainability benchmarks for lined and clad pipes.
- Offer training sessions for customers on interpreting and applying EPD and LCA data in their own sustainability strategies.

# Water Stewardship

## Optimising Water Use Through Efficiency and Monitoring

Conserving water is crucial for the long-term sustainability of both our operations and the communities we serve. Our water management strategy prioritises reducing consumption, enhancing efficiency, and expanding water recycling and reuse initiatives.

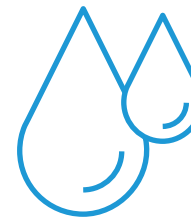
We have set an ambitious target to reduce water intensity by 30% across all its operations by the year 2030.

Year	Water Consumption (m <sup>3</sup> )	Intensity (ltr)/ton*	Total Emission (tCO <sub>2</sub> -e)
2021	37,279	2318	2,611
2022	44,468	2362	3,347
2023	39,635	3440	377
2024	82,401	2243	46

\*Water Intensity for each tonne product sold (ltr)

### Key Notes:

- Despite the rise in total water consumption in 2024, **water intensity improved** compared to both 2023 and the 2021 baseline. This improvement demonstrates **enhanced efficiency in water use relative to production output**.
- **Associated emissions from water use fell significantly** in 2024 compared with previous years. The sharp reduction in emissions is primarily due to an **update in our calculation methodology**, which reflects more accurate emission factors. This improvement enhances data quality and provides a stronger baseline for monitoring future performance. Year-on-year comparisons should therefore be interpreted with this refinement in mind.



Achievement Summary (2024 vs. 2023):

- ↓ **34.8% reduction in water intensity.**
- ↓ **87.8% reduction in water-related emissions.**

Achievement Summary (2024 vs. 2021 baseline):

- ↓ **3.2% reduction in water intensity.**
- ↓ **98.2% reduction in water-related emissions.**

## 2024 Actions and Achievements

- **Monthly water monitoring** was carried out across all manufacturing sites, with particular attention to departments using water-intensive processes such as cleaning, hydro testing, and auxiliary operations.
- **Awareness campaigns** were implemented to encourage water-saving behaviors among employees and reinforce preventive maintenance practices to minimize avoidable water usage.
- **Water management and recycling efforts** continued to evolve across our operations, with a focus on identifying opportunities to reduce consumption and enhance reuse where feasible.

## Looking forward to 2025,

Looking ahead, Cladtek is committed to advancing water efficiency and building the foundation for long-term reuse solutions.

- Establish a Water Management Plan at each site, including leak prevention, consumption tracking, and reuse targets.
- Conduct comprehensive site-level assessments to identify opportunities for infrastructure upgrades that enable rainwater harvesting, water reuse, and other sustainable water recycling practices.

# Circular Economy & Waste

## Minimising Landfill Waste Through Segregation and Operational Control

We aim to continuously enhance our waste management practices throughout all operational areas, supporting a cleaner and more sustainable environment in line with circular economy principles.

We have set a clear target of maintaining **landfill waste below 25% of its operational waste**, a goal aligned with its commitment to sustainability and waste reduction.

Year	Total Operational Waste (Kg)	Intensity (Kg)/ton	% Recycle Waste	Total Emission (tCO2e)
2021	1,303,632	81	39%	661
2022	1,812,152	96	71%	615
2023	1,942,559	169	67%	796
2024	2,493,147	63	65%	1083

\*Operational waste intensity per tonne of steel sold

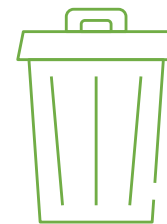
### 2024 Actions and Achievements

We continued to strengthen our waste management practices in alignment with **ISO 14001**, with clear segregation between hazardous waste and recyclable scrap materials, including steel. Hazardous waste was handled by certified contractors, while scrap metal was either recycled internally or through verified vendors.

We also took visible steps to **reduce plastic waste**, including limiting the use of **single-use plastic bottles** across several areas of operation. Department-level tracking improved, offering greater insight into waste generation patterns.

### Key Notes – Waste Performance

- Total operational waste increased in 2024 compared to all previous years, this rise reflects expanded production volumes and operational changes.
- Waste intensity, despite the growth in total waste volume, waste intensity improved significantly in 2024. This highlights improved efficiency in waste generation relative to production output.
- Recycling rate in 2024 was 65%, a slight decrease from 2023 (67%), but still much higher than the 2021 baseline (39%).
- Total waste-related emissions increased in 2024 – the highest level recorded – driven primarily by the larger waste volume.
- Overall, operational efficiency in waste generation improved, as evidenced by the reduced intensity, but total waste volume and associated emissions remain key areas for improvement.



Achievement Summary (2024 vs. 2023):  
 ↓ **62.7% reduction in waste intensity.**  
 ↓ **2 percentage points in recycling rate.**

Achievement Summary (2024 vs. 2021 baseline):  
 ↓ **22.2% reduction in waste intensity.**  
 ↓ **26 percentage points in recycling rate.**

### Reduce Single-use Plastic

- Over **50% reduction** in plastic bottle usage
- Avoided the use of over **100,000 single-use plastic** across our global operations
- Installed more than **20 refill stations**
- Launched a company-wide **Plastic-Free Awareness Campaign** focused on daily behavioral change
- Distributed **reusable water bottles** to all employees and frequent visitors

# Circular Economy & Waste

## Minimising Landfill Waste Through Segregation and Operational Control



In celebration of **World Environment Day**, Cladtek participated in the Industrial Symbiosis Week: Challenges and Opportunities from May 2024. This event was part of the **PRESI Project (Pathways for Resource Efficiency in Santa Cruz Industries)**, a collaborative initiative supported by AEDIN, the Government of Rio de Janeiro, Kalundborg Symbiosis, and the Danish Energy Agency.

As one of the participating companies, Cladtek demonstrated its ongoing commitment to environmental stewardship and circular economy practices through active knowledge exchange, networking, and site assessments. These activities underscore Cladtek’s role in fostering a more sustainable, integrated, and resource-efficient industrial future.

Our waste was categorised and managed as follows:

Waste Type	Volume (kg)	Notes
Hazardous Waste	532,000	Treated and disposed through licensed vendors
Non-Hazardous waste	2,064,000	Includes steel scrap, plastic, wood, and general waste
-of which Scrap Steel	1,145,000	Recycled and reused where possible
-of which General Waste	919,000	Targeted for reduction in upcoming initiatives

### Looking forward to 2025,

In 2025, our waste program will shift focus to address **general waste**, which remains the most variable and least optimized category. Our next steps include:

- Expanding general waste segregation and labeling in all departments
- Identifying high-volume general waste sources and alternatives
- Partnering with local vendors to explore for recycling, composting, or co-processing options
- Introducing **waste generation KPIs**, including waste per ton of production or per headcount

# Biodiversity

## Protecting and Restoring Natural Ecosystems

We strive to minimise our impact on nature by promoting responsible land use, preserving natural habitats, and supporting conservation efforts in the areas where we operate. Through initiatives such as mangrove restoration, green space planning, and biodiversity awareness programmes, we aim to contribute to the protection of local

### 2024 Actions and Achievements

- **Planted 1,000 mangroves** in Batam as part of ongoing restoration efforts
- Collaborated with local NGOs to implement mangrove restoration and coastal clean-up initiatives in Batam
- Incorporated biodiversity awareness into internal training and employee engagement events

### Looking forward to 2025,

In 2025, we aim to:

- Revisit and support mangrove restoration programmes in Batam through collaboration with local NGOs.
- Engage employees in environmental activities, with a focus on increasing awareness about the importance of mangrove ecosystems.
- Integrate biodiversity considerations into our ESG policies to strengthen our commitment to nature-positive practices
- Incorporate biodiversity topics into employee training and engagement programs to build greater understanding and support across the organisation.



### Celebrating Earth Day - April 2024, Batam, Indonesia.

Together with local community members, Cladtek volunteers worked to restore and protect our coastal environment.

### Key Notes:

Cladtek does not operate in or near areas classified as having high biodiversity value or protected ecosystems. However, we remain strongly committed to environmental stewardship across all our operations.

We integrate environmental considerations into our decision-making processes, focusing on minimising ecological impact, managing resource use responsibly, and continuously improving our environmental performance in line with industry best practices and regulatory requirements.

# Social



# Social Responsibility

## Empowering People, Strengthening Communities

At Cladtek, social responsibility is an integral part of our sustainability journey. We recognise that our success is deeply connected to the well-being of our employees, the resilience of our communities, and the integrity of our supply chain.

As a global company with operations in Indonesia, Brazil, Saudi Arabia, Singapore, and Dubai, we operate in diverse social and cultural environments, each presenting unique opportunities and challenges.

### Our Commitment

Cladtek is committed to upholding the highest standards of human rights, labour practices, workplace safety, diversity, and community engagement.

Our social commitments are guided by international frameworks such as the **United Nations Global Compact (UNGC)**, the **International Labour Organization (ILO) conventions**, and the **UN Sustainable Development Goals (SDGs)**.

#### We strive to:

- Ensure a safe, healthy, and inclusive workplace for all employees.
- Protect and respect human rights across our operations and supply chain.
- Foster diversity, equity, and inclusion at every level of the organisation.
- Invest in skills development, continuous learning, and leadership growth.
- Support and empower the communities where we operate through targeted social programmes.



# Our People

## Building a Skilled, Inclusive, and Resilient Workforce

At Cladtek, our people are our most valuable asset. Their skills, dedication, and diversity form the foundation of our success. As a global manufacturing leader, we recognise that our long-term sustainability depends not only on operational excellence but also on our ability to attract, retain, and develop talented individuals who share our values.

### Workforce Profile

With operations in Indonesia, Brazil, Saudi Arabia, Singapore, and the UAE, Cladtek's workforce brings together a wide range of nationalities, expertise, and cultural perspectives.

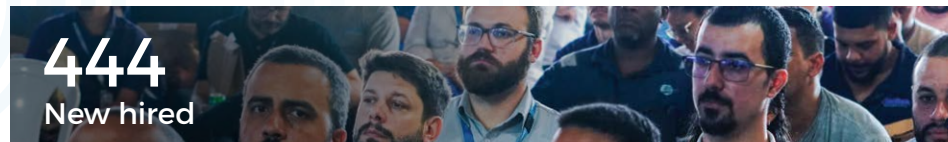
This diversity strengthens our ability to innovate and adapt in an evolving energy and manufacturing landscape. We prioritize local hiring to build strong ties with the communities where we operate, while also maintaining global talent mobility to share knowledge and expertise across regions.



**2049**  
Employees



**20**  
Nationalities represented



**444**  
New hired

## Employee Engagement & Recognition

### 2024 Global Employee Engagement Survey

Conducted across all regions (Indonesia, Brazil, Saudi Arabia, Singapore, Dubai).

- Overall satisfaction score: 73%, an increase of 2 percentage points compared to 2023.
- Response rate: 59%, with 1,213 submissions received across all locations.
- Strongest areas: teamwork, safety culture, sense of purpose, and pride in working at Cladtek.

### Stellar Workplace Award 2024

Received in recognition of outstanding employee engagement, workplace culture, and continuous investment in staff development.

- This award places Cladtek among leading employers in the manufacturing sector in the region.
- The recognition underscores our commitment to being not just a leading company in product innovation, but also an **employer of choice** in the global market.



# Diversity, Equity, and Inclusion

## Building a Workplace Where Every Voice Matters

We believe that a diverse workforce brings a rich mix of perspectives and experiences that are essential for innovation, effective problem-solving, and sustainable business growth. We are dedicated to fostering a workplace where every individual feels valued, respected, and empowered to contribute to our collective success.

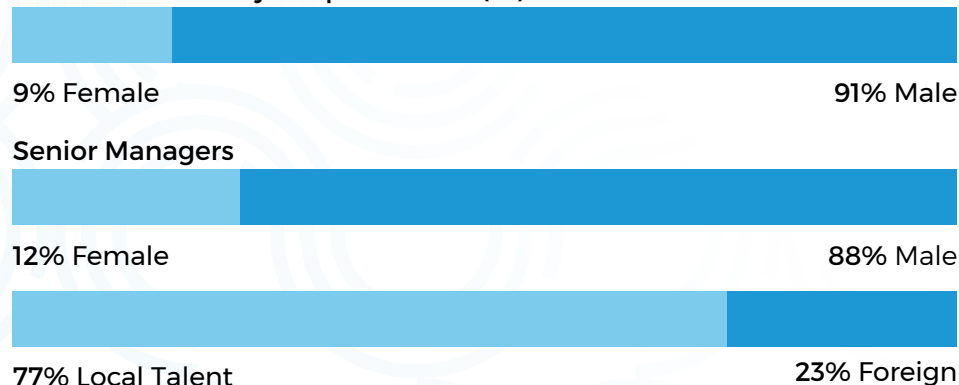
### Our Commitment

Our DEI commitment is anchored in three pillars:

- **Representation** – Ensure our workforce reflects the diversity of the communities in which we operate.
- **Opportunity** – Provide equal access to career growth, leadership roles, and learning resources.
- **Belonging** – Foster a culture where every employee feels respected, supported, and able to contribute their best.

We have embedded DEI into our corporate policies, including **Equal Opportunity Employment, Anti-Discrimination, and Anti-Harassment policies**, all of which are enforced globally.

#### Workforce Diversity Snapshot 2024 (%)



Celebrating International Women’s Day – March 2024, Batam, Indonesia. Our teams came together to honor the achievements of women in our workforce, highlight their invaluable contributions, and reaffirm our commitment to advancing diversity, equity, and inclusion.

### Looking Ahead

- **DEI Target Setting** – Establish regional and group-wide DEI targets, including a goal to **increase female representation in leadership**
- **Leadership Training** – Conduct DEI-focused leadership workshops for managers across all sites, covering unconscious bias, inclusive leadership, and equitable decision-making.
- **Review Pay Equity Annually** – Conduct salary audits to ensure fair and equitable compensation.
- **Introduce DEI Scorecard** – Track and publish progress in annual sustainability reports.
- **Inclusive Recruitment Initiative** – Collaboration with universities and vocational schools to attract underrepresented talent.

# Human Rights

## Respecting and Protecting Human Dignity in All We Do

At Cladtek, we are committed to upholding the highest standards of human rights across our operations and supply chain.

Our Human Rights Policy, aligned with the UN Guiding Principles on Business and Human Rights and the International Labour Organisation (ILO) core conventions, serves as the foundation for this commitment. We recognise that respect for human rights is fundamental to sustainable business growth and long-term trust with our employees, customers, suppliers, and communities.

We are dedicated to:

- Prohibiting all forms of forced, bonded, or child labor.
- Ensuring fair and safe working conditions.
- Promoting freedom of association and the right to collective bargaining.
- Preventing discrimination based on gender, age, ethnicity, religion,

## 2024 Actions and Achievements

In 2024, Cladtek took several concrete steps to strengthen human rights due diligence:

- **Policy Updates and Training:** Reviewed and updated our Human Rights Policy to align with evolving international standards. Included human rights modules in our ESG training, reaching **over 350 new hires** globally.
- **Grievance and Whistleblowing Mechanisms:** Maintained confidential channels for employees and external stakeholders to raise concerns without fear of retaliation.
- **Supplier Engagement:** Embedded human rights clauses in our Supplier Code of Conduct.
- **Community Integration:** Supported local employment initiatives, with an **average 75% of our workforce hired locally** in each operational region.



Celebrating International Human Rights Day, December 2024. Cladtek employees across all regions came together to share their pledges on our Commitment Wall, reinforcing our collective dedication to dignity, fairness, and respect in the workplace

## Looking Ahead

We aim to further integrate human rights into our operational and strategic decision-making by:

- Extending due diligence to **100% of Tier 1 suppliers** by 2026.
- Launch a Human Rights Impact Assessment across all operational sites to identify and address potential risks.
- Continuing to strengthen our grievance mechanisms to ensure accessibility and trust.

# Health and Safety

## Committed to a Safe, Healthy, and Thriving Workplace

The safety, health, and well-being of our employees are at the heart of Cladtek's operations. We recognise that a safe workplace is not only a moral imperative but also a driver of productivity, employee satisfaction, and operational excellence.

Guided by our Health, Safety, and Environment (HSE) Policy, we are committed to preventing all workplace injuries, illnesses, and unsafe acts, striving towards a "zero harm" culture across all our operations.

Our commitment is reinforced by rigorous risk assessments, continuous safety training, wellness initiatives, and proactive engagement with our workforce to foster a safety-first mindset at all levels of the organisation.

## Our Approach

- **Prevention First:** Conducting hazard identification and risk assessments across all operations.
- **Compliance & Beyond:** Adhering to legal and regulatory requirements while aligning with global best practices.
- **Employee Involvement:** Encouraging employees to actively participate in safety observations, near-miss reporting, and improvement programmes.
- **Continuous Learning:** Regular safety drills, toolbox talks, and sharing of incident learnings across sites.
- **Well-being Integration:** Expanding the scope of health programs to include physical wellness, ergonomics, and mental health support.

## Workforce Health & Safety Performance

### 2024 HSE Metrics:

- **Total Recordable Incident Rate (TRIR):** 1.64 (increase vs. 2023)
- **Lost Time Injury Frequency Rate (LTIFR):** 0.00 (↓100% vs. 2023)
- **HSE Training Hours Delivered:** XX hours across all sites
- Zero work-related fatalities.

### Total Hours Worked Without Lost-Time Injury:

- **Cladtek Arabia (CA):** 1,048,688 hours
- **Cladtek Indonesia (CBM):** 3,633,388 hours
- **Cladtek Brazil (CTB):** 1,564,686 hours
- **Total: 6,246,762 hours** worked without LTI in 2024.

In 2024, Cladtek achieved **zero lost-time injuries**, maintaining its position well below industry safety benchmarks for LTIFR. However, the rise in TRIFR underscores the need for further improvements in reducing all recordable incidents, not just those resulting in lost time. **Our strategy** for the coming year will focus on proactive hazard identification, enhanced incident investigation processes, and increased emphasis on near-miss reporting and corrective action follow-through.



# Health and Safety

Committed to a Safe, Healthy, and Thriving Workplace

## 2024 Actions & Achievements

- **Zero Lost-Time Injuries (LTIFR = 0)** achieved across all sites.
- **Observation Card Program** actively used, with **average >4 submission per employee in 2024**, enabling proactive risk mitigation.
- More than **80% of senior leaders** participated in **safety walks**
- All high-risk conditions identified were **addressed**, and over 60% of unsafe conditions reported were resolved.
- **World Day for Safety and Health at Work** celebrated in April 2024 with employee engagement activities and training refreshers.
- **In-house medical clinic** launched at the Batam facility, improving on-site healthcare access and reducing response time for workplace incidents.
- **HSE Certification Maintenance** – Successfully maintained **ISO 45001** Occupational Health & Safety certification across all relevant sites.
- **Safety leadership workshops** conducted for supervisors and managers to strengthen behavioral-based safety practices.



Celebrating World Day for Safety and Health at Work, April 2024. With the theme "Climate Change and Workplace Safety", Cladtek employees participated in engaging activities and discussions to raise awareness on how climate change impacts health and safety at work.

## Looking Ahead

- Expand the **Behavioural-Based Safety (BBS)** program to all global sites, with increased management participation.
- Increase the frequency of **leadership safety walks** to strengthen safety visibility and engagement.
- Expand **mental health and well-being programmes**, including peer support networks and resilience training.
- Integrate **real-time safety performance dashboards** into operational monitoring for better oversight and accountability.



# Training and Development

Empowering our people through continuous learning and skill enhancement.

At Cladtek, we are committed to investing in the growth and development of our people. We believe that continuous learning is essential not only for individual success but also for driving innovation, productivity, and long-term business sustainability. Through structured training programmes, technical skill-building, leadership development, and cross-functional learning opportunities, we aim to empower employees at all levels to reach their full potential.

## Our commitment is to:

- Ensure every employee has access to relevant and impactful learning opportunities.
- Align training programs with evolving business needs, industry trends, and sustainability goals.
- Foster a learning culture where professional and personal growth are equally valued.

## 2024 Training Performance Highlights

- **Total Training Hours:** 44,339 hours across all global sites.
- **Average Training Hours per Employee:** 31 hours/employee/year.
- **Participation Rate:** Over 98% of employees participated in at least one formal training session.
- **Training Coverage:** Delivered across Indonesia, Brazil, Saudi Arabia, Singapore, and Dubai, with both in-person and virtual formats.
- Delivered 5 industry-specific webinars attended by 150 participants, covering topics such as corrosion-resistant alloys, mechanical lined pipe technology, and sustainable manufacturing innovations.

## Training Categories by Share of Hours/Topic:

1. Technical Skills & Operational Excellence – 32%
2. Health, Safety, and Environment (HSE) – 15%
3. Leadership & People Management – 15%
4. ESG & Compliance – 15%
5. Soft Skills & Personal Development – 8%
6. Operational Excellence – 15%



# Training and Development

Empowering our people through continuous learning and skill enhancement.



## Cladtek Academy – Knowledge for the Community

Cladtek Academy is our flagship community-focused platform for **technical training and knowledge transfer**.

**Purpose:** Equip local communities and students with employable skills and sustainability awareness.

### 2024 Cladtek Academy Highlights:

- Conducted **7 batches** in Indonesia, Brazil, and Saudi Arabia
- Partnered with **18 local schools and vocational institutions** to introduce **STEM-focused modules** for youth.



## Global Leadership Program – Developing Leaders Across Borders

Our Global Leadership Programme is designed to cultivate leaders capable of driving Cladtek's vision across multiple regions.

- Partnered with **SBM ITB/ Flow Group Partner** to co-create leadership courses blending technical manufacturing expertise with strategic management.
- **2024 Cohort:** Trained **220 leaders** from Indonesia, Brazil, Saudi Arabia,

## Looking forward to 2025

We will continue to strengthen our learning culture by making training more accessible, relevant, and impactful for our employees worldwide. Our focus will be on:

- **Expanding Digital Learning** – Broaden the use of e-learning platforms to provide flexible, on-demand training that supports both technical and soft skills.
- **Creating Tailored Development Paths** – Ensure every employee has a personalised growth plan that aligns with their role, aspirations, and business needs.
- **Strengthening Leadership Capability** – Continue to invest in global leadership programs to prepare our leaders for the evolving challenges of our industry.
- **Enhancing Technical Expertise** – Provide advanced training in core manufacturing and engineering to maintain our industry leadership.
- **Fostering External Collaboration** – Partner with universities, industry experts, and suppliers to bring fresh knowledge, innovation, and perspectives into our workforce.
- **Encouraging Knowledge Sharing** – Promote peer-to-peer learning and webinars to build internal communities of practice.
- **Empowering the Community** – Grow initiatives like Cladtek Academy to deliver skills and capacity-building programs that benefit not just employees, but also local communities.

# Community Engagement

## Creating Shared Value Beyond Our Walls

We believe strong communities help build a stronger company. We engage in programs that promote education, health, environmental care, and local economic development.

We aim to build long-term relationships with our communities through open dialogue, active involvement, and meaningful contributions. By working together, we can create positive impacts and grow sustainably with our surroundings.



In November 2024, Cladtek marked Universal Children's Day with a company-wide celebration that brought together employees and their families.



In April, Cladtek extended support through charitable contributions to local orphanages, schools, and religious organisations



## 2024 Programs & Actions

- Cladtek Academy – Building Future Skills**
  - Delivered technical and vocational training for local youth, focused on welding, metallurgy, and manufacturing best practices.
  - 2024 Participants: **128 community members** trained
- Volunteer & Local CSR Engagements**

Employees across regions engaged in volunteer activities, from beach clean-ups, mangrove planting, charities, etc.

**Total Volunteer Hours in 2024: over 550 hours.**
- Mangrove Restoration & Coastal Conservation**

Conducted mangrove planting in Batam, Indonesia, in April 2024, aligned with Earth Day celebrations.

Planted over **1,000 mangrove saplings**, involving local fishing communities and stakeholders.
- Support for Local MSMEs (UMKM)**

Collaborated with local micro, small, and medium enterprises to provide their products to Cladtek including weekly snack programmes and local development activities.

## Looking Ahead

In 2025, we will continue to encourage employee volunteerism and establish long-term community monitoring frameworks to measure program impact.

# Governance and Ethic



# Governance

## Leading with Integrity, Accountability, and Transparency

Strong governance is the foundation of our **long-term success** and builds trust with our stakeholders—employees, customers, partners, regulators, and the communities we serve.

We are committed to:  
Upholding the highest standards of honesty, fairness, and transparency.  
Ensuring a safe, respectful, and non-discriminatory workplace.  
Complying with all applicable laws and regulations in every country we operate.

### 2024 Actions and Achievements

- Global Leadership Ethics Training: Refresher programme for all leaders covering governance, compliance, and anti-corruption measures, with 100% completion rate.
- Speak-Up Culture Reinforcement: Company-wide campaign including posters, newsletters, and leadership endorsements to promote safe reporting.
- Case Management Improvements: Communicate dashboard for tracking grievance and whistleblowing cases, allowing monthly reporting to senior management.
- Zero Confirmed Governance Breaches: All valid cases from whistleblowing and grievance channels investigated and closed with no unresolved issues at year-end.
- Conflict of Interest Awareness – Refreshed communication on policy requirements, and reminders before annual declarations.
- Reinforced Annual Compliance Process – Streamlined the Declaration of Compliance process to enhance tracking and follow-up, achieving 100% completion across the intended employee population.
- Supplier Code of Conduct – Communicate Supplier Code of Conduct with clear ESG and anti-bribery clauses, mandatory for all new supplier contracts.



### Looking Ahead

- Launch **mandatory e-learning compliance modules** for all leadership and high-risk positions, including case-based learning.
- Strengthen due diligence for suppliers, contractors, and third-party agents in high-risk jurisdictions.
- Enhance whistleblowing awareness campaigns for both internal and external stakeholders.
- Pursue recognition in **Corporate Ethics Excellence Awards** to benchmark governance practices globally.

# Grievance & Whistleblowing Mechanism

## Empowering Voices, Protecting Integrity

At Cladtek, we believe that transparency, trust, and accountability are essential to sustaining our ethical culture. Our grievance and whistleblowing channels provide employees, suppliers, contractors, and other stakeholders with safe, accessible, and confidential avenues to raise concerns about misconduct, policy violations, or unethical practices.

These mechanisms are governed by our **Grievance Policy** and **Whistleblowing Policy**, which align with international best practices, ensuring that reports are taken seriously, investigated impartially, and addressed without retaliation.

### Our commitment is clear:

- Protect confidentiality of reporters to the fullest extent possible.
- Ensure impartial and fair investigations through a trained ESG Investigation Specialist and cross-functional review.
- Address all valid cases after a preliminary assessment to determine scope and required action.
- Continuously improve awareness and accessibility of our reporting mechanisms across all regions.



**Grievance**  
esg.committee@cladtek.com



**Whistleblow**  
whistleblow@cladtek.com

### Whistleblowing and Grievance Channels

We have established dedicated whistleblowing and grievance channels. These platforms offer a safe, confidential, and accessible way for

employees, suppliers, customers, and other stakeholders to report potential violations of our Code of Conduct—such as corruption, discrimination, harassment, or conflicts of interest—without fear of retaliation.

## 2024 Actions and Achievements

In 2024, we strengthened our grievance and whistleblowing framework to ensure higher accessibility and stronger protections:

Cases Managed and Resolved:

- 16 total reports investigated and resolved across all operations. Issues addressed ranged from workplace behavior, harassment, and policy breaches to supplier-related concerns.
- Investigation Dashboard: Developed and shared quarterly with leadership, tracking cases by category, region, and resolution time.
- Awareness Campaigns: Conducted global communication drives via the Cladtek Portal, posters, and email newsletters to reinforce the speak-up culture.
- Policy Review: Updated grievance and whistleblowing procedures to clarify escalation paths, reporting timeframes, and investigation timelines.

## Looking Ahead

In 2025, we will build on these achievements by: Expanding whistleblowing awareness programmes to reach external stakeholders, including suppliers and contractors. Introduce a whistleblowing “trust index” survey to measure employee confidence in our grievance channels and inform improvements.

# Responsible Supply Chain

## Extending ESG Integrity Beyond Our Operations

We aim to ensure our supply chain operates ethically, sustainably, and with full respect for human rights. We expect our suppliers to operate in alignment with our Code of Conduct and adhere to applicable laws and international standards, including those related to labor rights, environmental protection, anti-corruption, and health and safety.

### 2024 Actions and Achievements

2024 was a foundational year for strengthening governance and sustainability expectations in our supply chain.

- **Supplier Code of Conduct Rollout:** Distributed the updated Supplier Code of Conduct to our active suppliers, with acknowledgements received from a significant proportion of them. This ensures that our partners understand our requirements regarding environmental performance, labour rights, workplace safety, and ethical conduct.
- **Evaluation Criteria Established:** Developed and approved comprehensive ESG-aligned supplier evaluation criteria to guide future assessments, focusing on quality, safety, compliance, sustainability performance, and innovation potential.
- **Supplier Acknowledgment:** Received formal acknowledgment from a significant portion of our suppliers, reinforcing shared commitment to ESG principles.

This year's focus was on building the governance framework that will allow for deeper ESG integration in supplier management going forward.



### Looking Ahead

In 2025, our priority will shift from framework establishment to active engagement and performance monitoring. Planned actions include:

- Expanding **due diligence** coverage to include 100% of Tier 1 suppliers and progressively Tier 2 suppliers.
- Conducting supplier ESG **assessments** and targeted **on-site audits**, prioritising high-risk categories and critical suppliers.
- Launching the **Supplier ESG Training Programme**, an online and in-person workshops on climate action, waste management, and compliance.
- Hosting the first **Supplier Sustainability Forum** to foster collaboration, share innovations, and recognise top performers.
- Deploying the **Digital Supplier Portal** to centralise performance tracking, document management, and ESG reporting.
- Introducing **supplier scorecards** to provide transparent feedback and encourage continuous improvement.

# Data Privacy & Cybersecurity

Safeguarding information to protect our people, customers, and partners

As part of our governance responsibility, Cladtek is committed to upholding the highest standards of information security and data privacy. We recognise that protecting sensitive data—whether belonging to employees, customers, suppliers, or our operations—is critical for maintaining trust, meeting regulatory requirements, and ensuring operational resilience.

## Our approach is underpinned by:

- **Data Privacy Policy** – Establishes how we collect, process, store, and protect personal and business information.
- **Cybersecurity Guidelines** – Defines security controls, acceptable use, and protection measures for digital assets.
- **Information Security Incident Response Procedure** – Provides a structured approach for detecting, reporting, and responding to security incidents.
- **Access Control and Classification Procedures** – Ensures that information is shared strictly on a “need-to-know” basis and classified according to sensitivity.
- All these policies and procedures are accessible to employees via the **Cladtek Portal**, and their compliance is reinforced through mandatory training and periodic refreshers.

## 2024 Actions and Achievements

- **0** confirmed data breaches resulting in information loss.
- **20%** of employees have been trained in cybersecurity awareness. This marks the initial stage of our programme, which will be expanded to cover all employees, with tailored modules for leadership, IT staff, and high-risk roles.

In 2024, we took significant steps to strengthen our data governance and cyber resilience:

- Policy Reinforcement
- Cybersecurity Awareness Training
- System Enhancements



## Looking Ahead

We aim to further advance our data privacy and cybersecurity maturity by:

- Launches **annual compliance and cybersecurity awareness training** for all employees
- Implement **enhanced data classification and encryption standards** for sensitive business data.
- Preparing for **ISO/IEC 27001 certification**, aligning with global best practices in information security management.
- Enhance our **cyber incident response plan** with simulated breach drills, cross-departmental coordination protocols, and improved forensic investigation capacity.
- Increase **awareness** with **campaigns** on best practices for data protection, including email security, phishing prevention, and secure data handling.
- Deploy enhanced IT tools for **continuous monitoring** of data access, unauthorised attempts, and system vulnerabilities.

# Continuous Improvement



Bima Satria P	Endikowsta A	Ghalib Akbar A	Vovo Mahatma	Muhlizam	Satria Wibowo

Selvi Priyani

# Operational Excellence

## Driving Efficiency, Cost Discipline, and Sustainability through Strategic Program

Operational Excellence is more than a cost-control exercise for Cladtek – it’s a strategic framework that ensures every operational expenditure drives measurable value in efficiency, reliability, sustainability, and workforce capability. In 2024, our OPEX programs spanned multiple regions and functions, combining lean management with sustainability integration to deliver stronger results for our people, our business, and our planet.

### 2024 Actions and Achievements

#### OPEX Programs Implemented

- **151 OPEX initiatives** executed globally across Indonesia, Brazil, and Saudi Arabia sites.
- Focus areas: process efficiency, maintenance optimisation, resource efficiency, and safety improvements.

#### Training & Capability Building

- **2,183 employees** trained in Operational Excellence tools, including **5S, Kaizen, Lean Manufacturing, and Problem-Solving Methodologies**.
- Launched **strategic improvement**, generating **60 improvement projects** that reduced operational waste and cycle time.

#### Kaizen & Continuous Improvement

- **>2000 Kaizen projects** successfully closed in 2024, delivering cumulative cost savings of **USD 7.3 million**.
- Examples include layout optimisation in pipe finishing, material handling improvements, and reduced downtime in MLP production lines.

#### Maintenance Optimisation

- Increased preventive maintenance coverage to **100% of critical assets**.



# Operational Excellence

## Driving Efficiency, Cost Discipline, and Sustainability through Strategic Program

### iN-Shield

In 2024, Cladtek launched the iN-Shield Program—our proprietary World-Class Manufacturing (WCM) framework—designed to unify and elevate our global operations. Built on proven international best practices, iN-Shield strengthens our capabilities in quality, efficiency, safety, and sustainability, ensuring every site and every team member contributes to our shared strategic vision.

#### Name & Meaning

- **Ni-iN:** Nickel – Interior (reflecting Cladtek’s core metallurgical expertise and internal strength)
- **Shield:** Solid – Protection (symbolising resilience, reliability, and safeguarding performance)

#### 9 competencies/pillars embedded across the organization:

- **Safety** – Maintaining a zero-harm culture and proactive risk management
- **Strategy & ESG** – Integrating sustainability goals and business objectives into daily operations
- **Innovation** – Encouraging creative solutions to improve products, processes, and services
- **Quality** – Strengthening standards to exceed customer expectations
- **Supply Chain** – Enhancing supplier relationships and performance
- **Cost** – Driving efficiency while optimising resources
- **People & Culture** – Building engagement, skills, and shared values
- **Performance** – Tracking KPIs to measure and reward achievement
- **Continuous Improvement** – Applying Lean and Kaizen to eliminate waste and improve productivity

### 3-Phase Excellence Journey

The iN-Shield Program is implemented through a three-phase maturity model designed to drive continuous improvement and raise operational standards:



#### Bronze Level – Foundation Phase

- Launched in 2022, focusing on building awareness, setting the baseline, and embedding the 9 pillars into operations.
- Achieved in **2023**, marking strong progress in standardisation and compliance.



#### Silver Level – Integration Phase

- Achieved in **2024**, highlighting integration of KPIs into operational scorecards, consistent performance reviews, and enhanced cross-site collaboration.
- Significant efficiency gains achieved through Lean and Kaizen projects.



#### Gold Level – World-Class Performance Phase

- Targeted for **2025**, aiming for full global alignment, best-in-class benchmarks, and demonstrable leadership in operational excellence and ESG integration.

### Cascading Strategy Across the Company

- Strategic goals are **translated into measurable KPIs** at global, regional, departmental, and individual levels.
- Goals are embedded in **operational scorecards, monthly performance reviews, and training plans.**
- The framework enables **cross-site knowledge sharing** to replicate success and reduce inefficiencies.

# Research, Development & Innovation (RD&I)

## Driving Sustainable Solutions Through Continuous Innovation

Innovation has always been part of Cladtek's DNA – the driving force behind our industry leadership in mechanically lined pipes (MLP), corrosion-resistant alloys (CRA) Cladding, and sustainable steel manufacturing practices.

In 2024, we took this commitment a step further by formally establishing a dedicated Research, **Development & Innovation (RD&I) Group**. This strategic move aims to centralise our innovation efforts, enhance technical capabilities, and ensure we meet – and exceed – evolving customer and market expectations.



## 2024 Actions and Achievements

- **Launch of the RD&I Group** – Formally established in 2024, reporting directly to senior leadership, integrating cross-functional expertise from engineering and operations across our multiple locations
- **Technical Publications & Forums** – Presented +5 technical papers at international forums and industry events.
- **Collaborative Projects** – Currently engaged in +20 research initiatives with universities, clients, suppliers, and industry consortia.
- **Product Innovation** – Advanced the development of next-generation clad solutions with enhanced corrosion resistance and reduced manufacturing footprint.

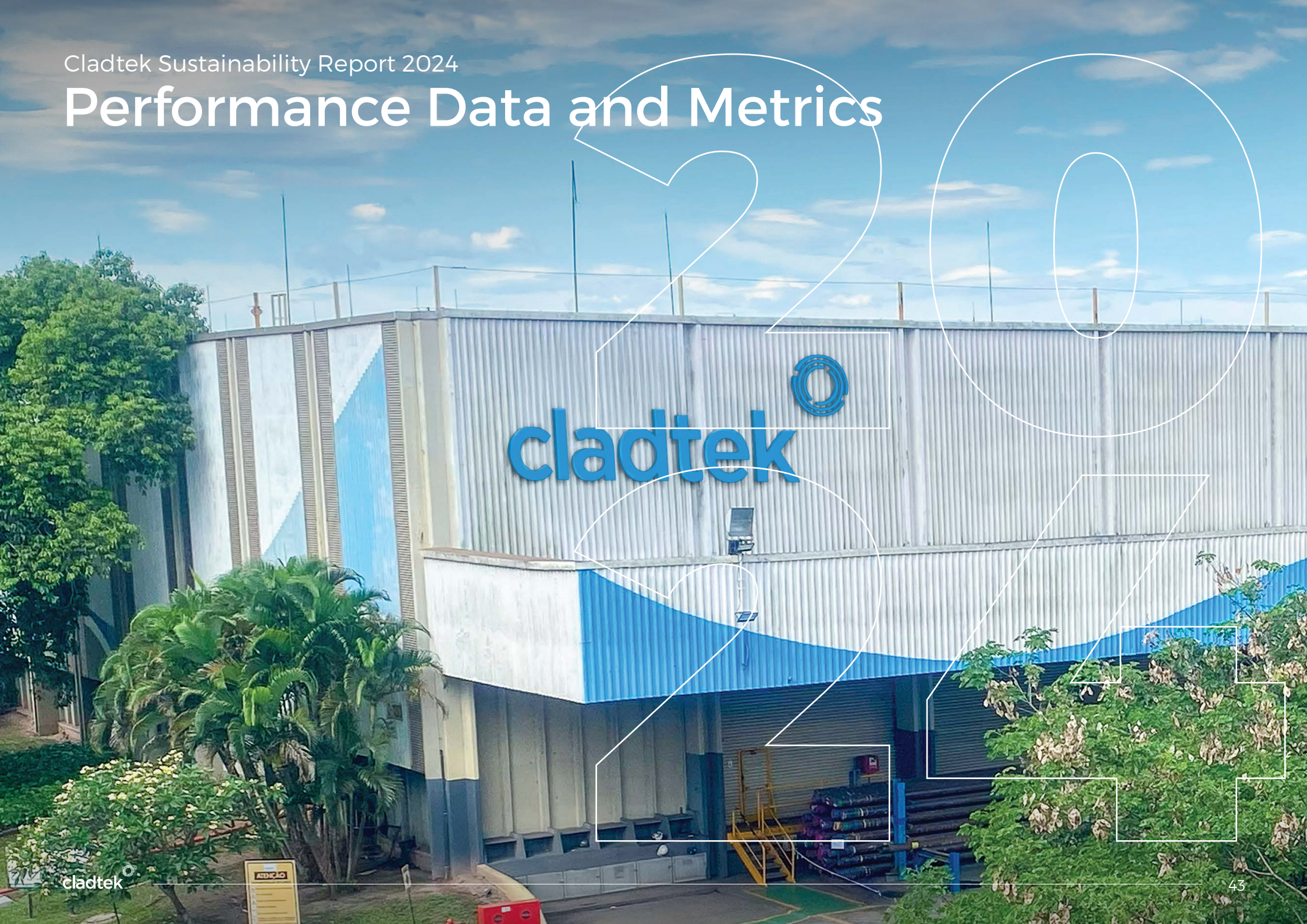
- **Sustainability Integration** – Applied LCA (Life Cycle Assessment) to new product designs, enabling transparent Environmental Product Declarations (EPDs).
- **Acknowledgement & Recognition** – Received industry acknowledgments for innovation in sustainable steel manufacturing.

## Looking Ahead




















In the coming years, RD&I will:

- Increase R&D investments in **sustainable manufacturing practices**
- Develop **next-generation clad products** designed for geothermal energy, hydrogen storage, and carbon capture infrastructure.
- Strengthen our **intellectual property portfolio** through targeted **patent** applications.
- Continue active participation in **industry working groups** shaping future sustainability standards and best practices.
- Launch a **Global Innovation Programme** to formalise idea generation, prototyping, and rapid testing cycles.
- Strengthen **collaboration with academic and research partners** to accelerate breakthroughs in metallurgical science and sustainable manufacturing.
- Increase **participation in international forums** and **publish** more peer-reviewed papers to cement Cladtek's position as an innovation leader in its segment.
- Develop an **Innovation Performance Dashboard** to track environmental, operational, and commercial benefits from RD&I initiatives.
- Establish **in-house testing infrastructure** to increase efficiency and productivity while reducing power consumption and waste generation.

# Performance Data and Metrics



# Framework Mapping Index

Cladtek 2024 Sustainability Report	GRI Standards	Sustainable Development Goals
CEO Message	GRI 2-22	
About this Report	GRI 2-1, 2-2, 2-3	
Cladtek Overview	GRI 2-1, 2-6	
Mission, Vision, Values	GRI 2-1	
ESG Governance & Accountability	GRI 2-9, 2-11 to 2-14, 2-23	
<b>Sustainability Strategy</b>	<b>GRI 2-22</b>	
Risk Management & Internal Controls	GRI 2-12, 2-13	
Stakeholder Engagement	GRI 2-29	
Materiality Assessment	GRI 3-1, 3-2	
<b>Environmental</b>	-	
Greenhouse Gas (GHG) Emissions	GRI 305-1 to 305-5	     
Resource Stewardship	GRI 306-2 to 306-3	
Biodiversity & Local Ecosystem	GRI 304-1	
<b>Social</b>	-	
People	GRI 401-1, 401-2	     
Diversity, Equity, and Inclusion	GRI 405-1, GRI 2-7	
Human Rights	GRI 2-23, 2-25	
Health and Safety	GRI 403-1 to 403-4	
Training and Development	GRI 404-1 to 404-2	 
Community Engagement	GRI 413-1, 413-2	
<b>Governance</b>	-	
Governance with Integrity	GRI 2-23, 2-25 to 2-27	
Grievance & Whistleblowing Mechanism	GRI 2-25, 2-26	
Responsible Supply Chain	GRI 2-6, 308-1, 414-1	    
Data Privacy & Cyber security	GRI 2- 23, 2-27, 418 -1,	
<b>Continuous Improvement</b>	-	
Operation Excellence	GRI 2-6, GRI 416-1	
Research, Development, & Innovation	Gri 2-6,	
<b>Framework Alignment</b>	<b>GRI 2-22</b>	
Performance Data	GRI 2-5, GRI 3-3	

# Environmental Performance Data

Data / Indicator	Unit	2021	2022	2023	2024
<b>GHG emissions</b>					
Scope-1 (direct)	Metric Tons CO2e	667	1,120	1,782	3,723
Scope-2 (indirect)	Metric Tons CO2e	16,153	13,868	13,771	19,900
Scope-3 (indirect)	Metric Tons CO2e	81,697	70,576	59,947	62,776
<b>Scope-1</b>					
Fuel Combustion - Stationary	Metric Tons CO2e	77	588	1,285	3,099
Fuel Combustion - Mobile	Metric Tons CO2e	301	434	412	538
Fugitive Emissions	Metric Tons CO2e	286	91	85	86
<b>Scope-2</b>					
Electricity Consumption	Kwh	17,364,420	15,854,394	16,092,928	21,675, 226
<b>Scope-3</b>					
Cat 1: Purchased goods and services					
CRA wires, liners, coils	Metric Tons CO2e	6,942	4,626	8,746	5,005
Steel pipes, fittings, flanges	Metric Tons CO2e	23,034	30,925	26,376	10,199
Other	Metric Tons CO2e	14,337	11,939	8,849	22,198
Cat 2: Capital Goods	Metric Tons CO2e	11,637	4,862	2,598	1,950
Cat 3: Fuel- and energy-related emissions	Metric Tons CO2e	1,672	1,447	1,425	2,181
Cat 4: Upstream transport (supplier to Cladtek)	Metric Tons CO2e	12,425	7,033	4,847	8,022
Cat 5: Operational waste	Metric Tons CO2e	661	616	796	1,083
Cat 6: Business travel	Metric Tons CO2e	662	1,702	1,404	2,181
Cat 7: Employee commuting	Metric Tons CO2e	2,828	3,274	3,119	3,838
Cat 8: Upstream leased assets	Metric Tons CO2e	174	194	105	131
Cat 9: Downstream transport (Cladtek to Client)	Metric Tons CO2e	6,993	3,401	1,237	5,236
Cat 10: Processing of sold products	Metric Tons CO2e	332	557	444	750

# Environmental Performance Data

Data / Indicator	Unit	2021	2022	2023	2024
<b>Water</b>					
Water usage	m3	37,279	44,468	39,635	82,401
Total emission	Metric Tons CO2e	2,611	3,347	377	46*
<b>Waste</b>					
Total Operational Waste	Kg	1,303,632	1,812,152	1,942,559	2,493,147
Recycle Waste	Kg	512,582	1,292,424	1,309,786	1,610,887
% Landfill Waste	Percentage	63	34	31	38
% Recycle Waste	Percentage	39	71	69	62
Total Emission	Metric Tons CO2e	661	615	796	1,083
Total volume of non-hazardous waste generated	Tonnes	863	656	792	920
Total volume of hazardous waste generated	Tonnes	229	186	369	532
Total volume of process water, wastewater or industrial effluent discharged	m3	20,411	26,669	24,142	2,125

\*The calculation methodology has been revised from the previous year

# Social Performance Data

Data / Indicator	Unit	2021	2022	2023	2024
Total number of employees (Full-time Equivalent)	Number	1,936	1,705	2,003	2,049
Total number of Senior Managers	Number	48	58	77	92
Total number of Executive Committee Members	Number	3	3	3	7
<b>Age</b>					
Under 30	Number	588	469	563	511
30-50 years	Number	1,228	1,123	1,299	1,338
Over 50 years	Number	105	113	141	200
<b>Gender</b>					
Total number of female employees	Number	167	202	171	180
Total number of male employees	Number	1,754	1,503	1,832	1869
<b>Local &amp; Foreign Composition</b>					
Total number of nationalities	Number	22	16	15	20
% local employees	Percentage	96.6	92.1	93.3	77
% foreign employees	Percentage	3.4	7.9	6.7	23
<b>Employee Turnover</b>					
Total no. of employee turnover	Number	250	245	210	399
Total no. of employee turnover - female	Number	30	25	38	50
Total no. of employee turnover - male	Number	220	220	172	370
<b>New Hires</b>					
Total no. of new employee hires	Number	614	394	686	444
Total no. of new employee hires - female	Number	41	36	50	45
Total no. of new employee hires - male	Number	573	356	636	399
<b>Senior Management Composition</b>					
% of female employees as senior managers	Percentage	16.7	24.1	18.1	12
% Senior Managers - Local	Percentage	62.5	74.1	72.7	65
% Senior Managers - Foreign Nationals	Percentage	37.5	25.9	27.3	35

# Governance Performance Data

Data / Indicator	Unit	2021	2022	2023	2024
<b>Whistleblow</b>					
Submitted	Number	-	1	4	3
Closed	Number	-	1	4	3
<b>Grievance</b>					
Received	Number	-	7	24	13
Closed	Number	-	7	24	13
<b>Cases by Issue Type</b>					
HR, Diversity, workplace respect	Number	-	7	14	11
Business Integrity	Number	-	1	7	-
<b>Health and Safety</b>					
Total Recordable injury Frequency Rate (TRIFR)	Percentage	0.96	1.32	1.61	1.64
Lost Time Injury Frequency Rate (LTIFR)	Percentage	0.19	0.0	0.09	0
Total number of work-related fatalities	Number	0	0	0	0
<b>External Communities</b>					
Complaints or any other feedback	Number	0	0	0	0
<b>ESG Training</b>					
Introduction to ESG (Business Ethic, human rights, etc.)	Number	1200	1705	1328	597

# Sustainability Report 2024

## Contact Us

### Cladtek Holdings Pte Ltd

#### Group ESG & Sustainability Department

- ♀ Corporate Office: Singapore
- ♀ Manufacturing: Batam (Indonesia), Rio de Janeiro (Brazil), Dammam (Saudi Arabia)
- ✉ [ESG.Committee@cladtek.com](mailto:ESG.Committee@cladtek.com)
- 🌐 [www.cladtek.com/sustainability](http://www.cladtek.com/sustainability)

## Report Preparation

This Sustainability Report was prepared by Cladtek's Group ESG & Sustainability Department:

- Led by **ESG & Sustainability Manager** ([✉ bionolla.shandiana@cladtek.com](mailto:bionolla.shandiana@cladtek.com))
- In close collaboration with cross-functional teams from HSE, HR/People & Culture, Operations, Opex, RD&I, IT, Finance, and Corporate Communications.

We thank all our employees, customers, suppliers, and community partners for their contributions to the achievements shared in this report.

