



ESG

PERFORMANCE OF CSAIL

2024



Contents



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All information included in this report has been carefully reviewed to ensure accuracy, and to the best of our knowledge, the report contains no misrepresentations, misleading statements, or material omissions.

CSAIL INTRODUCTION

• Message from CEO CSAIL	01
• CSAIL at A Glance	03
• CSAIL's Collaborations, Key Events & Achievements	08
• Key Events	09
• 2024 ESG Highlights	11
• Importance of ESG Performance to CSAIL	13



GOVERNANCE

	15
• Governance: The Backbone of Sustainable Growth	17
• Board of Directors (Independence, Diversity, Leadership)	19
• Governance Framework	20
• Corporate Governance, Core Values, Policies & Procedures	22
• Corporate Ethics & Integrity Initiatives	23
- Integrity Compliance Framework -Upholding Ethical Standards	23
- Transparency & Anti-Corruption Policies	24
- Compliance with Legal & Regulatory Requirements	25
• Innovative Research & Development	26
• Suppliers Vendor Management	27
• Risk Management	27



SOCIAL PERFORMANCE

	29
• Importance of Social Performance to CSAIL	31
• Stakeholders Engagement (Internal, External)	33
• Employment at CSAIL: A Foundation of Integrity and Inclusion	35
• CSAIL's Commitment to Equity, Inclusion, and Anti-Discrimination	37
• CSAIL's Grievances Mechanism	41
• Workers Grievances Mechanism	42
• Community Grievance Mechanism	43
• CSAIL's CSR Initiaves-2024	44
• CSAIL's Commitment to Health and Safety	46



ENVIRONMENTAL PERFORMANCE

	49
• Empowering a Greener Future: CSAIL's Clean Energy Contribution in 2024	51
• Greenhouse Gas Emissions Overview	51
• Optimizing Resource Efficiency for Sustainable Operations	52
• Comprehensive Waste Management for Environmental Responsibility	53
• Biodiversity Management Plan	55
• Overview of Achievements Associated with each Protection Measure	56



FUTURE ROADMAP

• CSAIL's Future Roadmap: A Vision for Sustainable Excellence	58
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**MESSAGE FROM
CEO CSAIL**



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CSAIL, a responsible and purpose-driven enterprise, embraces its ethical, legal, and economic responsibilities to foster inclusive and sustainable development in Pakistan. Guided by the principles of environmental stewardship and social equity, we remain committed to protecting ecosystems and uplifting communities wherever we operate.

As a global leader in clean energy, our mission goes beyond power generation. We aim to deliver sustainable, accessible, and affordable energy solutions while inspiring transformative change in the lives we touch. Our commitment to ESG performance lies at the core of our operations, driving innovation and responsible growth across CSAIL and its subsidiaries. In 2024, we made significant strides—reducing our environmental impact, expanding the reach of our social programs, and reinforcing strong governance structures. Through the adoption of advanced energy-efficient technologies and promotion of inclusivity, our efforts created enduring value for all stakeholders. Among our proudest achievements was maintaining zero fatalities across all projects, reflecting our deep respect for human life and workplace safety. Our ESG journey is grounded in values of transparency, accountability, and continuous progress as we navigate global challenges from climate change to socio-economic disparities.

While we celebrate our progress, we remain aware of the road ahead. CSAIL is unwavering in its commitment to ambitious goals, strategic partnerships, and innovative solutions for a low-carbon, resilient future. As stewards of the environment and society, we strive to embed sustainability and resilience into our operations, advancing a shared legacy of hope, harmony, and renewal.

Zhou Qiang
CEO CSAIL



CSAIL AT A GLANCE

China Three Gorges Corporation (CTG) was founded on September 27, 1993, with the primary objective of constructing the Three Gorges Project. Over the past 30 years of rapid and high-quality development, CTG has emerged as the world's largest hydropower development and operations enterprise, as well as China's leading clean energy group.

China Three Gorges International Limited (CTGI), established in 2011 as a subsidiary of CTG, serves as the sole platform for the investment, development, and operation of CTG's overseas power generation assets. With a portfolio encompassing multi-stage hydro, solar, and wind power projects, CTG's installed and under-construction capacity now exceeds an impressive 146 GW, generating more than 413.6 TWh annually. The corporation's crown jewel, the 22,500 MW Three Gorges Dam, the world's largest hydroelectric power facility, stands as a testament to its engineering excellence. Under CTG, CTGI's global ventures span continents, from Africa and Asia to Europe and the Americas, reflecting the group's strong commitment to advancing renewable energy worldwide.

China Three Gorges South Asia Investment Limited (CSAIL), a symbol of innovation and sustainable development, was established by CTG and CTGI on September 30, 2011, in the Cayman Islands. Designed to acquire, develop, construct, own, and operate renewable power generation projects, CSAIL began with an initial registered capital of USD 100,000, which has since grown to over USD 380 million.

Today, CSAIL's projects, strategically aligned with the Belt and Road Initiative, boast a cumulative capacity exceeding 3,000 MW and represent an investment of approximately USD 7 billion. With its registered office in Hong Kong and a branch liaison office in Islamabad, Pakistan, CSAIL continues to lead the transition to cleaner energy across diverse geographies.



CSAIL'S PRESENCE IN PAKISTAN



1124 MW KOHALA HPP



640 MW MAHL HPP



720 MW KAROT HPP



99 MW TGS & TGT WPP



49.5 MW TGF WPP



KAROT POWER COMPANY (PVT) LTD (KPCL)

A subsidiary of CSAIL, KPCL has developed the 720 MW Karot Hydropower Project. The Project is a flagship project under the China-Pakistan Economic Corridor (CPEC) and the Belt and Road Initiative. Located in Karot Village, District Rawalpindi, Punjab, the project is generating an average annual energy output of 3,206 GWh. Operating on a Build, Own, Operate & Transfer (BOOT) model, the project showcases innovative and sustainable development practices, highlighting the potential for collaborative energy projects to drive economic growth while prioritizing environmental considerations.



THREE GORGES WIND FARM PAKISTAN (PVT) LTD

Three Gorges First Wind Farm Pakistan (Pvt.) Ltd (TGF), a CSAIL subsidiary, made history in Pakistan's renewable energy sector by completing the 49.5 MW first wind power project ahead of schedule in 2014. This pioneering effort was followed by two additional phases, developed by Three Gorges Second Wind Farm Pakistan Ltd (TGS) and Three Gorges Third Wind Farm Pakistan (Pvt.) Ltd (TGT), each adding 49.5 MW to the national grid. These projects, operational since June 2018, were developed on a Build, Own, and Operate (BOO) basis and are recognized as "Actively Promoted Projects" under the China-Pakistan Economic Corridor (CPEC). The wind farms collectively provide reliable electricity to Pakistan's national grid, solidifying CSAIL's key role in the country's energy transition.



KOHALA HYDRO COMPANY (PVT) LTD (KHCL)

KHCL, another CSAIL subsidiary, is spearheading the development of the 1,124 MW Kohala Hydropower Project on the Jhelum River in Azad Jammu and Kashmir (AJK). This significant initiative is expected to yield an annual energy output of 5,149 GWh. Operating under the Build, Own, Operate, and Transfer (BOOT) model, the project has been designated as an "Actively Promoted Project" within the China-Pakistan Economic Corridor (CPEC) framework, highlighting the fruitful collaboration between Pakistan and China in the energy sector.



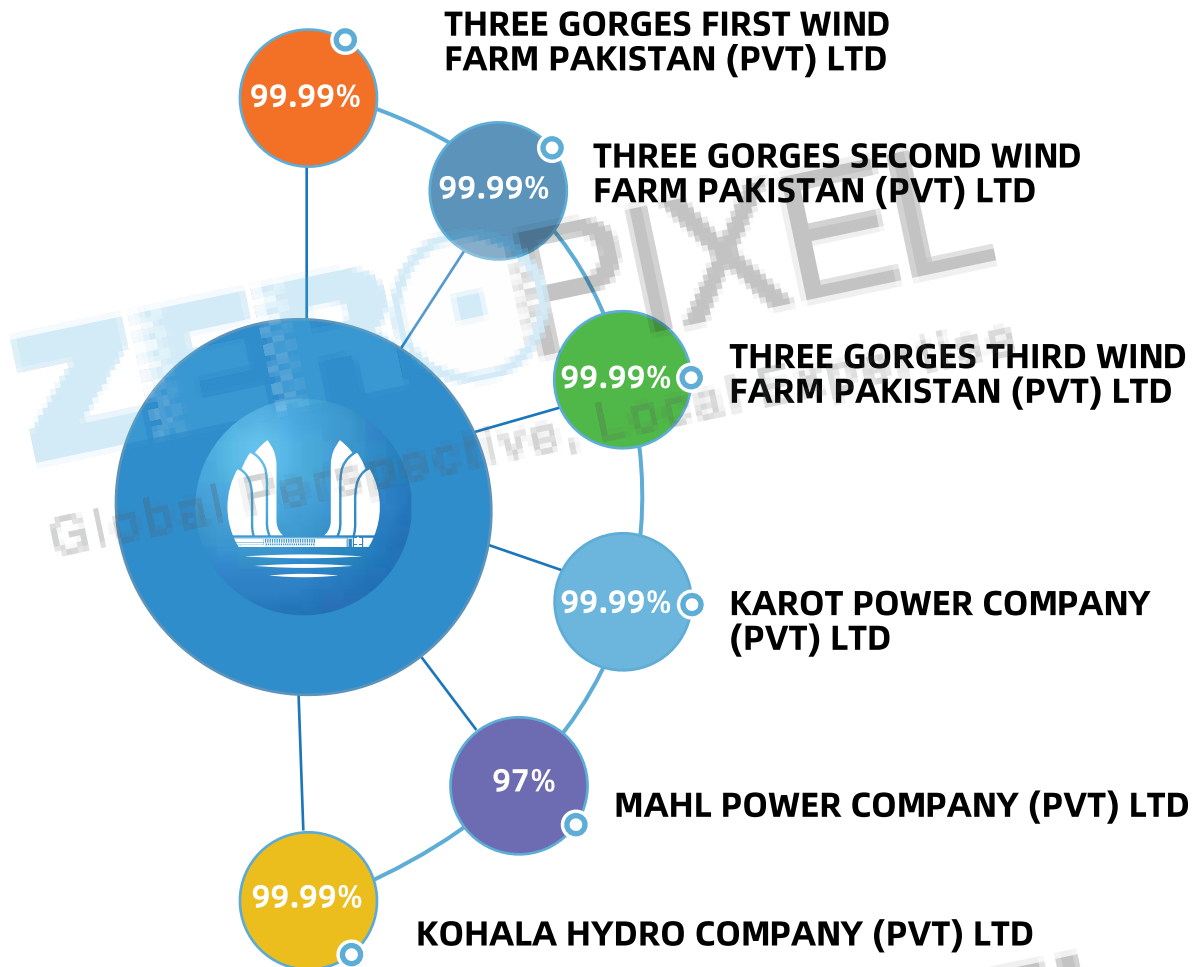
MAHL POWER COMPANY (PVT) LTD (MPCL)

MPCL, a CSAIL subsidiary, is driving forward the 640 MW Mahl Hydropower Project. This under development project, strategically located on the Jhelum River at the border of Azad Jammu and Kashmir (AJK) and Punjab, this project operates under the Build, Own, Operate, and Transfer (BOOT) model. The initiative highlights CSAIL's dedication to growing renewable energy infrastructure and contributing to sustainable development.

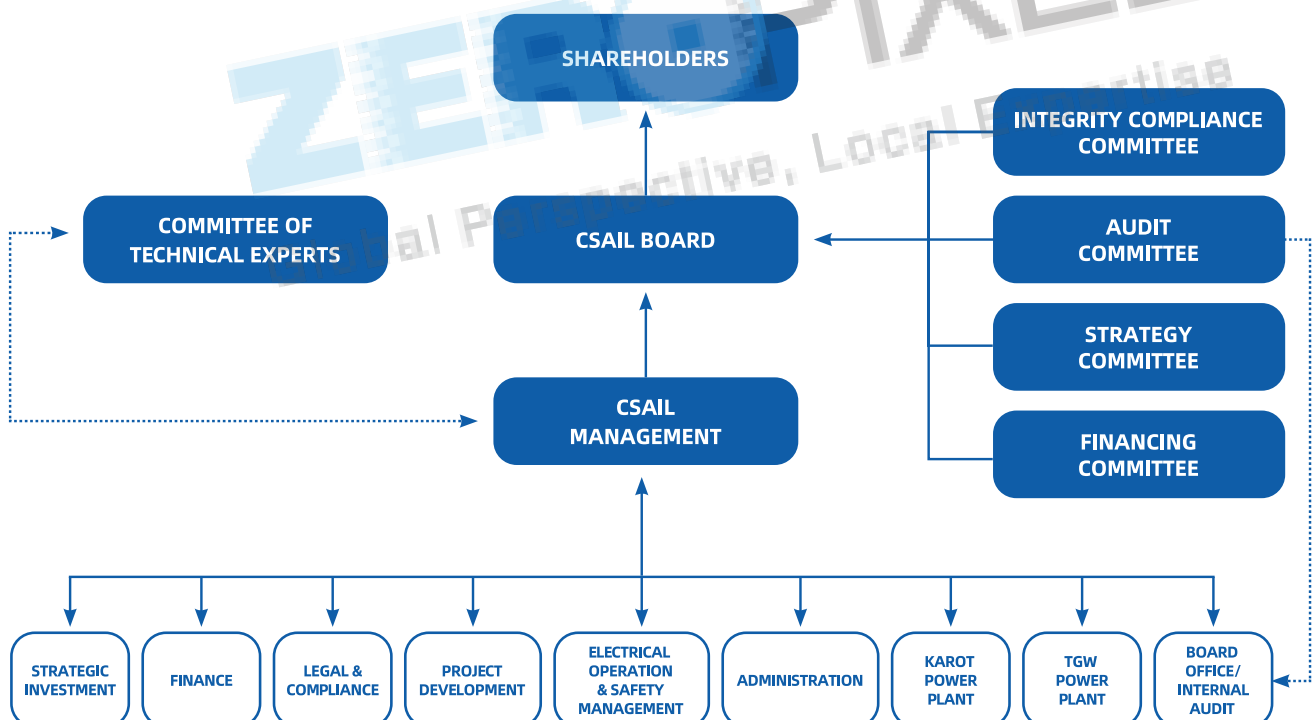




SHAREHOLDING STRUCTURE OF CSAIL



ORGANIZATIONAL CHART



CORE CONCEPTS



STATEMENT OF CULTURE

WE ARE CSAIL

Mission

Provide Clean Energy
and Build Beautiful
Communities
Together



Vision

Build an
International
First-Class Clean
Energy Group



CSAIL's Spirit

Science and Democracy,
Seeking Truth and
Innovating, Solidarity
and Courageous to
Shoulder Responsibility
Honesty and
Contribution, Seeking
Excellence



Core Values

Dedication
Responsibility
Innovation and
Harmony



Business Segments

Investment and
Financial Services,
Power Generation,
New Energy



CSAIL'S COLLABORATIONS, KEY EVENTS, RECOGNITION & AWARDS

Strategic Engagements & Partnerships Driving



ALL PAKISTAN CHINESE ENTERPRISES' ASSOCIATION (APCEA)

CSAIL actively engaged with APCEA in 2024, contributing policy insights and reinforcing its role in advancing sustainable energy and strong China Pakistan economic ties.



PAKISTAN-CHINA INSTITUTE (PCI)

In partnership with PCI, CSAIL enhanced its media outreach and promoted dialogue on renewable energy, China-Pakistan cooperation, and infrastructure innovation.



STRATEGIC PARTNERSHIPS WITH IFC AND SILK ROAD FUND

Collaboration with IFC and the Silk Road Fund secured vital funding, supported knowledge exchange, and helped align CSAIL's operations with international sustainability standards.



INTERNATIONAL UNION FOR CONSERVATION OF NATURE (IUCN)

As a key supporter of IUCN's implementation of the Karot Biodiversity Management Plan, CSAIL contributed to conservation efforts like illegal fishing control, habitat restoration, and Mahseer restocking in the Jhelum River.



COLLABORATION WITH CPPA-G, NTDC, AND NPCC

CSAIL successfully conducted the Annual Capacity Test (ACT) for the 720 MW Karot Hydropower Plant, validating its technical performance and grid contribution in partnership with CPPA-G, NTDC, and NPCC.



CHINA CHAMBER OF COMMERCE IN PAKISTAN

CSAIL co-launched two influential reports on the power sector's transformation and Chinese business sentiment in Pakistan, shaping energy policy and reinforcing CSAIL's leadership position.



KEY EVENTS

World Wetland Day

- Commemorated World Wetland Day to exhibit our commitment to environmental protection.

World Forest Day

- CSAIL commemorated World Forest Day at village Hollar, near the Karot Power Project, with the theme "Forests and Innovation".

Book Reading Event

- CSAIL conducted a Book Reading Event at local government schools near Karot, featuring "The Light Chaser Along the China-Pakistan Economic Corridor", a CTG Media publication.

International Day for Biodiversity

- CSAIL, in collaboration with its BMP implementation Organization, IUCN, celebrated International Day for Biodiversity at Karot. The event included the release of 3,500 endangered Mahseer fish seeds into the dam to promote aquatic biodiversity conservation.

World Environment Day

- CSAIL celebrated World Environment Day in Palandri, AJK, in partnership with IUCN, the implementing organization of the Karot Biodiversity Management Plan.

2nd Anniversary of Karot COD & Annual Capacity Test

- An Open Day for the local community was organized at the Karot Hydropower Project to celebrate the 2nd Anniversary of Karot COD.
- July 29: The 720 MW Karot Hydropower Plant successfully conducted its Annual Capacity Test, attended by officials from CPPAG, NTDC, and NPCC.

Reports Launching Ceremony

- The launching ceremony of two reports, 'The Glorious 11 Years - How Chinese Companies Reshaped the Power Sector in Pakistan' and the 'Business Climate Index of Chinese Companies in Pakistan' was held at Marriott Hotel, Islamabad.

Family Open Day

- A Family open days were organized for employees' families.





2024 ESG Highlight



ZERO ACCIDENTS

No safety accident occurred across CSAIL's projects because of implementation of a proactive and reactive incident management system



ZERO FATALITIES

No lives were lost across CSAIL projects in 2024 – a testament to our strong safety culture and effective risk management



3 MILLION SAFE MANHOURS

Wind Farms operated for over 3 million manhours without severe incidents, demonstrating operational excellence



900+ HSE TRAININGS & AWARENESS SESSIONS

Over 6,500 employees trained through 900+ sessions, promoting safety, environmental awareness, and regulatory compliance



100% SITE SAFETY

Achieved Zero LTIs (Lost Time Incidents) through rigorous inspections, hazard control, and behavior-based safety systems



1.26 MILLION TONS CO₂ AVOIDED

CSAIL's renewable projects avoided 1,264,045 tons of CO₂ emissions, advancing climate change mitigation



REDUCING GHG FOOTPRINT

By integrating advanced technologies, data-driven energy optimization techniques, and fuel efficient practices, we aim not only to reduce our greenhouse gas footprint but also to create a replicable model of sustainable innovation



EMERGENCY PREPAREDNESS

Executed robust Emergency Preparedness Response Plans (EPRPs) with live drills on evacuation, firefighting, and flood scenarios



ISO CERTIFIED HSEMS

Upgraded systems certified under ISO 9001, 14001, and 45001, aligned with CTGI and IFC standards



CLIMATE ACTION & REFORESTATION

Planted trees and restored green spaces across project sites; celebrated World Environment Day supporting SDGs



BIODIVERSITY CONSERVATION

A major milestone under the BMP Plan: Protection of endangered Mahseer fish species ensured through habitat preservation





Importance of ESG Performance to CSAIL

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Environmental, Social, and Governance (ESG) performance is at the heart of our strategy, reflecting our commitment to sustainable development and responsible business practices. By embedding ESG principles into our operations, we not only drive innovation and resilience but also align with global efforts to combat climate change and promote social equity.

Our focus on rigorous environmental standards, community empowerment, and transparent governance ensures long term value creation and strengthens stakeholder trust. Through these principles, we advance renewable energy solutions, foster inclusivity, and uphold ethical integrity, positioning CSAIL as a leader in sustainable energy transitions and a catalyst for shared prosperity.





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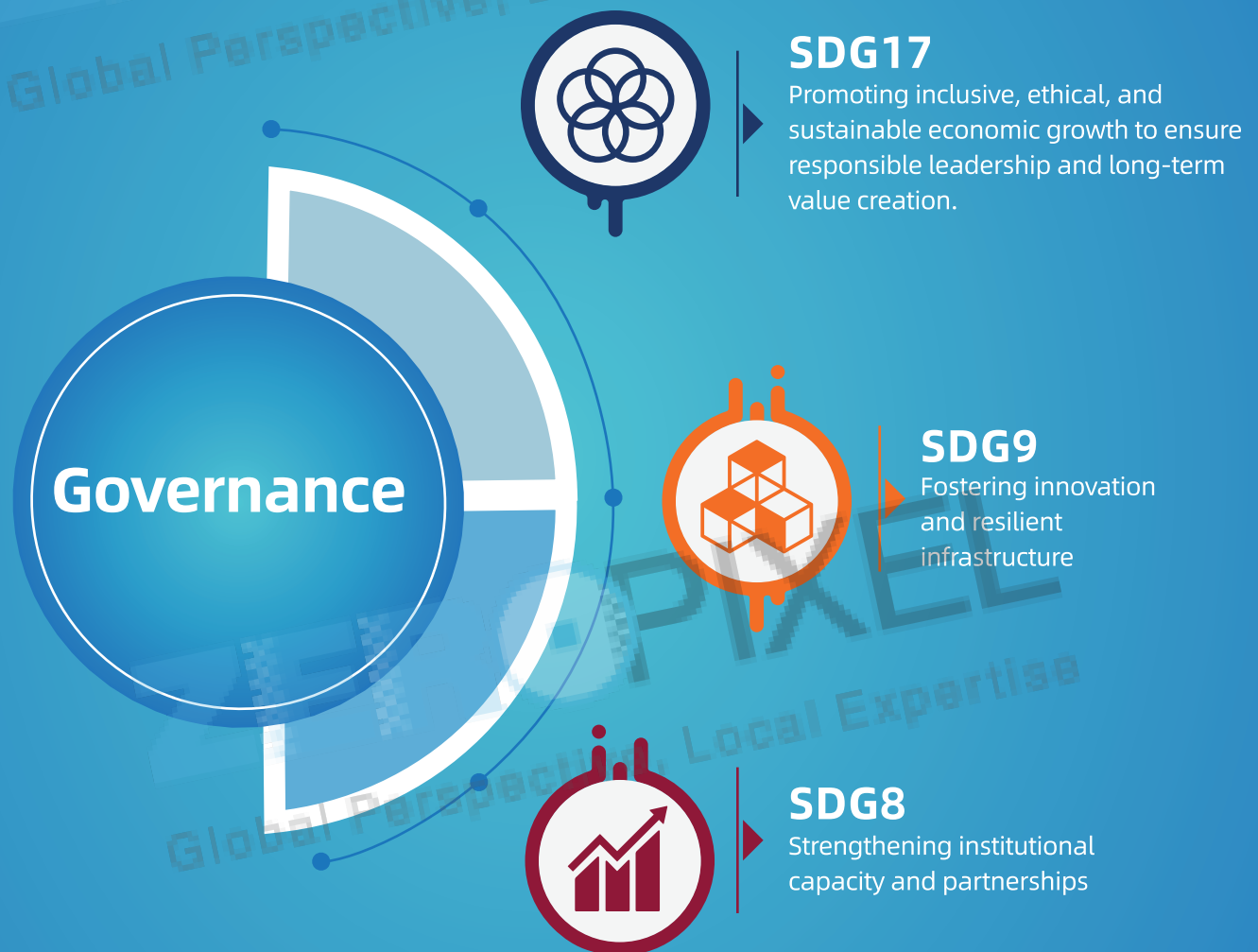
Governance



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Under Governance, we Contribute to the Sustainable Development Goals by:



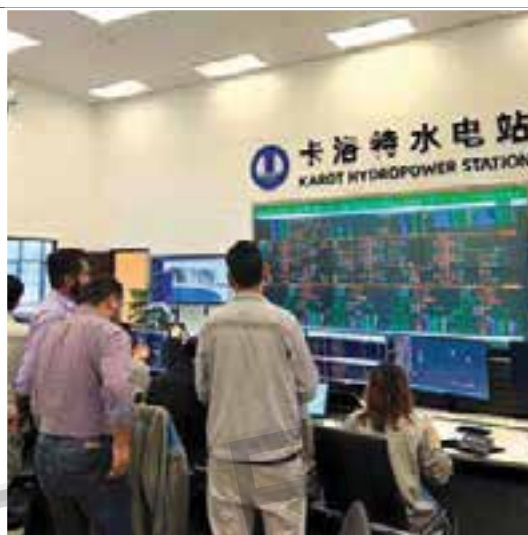


Governance: The Backbone of Sustainable Growth

Through strengthened governance practices, CSAIL reinforces its identity as a responsible, forward-thinking organization—driven by ethics, guided by sustainability, and grounded in stakeholder value. As the global business landscape evolves, CSAIL remains steadfast in its pursuit of integrity, innovation, and inclusivity, principles that will continue to define its legacy in the years to come.

Governance at CSAIL is a cornerstone of integrity, accountability, and stakeholder trust. Rooted in ethical standards, it ensures transparency in decision-making and alignment with the company's long-term vision. By holding leadership accountable and proactively managing risks, CSAIL strengthens resilience while safeguarding stakeholder interests.

Adhering to stringent governance standards not only ensures compliance but also enhances corporate credibility. CSAIL governance goes beyond compliance, it sets a benchmark for excellence, driven by integrity, foresight, and ethical leadership.





Board of Directors

In 2024, CSAIL's Board of Directors reaffirmed its enduring pledge to cultivate a governance culture rooted in inclusion, strategic foresight, and unwavering accountability. Far beyond abstract ideals, these pillars serve as powerful catalysts for sustained growth and corporate resilience. By championing a leadership model that values diversity of thought and experience, CSAIL ensures decisions are made with both clarity and vision. This inclusive approach not only strengthens internal transparency but also sharpens the company's agility in an ever-shifting global context.

Effective governance lies at the heart of stakeholder confidence, ethical conduct, and regulatory alignment. With a firm commitment to excellence, CSAIL's Board continues to raise the bar, driving the organization toward a future defined by innovation, responsibility, and long-term impact.



Independence

Guided by Integrity, Empowered by Independence

CSAIL recognizes that true governance thrives on independence. The Board is structured to maintain a significant proportion of independent directors—individuals unencumbered by conflicts of interest and steadfast in their duty to uphold objectivity. This framework fosters accountability, transparency, and strategic foresight, ensuring that decision-making remains untainted by personal affiliations and instead serves the collective good of the organization and its stakeholders.

Diversity

Fostering Diversity to Fortify Governance



Diversity is not merely a policy but a guiding philosophy at CSAIL. The Board reflects a convergence of diverse perspectives across age, gender, professional expertise, and cultural backgrounds. This amalgamation of experiences enriches strategic decision-making, enabling the company to navigate global challenges with agility and inclusivity. CSAIL understands that the strength of its governance lies in its ability to incorporate multifaceted viewpoints, thereby fostering innovation and resilience.



Leadership

Leadership Frameworks that Drive Governance Excellence

True leadership transcends authority. It is about inspiring a shared vision, cultivating trust, and fostering a culture of excellence. CSAIL's governance model ensures a clear distinction between the roles of Chairman and CEO, fortifying a system of checks and balances that prevents power consolidation and ensures holistic oversight. Leadership at CSAIL is characterized by strategic foresight, ethical governance, and an unwavering commitment to sustainable business practices.



Board Composition

The Board of Directors upholds the highest standards of governance, objectivity, and oversight, ensuring strategic alignment with CSAIL's long-term vision. A key pillar of CSAIL's corporate governance framework is diversity, reflected in the varied backgrounds, expertise, and perspectives of its Board members. This diversity strengthens decision-making, risk management, and innovation, reinforcing CSAIL's commitment to sustainable and responsible business practices.

Board of Directors



Zhang Kaihong
Chairman



Zhang Xinlin
Board Director



Li Hongcheng
Board of Director



Khalid Rafi
Independent Director



Zhou Qiang
Board Director



Jiang Xiaoming
Board Director

Each Board member brings extensive industry knowledge and leadership experience, directly contributing to CSAIL's strategic objectives. This collective expertise enables the company to effectively navigate complex global markets, address emerging challenges, and capitalize on new opportunities. By fostering strong corporate governance and ethical leadership, CSAIL remains well-positioned for sustained growth and long-term success in an evolving business landscape.



Governance Framework

CSAIL's governance framework is a testament to the principles of stewardship, accountability, and enlightened leadership, ensuring a harmonious interplay between oversight and strategic vision. At its core, the Board of Directors (BOD) functions as the guiding intellect of the organization, orchestrating its trajectory with precision and foresight. This governance edifice is fortified by a constellation of specialized committees, each entrusted with a distinct domain of critical oversight—namely, the Board Financing Committee, Board Audit Committee, Board Strategy Committee, and Board Integrity Compliance Committee. By distributing these pivotal responsibilities among various board members, impartiality is enshrined, and the scrutiny of decisions remains unclouded by unilateral influence.

Ultimately, this governance framework is not merely an administrative construct but a living philosophy—one that anchors CSAIL's commitment to ethical leadership, resilient corporate governance, and the perpetual pursuit of sustainable prosperity.



Board Financing Committee

Ensures financial decisions align with long-term sustainability and corporate social responsibility (CSR) objectives.

Responsibility:

- Reviewing the financing options for the Company's investment projects
- Monitoring and reviewing the procurement of the project loans of the Company (including overseeing the terms and conditions of the financings); and
- Monitoring and reviewing the management of the project loans of the Company



Board Audit Committee

Safeguards financial integrity through rigorous oversight of reporting and compliance mechanisms.

Responsibilities

- Reviewing and recommending board approval for financial statements and audit reports.
- Reviewing the Company's internal control and risk management systems.
- Monitoring and reviewing the effectiveness of the Company's internal audit function.
- Ensuring the Company's compliance with all legal and regulatory requirements and other internal policies of the Company.
- Recommend to the Board that the external auditor be presented to the shareholders for approval at the General Meeting, and approve the remuneration and terms of engagement for the external auditor.
- Monitoring and reviewing the external auditors' independence and objectivity and the effectiveness of the audit process.
- Monitoring and reviewing the related party transactions of the Company.



Board Strategy Committee

Drives long-term business strategies that integrate economic, environmental, and social imperatives.

Responsibilities

- Developing the long-term development strategic plan.
- Managing the overall investment strategy, proposing to the Board on any changes to investment strategy and regulatory monitor the execution of the investment strategy.
- Considering the current investments and target investments in order to advise whether acquisition or disposal of investment is appropriate.



Board Integrity Compliance Committee

Upholds corporate ethics, ensuring strict adherence to regulatory frameworks and ethical standards.

Responsibilities

- Developing the integrity compliance culture and the Company's core values at the entity level.
- Establishing internal policies and procedures to prevent misconducts including the implementation of key controls such as segregation of duties, delegation of authority and performance review.
- Taking active remediation actions to deal with non-compliance and misconduct.



Corporate Governance

Core Values policies & Procedures

Corporate Governance, as envisioned by CSAIL, is not merely a system of structures and processes but a philosophy that harmonizes control with ethical stewardship. It embodies a dynamic interplay between the Company's shareholders, Board of Directors, and executives, fostering a governance ethos that transcends procedural compliance to embrace a higher purpose—the creation of enduring value.



Accountability

Our Corporate Governance Code ensures the Board steers the company with strategic clarity, oversight, and ethical leadership—driving sustainable growth and trust.



Fairness

We uphold equal rights for all shareholders, with special attention to protecting minority interests through inclusive and just governance.



Transparency

We ensure timely and accurate disclosure of financial, operational, and ownership information—empowering stakeholders with clarity and confidence.



Responsibility

We actively engage stakeholders, value their input, and operate within legal and ethical frameworks to build resilient, long-term partnerships.





Corporate Ethics & Integrity Initiatives

In 2024, CSAIL's Board of Directors reaffirmed its unwavering commitment to independence, diversity, and ethical leadership, core values that underpin strong governance and long-term resilience. To reinforce this commitment, CSAIL continues to implement its Integrity Compliance Framework across all subsidiaries. This framework, built on seven key integrity policies, safeguards against misconduct such as bribery, collusion, coercion, embezzlement, unfair competition, and conflicts of interest.



Integrity Compliance Policies Framework Upholding Ethical Standards

CSAIL has established a robust Integrity Compliance Framework to uphold the highest ethical standards and foster a culture of transparency and accountability. The framework comprises key policies and programs designed to ensure ethical conduct across all levels of the organization.





Whistleblowing Mechanism

CSAIL maintains a robust whistleblowing system to promote transparency, accountability, and ethical conduct. Employees, stakeholders, and partners can confidentially report suspected misconduct—anonously or by name. CSAIL enforces a zero-tolerance policy against unethical practices such as bribery, fraud, embezzlement, collusion, and regulatory violations. All reports are treated confidentially, and strict anti-retaliation measures protect whistleblowers—fostering a safe, responsible reporting culture.

By E-mail	whistleblow@ctgsail.com
By Post	Room 3401, 34/F, Cosco Tower, 183 Queen's Road Central, Sheung Wan, Hong Kong
Attention	Chief Compliance Officer

Transparency & Anti-Corruption Policies

CSAIL is firmly committed to maintaining the highest standards of integrity, ethical conduct, and transparency in all business operations. The company upholds a zero-tolerance policy against bribery, corruption, and money laundering, ensuring that all activities are conducted with honesty, accountability, and strict adherence to ethical business practices. To reinforce this commitment, CSAIL has developed a comprehensive Anti-Bribery, Anti-Corruption, and Anti-Money Laundering Policy.

ISO 37001 (Anti-Bribery) & ISO 37301 (Compliance) Certifications

CSAIL earned ISO 37001 and ISO 37301 certifications, underscoring its commitment to ethical conduct, transparency, and global best practices in governance. The prestigious certification ceremony was marked by Mr. Liu Yonggang, ACEO of CSAIL, receiving the certificates from the CEO of DAS, along with a Shield of Honor recognizing CSAIL's outstanding achievement in corporate governance.





Compliance With Legal & Regulatory Requirements

The Legal & Compliance Department of CSAIL operates as a centralized unit, ensuring adherence to all applicable laws, regulations, and company policies concerning legal matters. This includes oversight of contract management, litigation handling, and legal advisory services to support the organization's operations.



Contract Management

- Ensure that contracts are valid under the applicable law
- Check the background of the vendor(s)
- Check the compliance with contract management policy thorough contract review ensuring agreements meet regulatory standards, internal policies, and contractual obligations
- Work closely to verify that contract terms adhere to applicable laws and industry standards
- Other measures as per the circumstances of a particular contract



Litigation Management

- Pursue legal disputes actively and vigorously
- Liaison with the external counsels
- Make a strategy to handle the litigation cases as per circumstances of each case
- Ensure to get in loop the management for critical legal disputes
- Attend the legal cases hearing from time to time
- Other measures as per the circumstances of a particular case

Throughout the reporting year, CSAIL actively managed 06 litigation cases involving KPCL and KHCL, while no legal proceedings were recorded for TGS, TGF, TGT, and the Mahl Projects. During the year 2024 no legal proceedings were reported to the Legal & Compliance Department relating to anti-competitive.

	KPCL	KHCL	MPCL	Wind Farms (TGW, TGS, TGT)
Reported in 2024	2	4	0	0
Closed in 2024	4	0	0	0



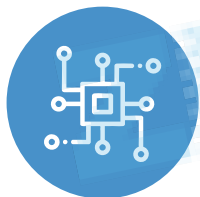
Innovative Research and Development

In 2024, CSAIL continued advancing innovation and sustainability through cutting-edge research, technology integration, and optimized project delivery.



Advancing Technological Frontiers

Focused on next-generation power equipment to reduce failure rates, enhance maintenance, and lower operational risks in extreme environments.



Integrating Cutting-Edge Technologies

Incorporated breakthrough technologies to boost efficiency, accelerate execution, and improve construction quality across power projects.



Innovating Business Models

Adapted to evolving energy markets by developing forward-thinking, sustainable business models that drive long-term growth.

2024 Achievements



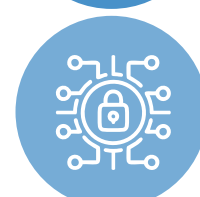
Karot Hydropower Station – Hydraulic Research

- Studied hydrodynamics and energy dissipation in soft rock valleys.
- Improved flow regulation, tailwater management, and slope stability.
- Enhanced safety and streamlined tailrace construction.



IGBT Reliability – Wind Farm Research

- Developed resilience strategies for IGBT modules facing mist, wind, and sand exposure at Three Gorges Wind Farm.



Comprehensive Security System – Pakistan

- Designed an Emergency Command Center with integrated SOPs and safety protocols for camps and residential zones.



Automatic Hydrological Monitoring – Karot

- Deployed Beidou-based real-time monitoring for rainfall and hydrology.
- Enabled accurate flood forecasting, reservoir control, and operational efficiency.



Suppliers Vendor Management

At CSAIL, all suppliers undergo a structured registration process through the CTGI ERP system, ensuring transparency and compliance with corporate procurement standards. The process begins with initiating a supplier request in the ERP, followed by an invitation for the supplier to complete the CTG questionnaire and submit all required documents.

The procurement process follows a well-defined procurement cycle, designed to identify and acquire the most efficient, cost-effective, and high-quality goods and services. This approach not only optimizes operational efficiency but also upholds sustainability and corporate responsibility commitments.

Key Highlights for 2024



Supplier Registration

A total of 277 vendors have been successfully onboarded into the ERP system of the CSAIL, ensuring a streamlined and transparent procurement process



Credit Evaluation

Financial assessments were conducted for 17 awarded contracts to evaluate vendor performance, mitigate financial risks, and enhance future supplier selection strategies



Contract Awards

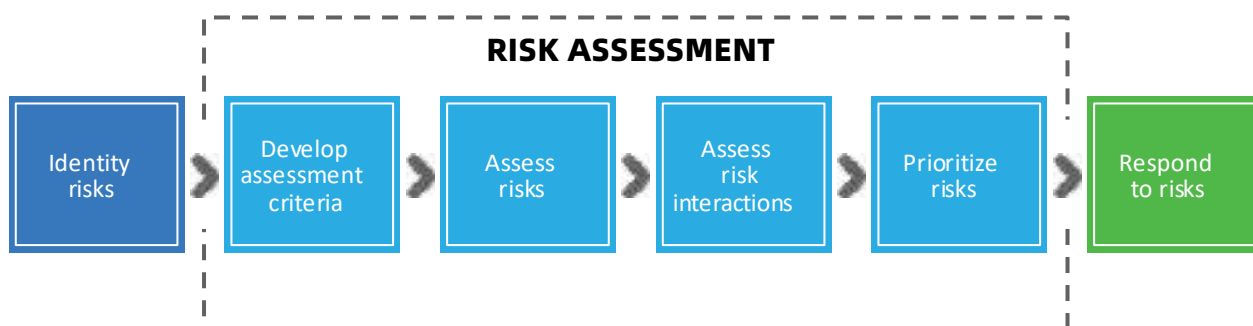
A total of 205 contracts were awarded, including agreements with new vendors and amendments to existing contracts, reinforcing efficient supplier engagement and contract management

Risk Management

Navigating Uncertainty with Foresight and Precision

Risk management is not merely a compliance exercise – it is a strategic discipline woven into the fabric of decision-making. We recognize that risk is an inherent part of innovation and progress. As such, our approach is to understand, anticipate, and manage risk in ways that not only protect value, but also create it.

To fortify our business landscape, CSAIL has developed a resilient and adaptive risk management framework rooted in clarity of roles, proactive defense mechanisms, and continuous improvement. Responsibilities are clearly distributed across operational levels to ensure transparency and accountability, creating a strong line of control that supports both agility and stability.





The “4 Earliness” Philosophy

To stay ahead of potential disruptions, CSAIL applies the “4 Earliness” principle – a proactive methodology for confronting business risks before they materialize:

- Early Identification**
 Vigilantly scanning the internal and external environment for emerging risks.
- Early Warning**
 Raising timely alerts on potential threats to enable quick organizational awareness.
- Early Study & Analysis**
 Investigating risk indicators deeply to understand their nature, triggers, and impacts.
- Prompt Treatment**
 Responding with urgency and precision to contain and mitigate threats before they escalate.

This approach ensures that risk does not compromise our ability to meet strategic and operational objectives, including the successful achievement of annual performance targets.

Integrated Risk Assessment Framework

Guided by the globally recognized COSO Enterprise Risk Management Framework, CSAIL’s risk assessment process is grounded in structured thinking. It begins with event identification – mapping out possible internal and external events that may affect the achievement of objectives – and flows into comprehensive risk response planning.

Responding to Risks

Once risks are assessed in terms of likelihood and impact, CSAIL evaluates its response options through a strategic lens: Based on data submitted by CSAIL’s departments and project companies, the total number of medium- and high-rated risks has decreased from 22 out of 111 in 2024, reflecting a significant improvement in risk mitigation.

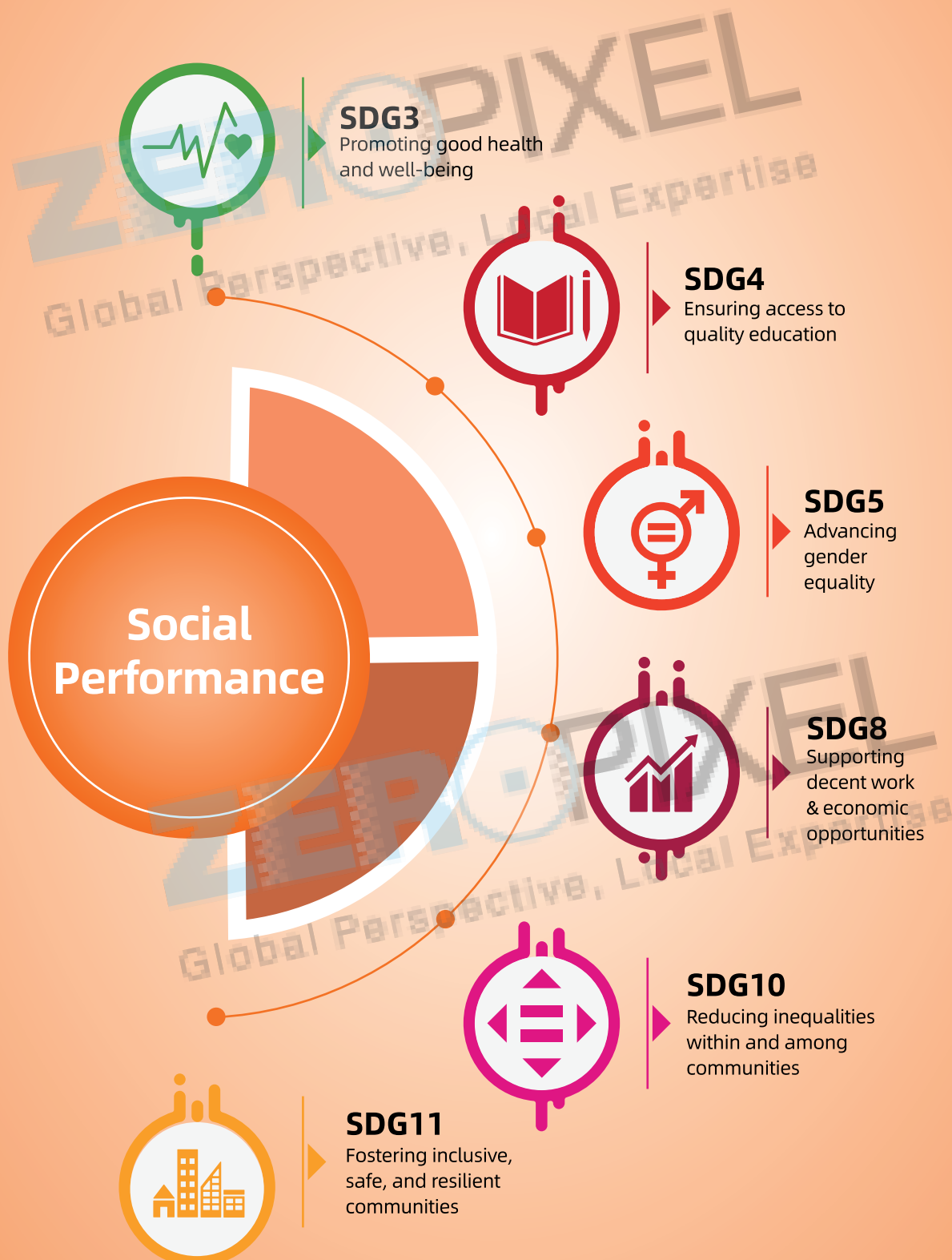
Risk Log	Q4 – 2024						Total in 2024
	Q4-2023	New	High	Medium	Low	Closed/ Transferred	
CSAIL	19	0	1	7	9	0	17
KPCL	16	0	2	9	10	0	21
KHCL	58	0	0	0	58	0	58
TGW	17	1	0	3	12	0	15
Total in 2024	110	1	3	19	89	0	111



Social Performance



Under Social Aspects, Our contribution to the Sustainable Development Goals:





Importance of Social Performance to CSAIL

Building strong communities, empowered teams, and a sustainable future

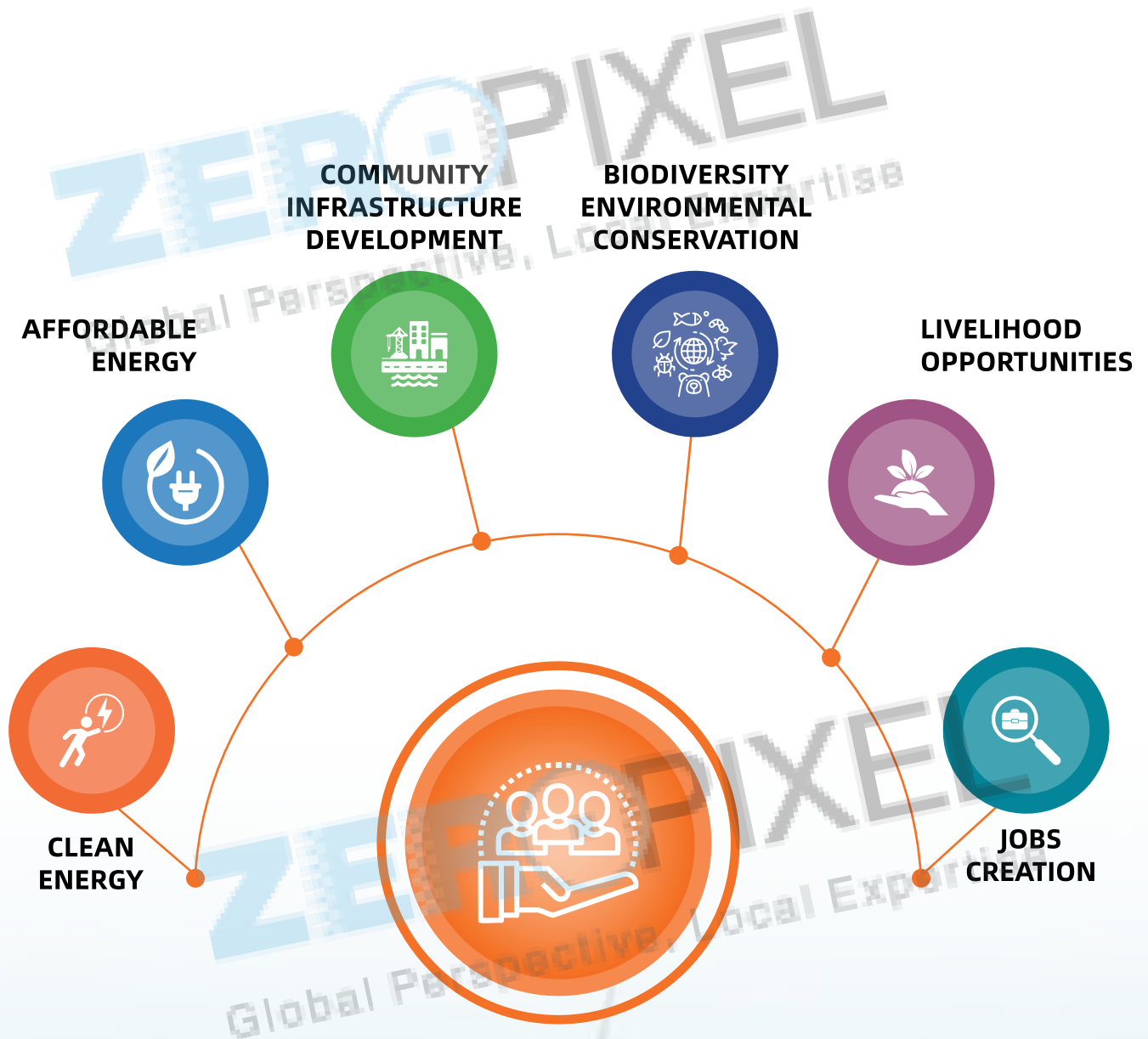
CSAIL believes that social performance is not just an obligation, it's a strategic cornerstone of sustainable growth, ethical leadership, and long-term business success. We prioritize our people. By investing in employee well-being and career development, we foster a motivated, skilled, and resilient workforce. We actively contribute to the well-being of the communities we serve through impactful outreach, educational support, and inclusive development initiatives. These efforts help build mutual trust, shared prosperity, and enduring partnerships grounded in respect and collaboration.

At the heart of our social approach lies a deep respect for diversity and inclusion. We embrace varied perspectives to drive innovation, enable creative problem-solving, and shape a workplace culture where everyone can contribute and grow. This diversity strengthens our ability to adapt and lead in an ever-changing world. By embedding social responsibility into the fabric of our operations, CSAIL reaffirms its dedication to doing business with integrity. We aim to inspire trust, create value for all stakeholders, and contribute meaningfully to a more just, inclusive, and sustainable world.





How Our Energy Projects Bring Dramatic Positive Changes in Society





Stakeholders Engagement

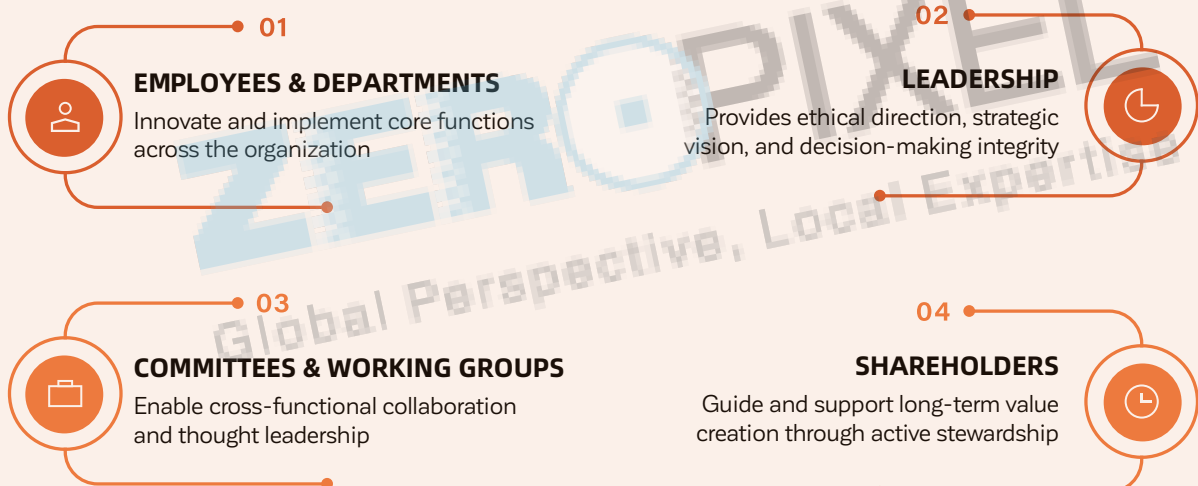
Collaboration is not just a strategy—it's a commitment to shared success

Stakeholders engagement is a foundational element of our sustainability journey. We believe that open, transparent, and inclusive engagement drives trust, creates shared value, and ensures that our actions are informed by those they impact the most.

By fostering participatory dialogue and inclusive decision-making, we ensure our projects reflect a broad spectrum of perspectives. Our Stakeholder Engagement Frameworks, developed in close partnership with relevant stakeholders, are dynamic tools that promote accountability, responsiveness, and long-term impact.

Through continuous collaboration, we build meaningful partnerships that empower communities, strengthen institutional relationships, and drive tangible environmental and social outcomes.

Internal Stakeholders: Driving Purpose from Within



We nurture a culture of inclusivity, transparency, and collective ownership to keep our internal ecosystem agile, aligned, and resilient.



External Stakeholders: Building Partnerships Beyond Boundaries

Our external stakeholders encompass a wide range of actors whose voices shape our impact and legitimacy. These include:

LOCAL COMMUNITIES

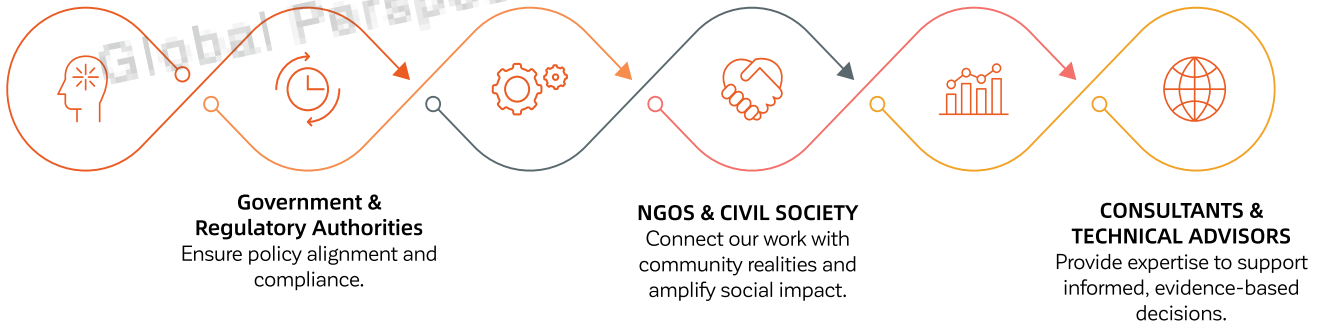
Offer invaluable local insights and co-create grassroots solutions.

SUPPLIERS & BUSINESS PARTNERS

Help implement sustainable & ethical practices across the value chain.

FINANCIAL INSTITUTIONS & LENDERS

Enable long-term vision through strategic capital and partnership.



Best Practices by CSAIL for Stakeholders Engagement





Employment at CSAIL: A Foundation of Integrity and Inclusion

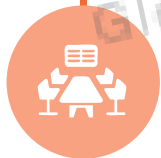
CSAIL is committed to creating meaningful employment opportunities through a comprehensive Human Resources (HR) framework that upholds fairness, transparency, and compliance with Pakistan's labor laws. Our policies are rooted in global best practices, ensuring a work culture that values diversity, merit, and professional development.

Key Highlights of CSAIL's Employment Framework



Fair & Transparent Recruitment

All hiring—whether for permanent, contractual, or outsourced roles—is based strictly on merit, ensuring equal access and non-discrimination across the board.



Inclusive and Supportive Work Environment

We actively foster a workplace where all individuals feel respected, empowered, and supported in their career journeys.



Permanent Employees

Offered long-term contracts, competitive compensation & a comprehensive benefits package as detailed in our HR Manual—supporting stability and career progression.



Contractual Employees

Hired for defined, time-bound roles with clearly articulated terms and equal access to professional development opportunities.



Third-Party Staff

Even for outsourced support staff, CSAIL enforces ethical labor standards, ensuring fair treatment, legal compliance, and responsible hiring practices through our vendors.

Our HR Philosophy

Human capital is our greatest strength. By embedding ethical employment practices and growth-oriented policies into our operations, we nurture a high-performing, loyal workforce that drives our mission forward—sustainably and ethically.



CSAIL's Commitment to Equity, Inclusion & Anti-Discrimination

At the heart of CSAIL's corporate philosophy lies an unwavering commitment to fostering an environment of inclusivity, fairness, and equity. Our policies are not merely regulatory guidelines but foundational principles that shape the ethos of our organization. The company acknowledges that true progress stems from diversity, mutual respect, and the equitable treatment of all individuals, irrespective of gender, nationality, ethnicity, or social background.

Core Principles of CSAIL's Equity and Inclusion Policy

All hiring—whether for permanent, contractual, or outsourced roles—is based strictly on merit, ensuring equal access and non-discrimination across the board.

Equal Employment Opportunity

CSAIL upholds the fundamental right to fair employment by ensuring a non-discriminatory hiring process. Recruitment decisions are based solely on merit, competence, and professional aptitude, devoid of biases related to gender, race, or cultural background. The company actively dismantles barriers that may impede equitable access to employment opportunities.

Inclusive Work Environment

A workplace thrives when it is free from discrimination, prejudice, & harassment. CSAIL expects every employee to uphold ethical conduct that nurtures a culture of respect, collaboration & psychological safety. The company actively promotes dialogues on inclusivity to reinforce these values in daily operations.

Strategic Actions to Foster Inclusion, Eliminate Gender Bias, and Uphold Equal Opportunities



Cultivating an Inclusive Culture



Ensuring Fair and Transparent Recruitment & Remuneration



Proactive Measures Against Discrimination, Unequal Treatment & Harassment



Monitoring, Accountability & Continuous Improvement

For three consecutive years (2022–2024), there have been zero reported cases of discrimination, reflecting a continued commitment to an inclusive and respectful environment.



Commitment to Employee Engagement and Well-being

Recognizing that employee well-being and engagement are fundamental to organizational success, CSAIL has implemented a comprehensive annual plan designed to foster a positive and thriving work environment. This initiative encompasses a range of activities and policies aimed at enhancing job satisfaction, work-life balance, and overall employee welfare.

Holistic Employee Benefits and Support Framework

1

Paid Leave Entitlements

CSAIL offers annual, sick, casual, and religious obligation leave, including a one-time paid Hajj leave for Muslim employees, supporting work-life balance and inclusivity.

2

Leave Fare Assistance

Financial support is provided for travel during leave, promoting personal rejuvenation and family bonding.

3

Ethical Disciplinary and Dismissal Procedures

A fair and transparent disciplinary framework ensures due process, aligned with legal and ethical standards.

4

Comprehensive Health and Life Insurance Coverage

Employees are entitled to both health and life insurance coverage, and their spouses, children, and parents also receive extensive health insurance benefits.

5

Exclusive Benefits for Female Employees

Includes maternity and Iddat leave, reflecting cultural sensitivity and legal compliance.

6

Retirement and Post-Service Benefits

Structured retirement at age 60 with defined benefits ensures financial security post-employment.

7

Allowances for Employee Support

Travel and site allowances help ease work-related financial burdens.

8

Premium Accommodation and Nutritional Well-being

High-standard accommodations and diverse food options cater to a multicultural workforce.

9

Provision of Drinking Water, Canteens & Access to Medical Facilities

Clean water, hygienic canteens, and accessible medical facilities are provided at all offices.

10

Recreational Activities for Employee Well-being

Regular team-building and wellness activities promote mental health and inclusivity.

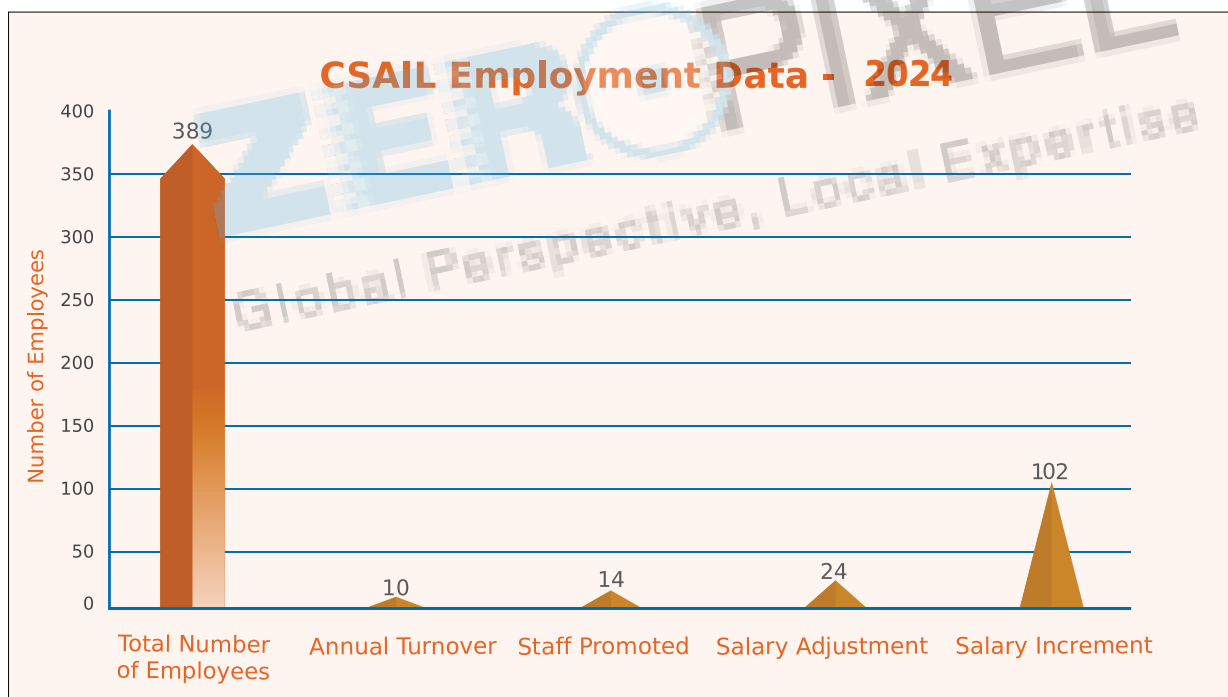
11

Health Care and Emergency Treatment Facilities

Each site includes a medical center, in-house nurse, and ambulance service for emergencies.



CSAIL's holistic approach to employee engagement and well-being is deeply anchored in the principles of fairness, inclusivity, and long-term sustainability. By consistently refining its policies to align with global best practices, the company is dedicated to cultivating an environment where employees are not only valued and supported but also inspired to thrive and contribute meaningfully to the organization's success.





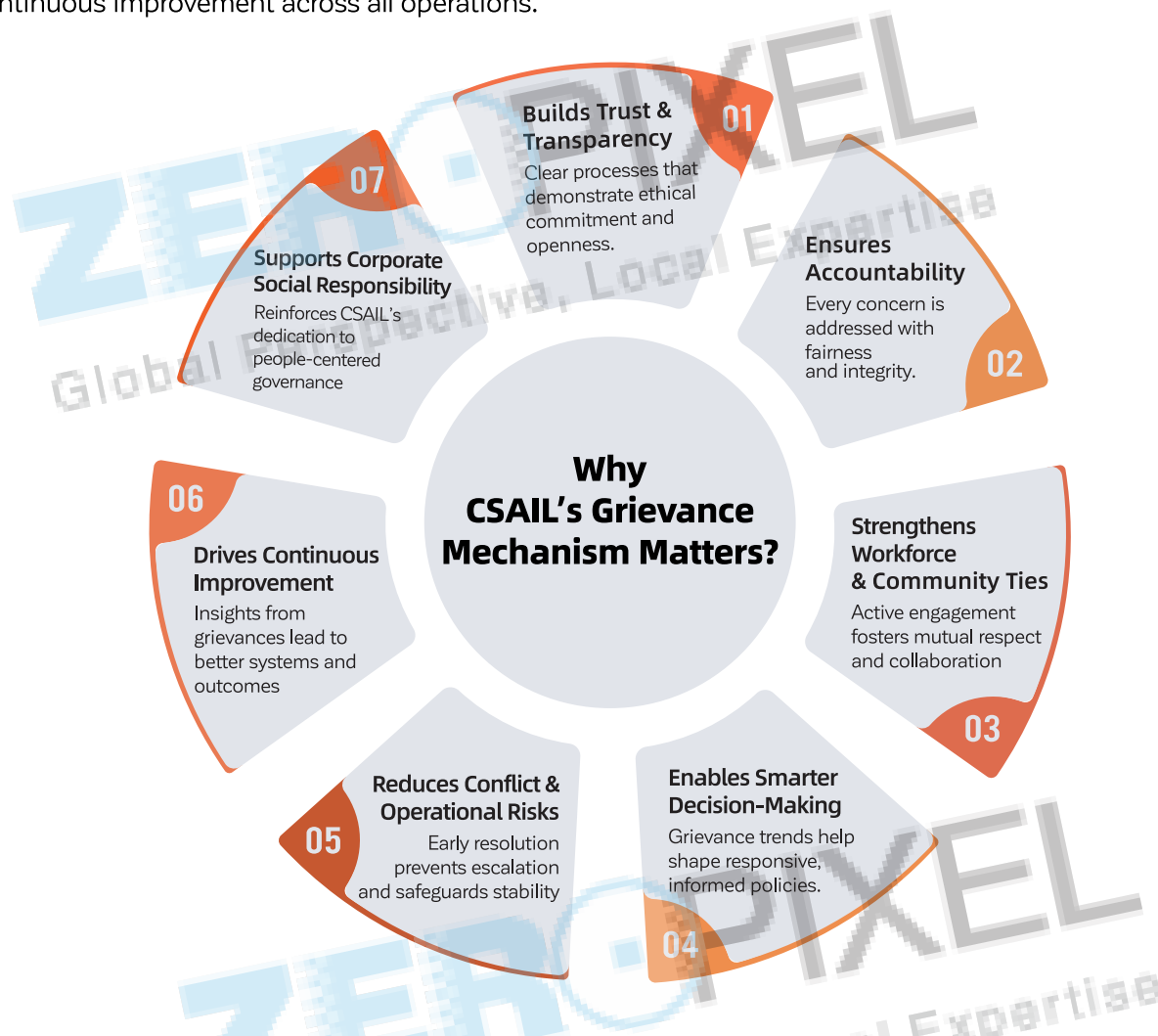




CSAIL's Grievances Mechanism

Empowering workers, building trust, and driving sustainable organization

A responsive grievance system is not just good practice it is also a vital part of responsible business. CSAIL's structured, transparent, and timely approach ensures fairness, enhances dialogue, and supports continuous improvement across all operations.





Workers Grievance Mechanism (WGM)

CSAIL's worker grievance system was actively utilized throughout 2024, ensuring swift and fair resolution of concerns. A comprehensive review of grievances received and addressed underscores the effectiveness of our redressal framework.



Grievances Recorded

A significant number of worker grievances were logged, reflecting CSAIL's open-door policy and employees' trust in the system.



Primary Concerns

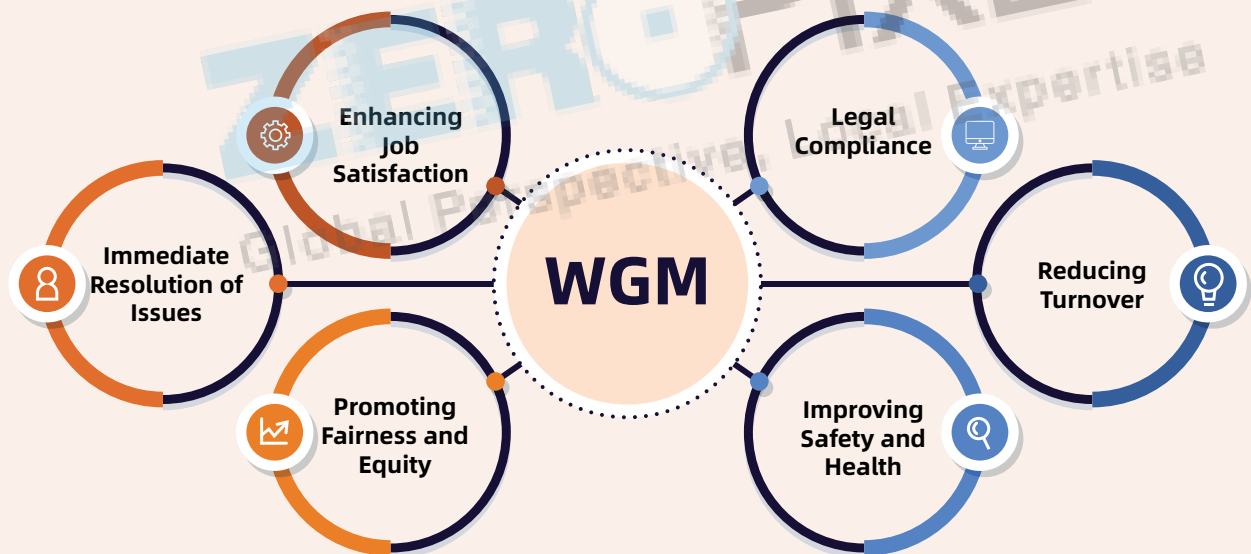
Approximately 50% of grievances were related to accommodation facilities, highlighting a key area of focus for continuous improvement.



Resolution

Through proactive grievance handling and a responsive mechanism, 100% of recorded grievances were addressed, reinforcing CSAIL's commitment to employee welfare.

Objectives of WGM

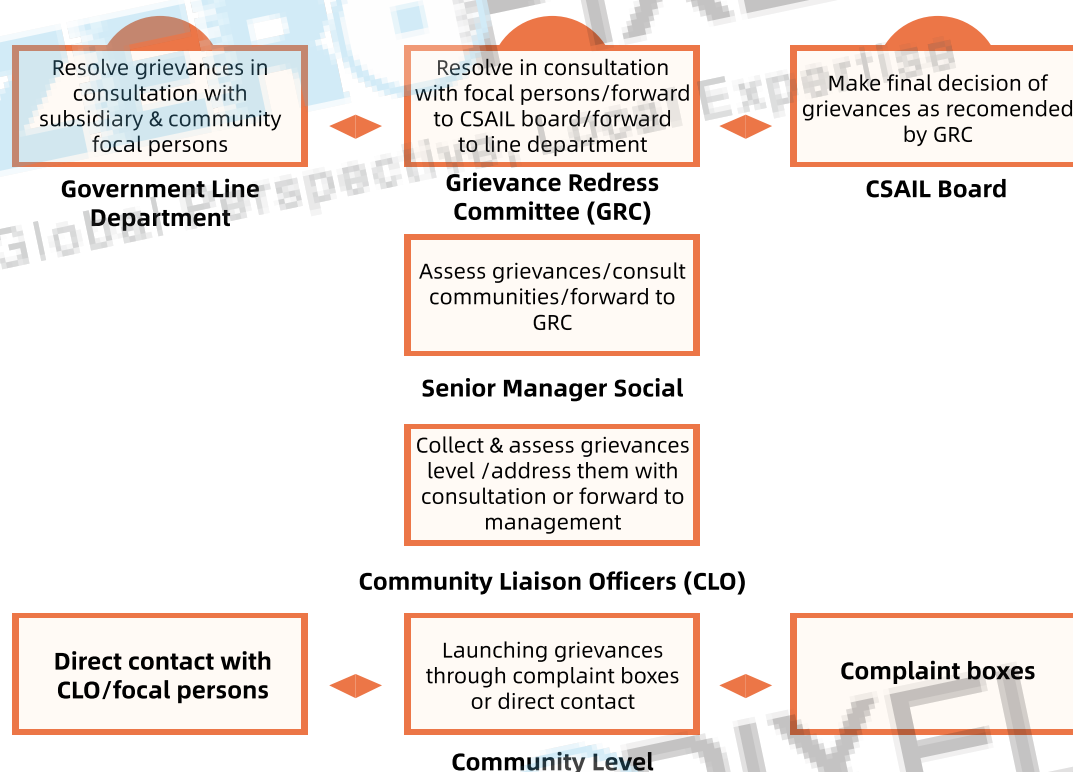




Community Grievance Mechanism (CGM)

A robust & effective Community Grievance Mechanism (CGM) is a cornerstone of CSAIL's commitment to responsible & ethical business practices. Recognizing the fundamental role of stakeholder engagement, CSAIL ensures that community concerns within its operational areas are addressed with fairness, transparency, & efficiency. By fostering open communication & swift resolution of grievances, the company strengthens its relationship with communities, enhances decision-making, & improves overall operational effectiveness.

Working of CGM



Objectives of CGM





Complaint Box System

Installed in each village and key locations.
Collected bi-monthly by the Community Liaison Officer (CLO) and Community Focal Person (CFP).

Community Focal Persons

Nominated by villagers.
Act as a bridge: collect complaints and update communities on progress.

Community Liaison Officers (CLOs)

Collect, assess, and escalate grievances.
Direct engagement with affected persons.

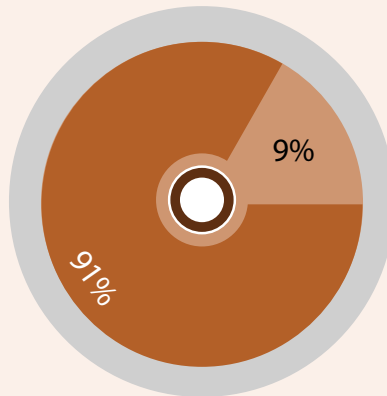
Monthly Community Meetings

Updates on grievance resolution.
Open platform for new issues.
Referral of unresolved matters to GRC.

Grievance Redress Committees (GRC)

Include CFPs, government reps, and CSAIL management.
Monthly meetings to resolve escalated issues.
12 GRC meetings held in 2024 under CRMP.

Status of Community Grievance 2024



■ Unresolved ■ Resolved

CSAIL's CSR Initiatives-2024

Building Futures Beyond Energy: CSAIL's CSR Commitment in Action

At the heart of CSAIL's operations lies a deep-rooted commitment to Corporate Social Responsibility (CSR), forming a core pillar of its Environmental, Social, and Governance agenda. Since the inception of its projects, CSAIL has played a transformative role in uplifting the socio-economic conditions of local communities through strategic investments in healthcare, education, livelihoods, and social infrastructure.

Reinforcing this commitment in 2024, CSAIL expanded its social outreach by:

Offering internship opportunities to students from local educational institutions across its project areas

Donating books to institutions to strengthen learning resources

Launching book reading initiatives to cultivate a culture of reading among youth

Organizing a series of environmental, social, and cultural events, promoting awareness, inclusion, and community engagement.

These initiatives reflect CSAIL's unwavering dedication to fulfilling its social, economic, and ethical responsibilities, fostering inclusive development and shared prosperity in the regions where it operates.





CSAIL's Commitment to Health and Safety

Core Policies

Five comprehensive policies guide CSAIL's approach to health, safety, environment, and social performance across all operations.

ESMPs

14 Environmental & Social Management Plans address operational impacts, combining strategic direction with actionable protocols for responsible project execution.



SOPs

22 Standard Operating Procedures ensure safe, consistent, and compliant execution of critical tasks company-wide.

Holistic Approach to Health & Safety Management at CSAIL

CSAIL embraces health and safety more than obligation that reflects our core values and ethical duty to protect our people, partners, and the communities we serve. Our Zero accident commitment drives a safety-first mindset across every project, every site, every day.

Our health and safety framework is risk-driven, adaptive, and grounded in global standards. It weaves together regulatory compliance, industry-leading practices, and continuous improvement to ensure excellence. Through a culture of ownership, active engagement, and early risk intervention, we uphold the highest levels of occupational safety—making it not just policy, but a way of life.

Legal Framework for Health and Safety

CSAIL and its subsidiaries ensure full compliance with host country regulations and international best practices. We strictly adhere to labor laws, occupational health and safety standards, and environmental safeguards, reinforcing our commitment to responsible business conduct.



Industry Best Practices

Beyond legal compliance, CSAIL integrates globally recognized safety standards to elevate our safety culture and operational excellence:

Quality, Environmental, Occupational Health and Safety Management Manual

(QG/CTG 01.03–2012)

International Finance Corporation (IFC) Performance Standards

IFC Environmental, Health, and Safety (EHS) Guidelines

ISO 45001 - The international benchmark for occupational health & safety management.

Comprehensive Health and Safety Management Framework

Beyond legal compliance, CSAIL integrates globally recognized safety standards to elevate our safety culture and operational excellence:

Development of Safety Plans

Each project and operational area is governed by detailed, site-specific safety plans that outline:

- Hazard identification and risk control strategies.
- Emergency response protocols
- Worker safety training and personal protective measures.

Implementation of Safety Controls

Based on rigorous risk assessments, CSAIL enforces multi-tiered safety controls:

- Engineering Controls - Designing safer work environments through technological and structural interventions.
- Administrative Controls - Establishing policies, procedures, and behavioral guidelines to enhance safety.

Employee Engagement and Communication

We believe that a strong safety culture is built through active participation. CSAIL fosters open communication channels where employees can:

- Report hazards & near misses without fear of reprisal.
- Provide feedback on safety policies & procedures.
- Participate in safety committees and peer-to-peer safety programs.

Documentation and Record-Keeping

A structured documentation system ensures that every aspect of safety management is tracked, reviewed, and optimized:

- Risk assessments and hazard logs
- Training records and competency evaluations
- Incident reports and investigation findings
- Audit results and compliance checklists

Continuous Improvement

CSAIL is committed to an evolving safety strategy, driven by:

- Regular safety audits and inspections to identify gaps and areas for improvement.
- Lessons learned from incidents and near misses, feeding into policy refinements.
- Adapting to new safety regulations, technological advancements, and industry trends.

Collaboration with Stakeholders

Ensuring workplace safety requires collective responsibility. CSAIL actively collaborates with:

- Local authorities to align with national regulations.
- Safety organizations and industry groups to adopt best practices.
- Contractors, subcontractors, and suppliers to enforce unified safety standards.



Our Commitment: Zero Accident Philosophy

CSAIL's approach to health and safety is rooted in a Zero Accident Philosophy, which ensures that:

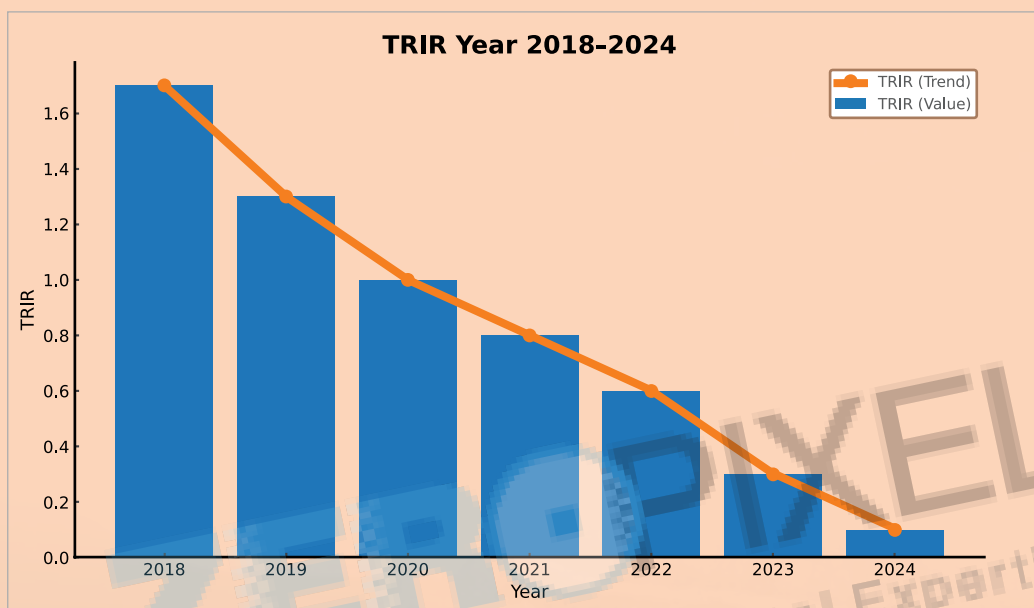
Every employee and contractor returns home safely every day.

Our operations cause no preventable harm to people, property, or the environment.

We foster a safety-first culture, where responsibility and accountability are shared at all levels.

Outcomes of Promoting Safety Culture

Our commitment to safety excellence is reflected in our consistent performance improvements over the years. The Total Recordable Incident Rate (TRIR) has significantly declined, reaching 0.1 in 2024, a substantial improvement from 1.6 in 2018. This remarkable reduction underscores CSAIL's unwavering focus on risk mitigation, proactive safety measures, and operational excellence.



HSE Trainings & Safety Sessions Conducted

900+

Employees Workers Trained on HSE

6500+

Accident During 2024

Zero

Fatalities During 2024

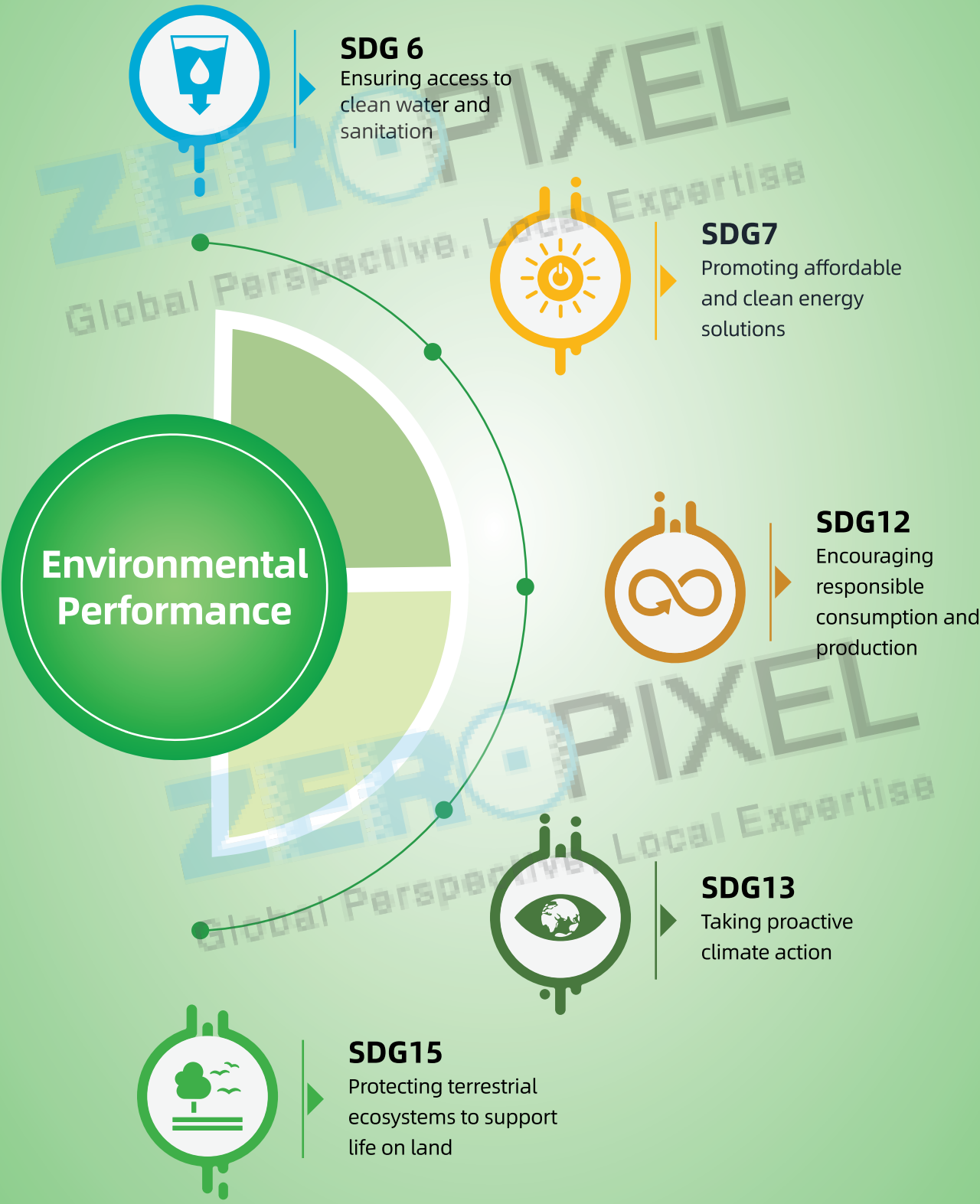
Zero



Environmental Performance



Under environmental aspect, We contribute to the sustainable development goals by:





Empowering a Greener Future: CSAIL's Clean Energy Contribution in 2024

In 2024, CSAIL made a significant impact in advancing clean energy and environmental protection through its diverse renewable energy portfolio. The flagship Karot Hydropower Project alone generated an impressive 2,965.25 GWh, providing a reliable and sustainable energy source while reducing dependence on fossil fuels. Complementing this, CSAIL's three wind power projects TGF, TGS, and TGT, collectively contributed 241.36 GWh of clean electricity to the national grid. Together, these projects produced a total of 3,206.61 GWh of green energy in 2024, significantly reducing carbon emissions and promoting climate resilience. This remarkable achievement reflects CSAIL's unwavering commitment to environmental stewardship and its vital role in supporting Pakistan's transition toward a more sustainable and low-carbon energy future. In 2024, CSAIL's renewable energy projects in Pakistan played a vital role in driving the country's low-carbon transition, collectively reducing over 1.26 million tons of CO₂ emissions.

Project	Type	Annual Generation (GWh)	Annual CO ₂ Reduction in Tons
Karot	Hydropower	2965.25	1168901
TGF	Wind	85.35	33,645
TGS	Wind	76.56	30,180
TGT	Wind	79.45	31,319
Total		3206.61	1264045

Greenhouse Gas Emissions Overview

In the reporting period, CSAIL recorded total GHG emissions of 2,641.91 tCO₂e, with Scope 1 emissions accounting for 1,036.72 tCO₂e and Scope 2 (market-based) emissions totaling 1,605.19 tCO₂e across power plants located in Pakistan. Within Scope 1, the largest contributor was fugitive emissions, followed by mobile combustion and stationary combustion, with no reported emissions from industrial gases. Scope 2 emissions were entirely attributable to imported electricity. The overall GHG emissions intensity stood at 0.390 tCO₂e/GWh, with Scope 1 and Scope 2 intensities reported at 0.153 and 0.237 tCO₂e/GWh, respectively. These figures reflect CSAIL's continued efforts to monitor and manage its carbon footprint across both direct operations and energy procurement.

Emissions			Total tCO ₂ eq
1	Scope 1: Direct GHG emissions and removals in tCO ₂ e		1036.720
	Scope 1: Direct GHG emissions intensity (tCO ₂ e/GWh)		0.153
	1.1	Direct emissions from stationary combustion	82.155
	1.2	Direct emissions from mobile combustion	381.523
	1.3	Direct fugitive emissions	573.042
	1.4	Direct emissions from use of other industrial gases	0.000
2	Scope 2: Indirect emissions in tCO ₂ e (market based)		1605.193
	Scope 2: Indirect GHG emissions intensity (tCO ₂ e/GWh)(market based)		0.237
	2.1	Location based indirect emissions from imported electricity	1605.193
	2.2	Market based indirect emissions from imported electricity	1605.193
	2.3	Indirect emissions from imported heat	0.000
Total			2641.913
Total GHG emissions intensity (tCO₂e/GWh)			0.390



Optimizing Resource Efficiency for Sustainable Operations

Energy Consumption & Conservation

CSAIL is committed to enhancing energy efficiency and reducing its carbon footprint through cutting-edge conservation measures:



Implementation of energy-efficient technologies such as auto power systems and LED lighting across facilities.



Advanced monitoring and control systems to track and manage real-time energy consumption, including both stationary and mobile fossil fuel usage.



Employee training and awareness programs to promote energy-saving behaviors and sustainable practices.

By integrating these initiatives, CSAIL has significantly reduced energy consumption, reinforcing its commitment to sustainability and environmental responsibility.

Water Consumption & Conservation

Water conservation remains a key focus at CSAIL, with strategies designed to optimize usage and minimize waste:



Minimizing water use for dust suppression by maintaining road conditions and conducting monthly monitoring to detect abnormal consumption patterns.



Enhancing efficiency in cleaning processes by reducing unnecessary washing cycles and adopting spraying techniques.



Diverse water sources include surface water, municipal supply & outsourced drinking water, with consumption varying based on plant design and regulatory requirements.

While operational constraints may limit reductions in water usage, CSAIL remains committed to continuous optimization across its projects.



Hydropower & Water Resource Management

Given the large volumes of water involved in hydropower operations, CSAIL ensures responsible water basin and flow management:



Alignment with environmental flow requirements as per the approved Environmental & Social Impact Assessment (ESIA).



Balancing water availability to maintain ecological integrity while preventing reservoir overfilling.



Ensuring compliance with environmental regulations, despite not having direct operational control over hydropower projects.

Through proactive monitoring and sustainable practices, CSAIL continues to advance responsible water stewardship, safeguarding both natural resources and operational sustainability.

Comprehensive Waste Management for Environmental Responsibility

In 2024, CSAIL reinforced its commitment to responsible waste management, ensuring the safe handling, treatment, and disposal of liquid, solid, and hazardous waste across all operations.



Liquid Waste Management

CSAIL integrated advanced treatment technologies to ensure that all effluents were effectively treated before disposal, adhering to strict environmental regulations to minimize ecological impact.



Solid & Hazardous Waste Management

CSAIL's power plants implemented stringent safety protocols for the handling, storage, and disposal of hazardous waste, preventing contamination and ensuring full regulatory compliance. By prioritizing waste minimization and responsible disposal, CSAIL reaffirmed its dedication to sustainability and environmental stewardship.



Proactive Spill Prevention Measures

To protect both environmental integrity and operational efficiency, CSAIL adopted comprehensive spill prevention strategies, including:



Robust hazardous material storage protocols with secondary containment systems to prevent leaks and spills.



Regular employee training programs on spill prevention, emergency response, and containment measures.



Strict monitoring procedures to ensure quick detection and mitigation of potential risks.

Through these proactive measures, CSAIL strengthened its resilience against environmental hazards, ensuring safe and sustainable operations.

Air Quality Monitoring & Compliance

CSAIL prioritizes air quality monitoring as a critical element of its environmental management strategy, ensuring that operational activities do not compromise local air quality.



Third-party air quality monitoring services were engaged to ensure independent and accurate assessments.



Continuous data analysis was conducted to track air quality trends & identify potential risks before they could impact surrounding communities.



Strict adherence to regulatory standards was maintained, reinforcing CSAIL's commitment to environmental responsibility and compliance.



Biodiversity Management Plan Where Conservation Meets Clean Energy

Biodiversity Management is not an afterthought—it is a fundamental pillar of our environmental and social due diligence. Recognizing the intricate balance between development and conservation, we integrate biodiversity assessments into project planning to mitigate negative impacts. Where avoidance is not feasible, our Biodiversity Management Plan (BMP) ensures compensation measures that strive for no net loss for endangered species.

CSAIL has undertaken the largest Biodiversity Management Plan under the Karot Hydropower Project, extending its impact far beyond the project's direct footprint.

Launched in 2021 & achieving remarkable momentum in 2024, the BMP's core mission is the preservation of the endangered Mahseer fish in the Jehlum River by achieving, "No Net Loss". This initiative, backed by a government-approved strategy, is executed in collaboration with the International Union for Conservation of Nature (IUCN), a globally renowned authority in conservation.

The Karot BMP has implemented various protection measures to achieve "No net Loss" aimed at controlling illegal activities that threaten local biodiversity. These measures focus on tackling illegal fishing, forest cutting, wildlife hunting, and sand & gravel mining. Through an effective watch & ward approach, combination of enforcement actions, community engagement, and monitoring efforts, the BMP has made significant progress in addressing these challenges.





Overview of Achievements Associated with each Protection Measure

Sr. #	Activity Name	2021	2022	2023	2024
1	Number of watch & ward visits conducted to all nallahs	110	5840	1850	5400
2	Kobo forms filled by watch & ward teams	104	1748	2768	2359
3	Number of watch & ward conducted to Kahuta nallah	22	1095	23	720
4	Number of fish catch & release during flow fluctuations	0	6420	2650	3629
5	Number of illegal fishing activities stopped	88	138	22	66
6	Number of illegal sand & gravel mining activities stopped	27	30	23	58
7	Number of fishing gears ceased	51	148	38	25
8	Total amount of fine imposed on illegal fishermen	--	14,500	91,000	29,000
9	Number of illegal forest cutting activities stopped	--	01	110	110
10	Number of times participated in fire control	01	11	110	110
11	Number of wildlife hunting gears ceased	--	01	--	--
12	Number of illegal wildlife hunting activities stopped	02	05	02	05
13	Total amount of fine imposed on illegal wildlife hunters (Pak Rupees)	--	10,000	10,000	30,000
14	Control illegal grazing in kahuta nallah	--	--	17	55

The 2024 Biodiversity Management Plan achievements reflect CSAIL's commitment to protecting ecosystems, raising awareness, and promoting sustainable natural resource use. Through collaborative stakeholder engagement, community involvement, and strategic conservation measures, the project continues to drive impactful and lasting environmental change.





CSAIL's Future Roadmap: A Vision for Sustainable Excellence

CSAIL envisions a future where sustainability and responsible practices are seamlessly woven into its Environmental, Social, and Governance strategy. The roadmap ahead is defined by bold commitments, innovative solutions, and a steadfast dedication to long-term impact.

Environmental Stewardship

CSAIL is set to deepen its environmental commitment by integrating cutting-edge technologies and expanding the use of renewable energy across operations. Key priorities include:

- Accelerating Carbon Reduction – Setting ambitious targets to lower greenhouse gas emissions and enhance energy efficiency.
- Innovative Waste Management – Implementing circular economy principles to minimize waste and optimize resource use.
- Climate Resilience Strategies – Strengthening adaptive measures to mitigate environmental risks while ensuring sustainable operations.

Social Responsibility

CSAIL believes that sustainability extends beyond the environment—it thrives in empowered communities and a resilient workforce. Future initiatives include:

- Fostering Inclusion & Diversity – Strengthening policies that promote equity, representation, and employee well-being.
- Community-Centric Development – Expanding local outreach programs in education, health, and livelihood support.
- Workforce Empowerment – Enhancing training programs, ensuring workplace safety, and investing in career development.

Governance & Ethical Leadership

CSAIL is dedicated to upholding the highest standards of corporate governance, ensuring transparency, accountability, and trust. Key actions include:

- Strengthening Oversight & Risk Management – Enhancing governance frameworks to align with global best practices.
- Upholding Ethical Business Practices – Embedding integrity and compliance at every level of operation.
- Enhancing Board Diversity & Leadership – Driving decision-making excellence through diverse perspectives and expertise.