Green Island Cement

WORKING TOGETHER TO BUILD A GREEN ISLAND

2021-2022 SUSTAINABILITY REPORT

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MESSAGE FROM CEO

The past two years have brought both challenges and opportunities, shaping our journey and driving innovation across our business. The construction industry has faced significant disruptions due to global megatrends, including climate change, geopolitical tensions and the ongoing impacts of the pandemic. These shifts have tested our supply chains, emphasised the need for resilient facilities and underscored the importance of business continuity. At the same time, they have highlighted the need for greater focus on personal and community well-being, pushing us to adapt and evolve.

Amid these challenges, we have reaffirmed our commitment to sustainability, recognising that the production of cementitious materials has a considerable impact on the sustainability of the entire supply chain. To address these challenges in a systematic way, we established a Sustainability Committee to evaluate risks, identify opportunities and track our performance. This year, we conducted a climate scenario analysis and, for the first time, reported on climate risks and opportunities, paving the way for a more transparent and resilient sustainability approach.

In response to climate concerns, we have intensified our efforts to reduce emissions, improve material efficiency and lower our carbon footprint. By implementing innovative technologies such as low-NOx burners, we have reduced NOx emissions by 25%. Scope 1 and Scope 2 emissions intensities have decreased by 11% and 16% respectively. Additionally, we are addressing urban waste by converting plastic waste into fuel, further reducing our reliance on fossil fuels. Today, 20% of our energy comes from waste heat generation systems.

Resource circularity remains a cornerstone of our environmental efforts, and we are committed to turning waste into valuable resources. By repurposing materials such as oyster shells and waste sand, we minimise our reliance on natural resources. Currently, 26% of our raw materials are sourced from eco-friendly alternatives, and clinker accounts for 81.5% of our products, underscoring our commitment to responsible material use and sustainable practices.

Our commitment to sustainability has been recognised with notable awards, including the Gold Award in the Green Management Award (Corporate) category at the Hong Kong Green Awards and a Silver Award at the BOCHK Corporate Environmental Leadership Awards 2021 in the Manufacturing Sector.

We place the safety and well-being of our people at the forefront of everything we do. Our employee well-being initiatives support both physical and mental health, including the 24/7 Employee Assistance Programme for employees and their families, the reopening of the Caring Recreation Centre and various well-being activities throughout the year. We also continuously enhance our internal tools, such as the GIC App, to ensure effective and accessible support. We are proud to report that our turnover rate remains in the single digits, significantly lower than the industry average.

In recognition of our commitment to employee well-being, we have earned several accolades, including the Good MPF Employer Award 2021-22 in multiple categories: Best All-round MPF Employer Award, Good MPF Employer 5 Years+, e-Contribution Award and MPF Support Award. We were also awarded the Joyful @ Healthy Workplace Best Practices Award (Excellence Award) in the Enterprise/ Organisation Category.

"Safety is everybody's responsibility" is at the heart of our operations. To embed this into our culture, we launched the Group Safety Incentive Scheme in 2021. By assessing risks, staying aware of hazards and promoting open communication, we strive to create a workplace where everyone actively contributes to safety. To address the increasing risks of heat-related illnesses, we've implemented heatstroke drills and daily safety assessments, and installed additional shelters and portable water stations at our Tap Shek Kok Plant, ensuring a safe and healthy environment for our workforce. Our commitment to safety has been recognised with the Safety Performance Award (Outstanding Award) at the 20th Hong Kong Occupational Safety and Health Award.

Looking ahead, we remain committed to advancing sustainable practices, fostering innovation and strengthening partnerships to create lasting value for our stakeholders and a better future for all. I extend my heartfelt thanks to our employees, partners and stakeholders for your trust and collaboration as we continue on this journey together.

Eddy Tsang
Chief Executive Officer

MESSAGE FROM THE CEO

PERFORMANCE HIGHLIGHTS

Sustainability Performance

Governance for Good

1 Established Sustainability Committee

2 Published our first **TCFD-aligned** disclosures

Greener Future

Emission Reduction

1 NOx intensity (tonnes per thousand HKD turnover)
0.00063 (-25%)

2 Scope 1 intensity (tonnes CO_2e per thousand HKD turnover)
1.24 (-11%)

3 Scope 2 intensity (tonnes CO_2e per thousand HKD turnover)
0.07 (-16%)

Energy use Reduction

1 Raw materials from eco-friendly sources
26.0%

2 Fuel energy from waste-derived alternative fuel
0.6%

Material Efficiency

1 Clinker in all products
81.5%

2 Non-OPC cementitious products
4.5%

3 Power from waste heat generation system
20.0%

4 Water from recycled system
45%

5 Packaging materials intensity for the finished product (tonnes per thousand HKD turnover)
0.001125 (-15%)

Fostering Well-being

1 Turnover rate
7.0%

2 Training hours per employee
20

3 Employees covered by ISO 45001 **100%**

4 Fatalities **0**

MESSAGE FROM THE CEO

AWARDS AND RECOGNITION

GOLD Award,
Green Management Award *(Corporate)*,
Hong Kong Green Awards 2021 & 2022

Sustained Performance Awardee
for 12 years+,
Hong Kong Green Awards 2022

Four Awards at the Good MPF Employer Award 2021-22

- Best All-round MPF Employer Award
- Good MPF Employer 5 Years+
- e-Contribution Award
- MPF Support Award

SILVER Award
BOCHK Corporate Environmental Leadership Awards 2021
(Manufacturing Sector)

BRONZE Award
BOCHK Corporate Environmental Leadership Awards 2022
(Manufacturing Sector)

Certificate of Merit, Hong Kong Awards for Environmental Excellence 2022

BRONZE Award, Hong Kong Awards for Environmental Excellence 2021

ABOUT GREEN ISLAND CEMENT

OUR BUSINESS

Green Island Cement (GIC), established in 1886 on Ilha Verde (Green Island) in Macau and incorporated in Hong Kong in 1887, is a leading local manufacturer and distributor of cement and cementitious products. The holding company, Green Island Cement (Holdings) Limited (GICH), is a wholly owned subsidiary of CK Infrastructure Holdings Limited (CKI).

In addition to our operations in Hong Kong under Green Island Cement Company Limited (GICL), Green Island Cement operates two cement plant companies in South China: Guangdong GITIC Green Island Cement Company Limited (GGGIC), established in 1998, and Green Island Cement (Yunfu) Company Limited (GICYF), established in 2013. Our expansion into Mainland China solidified our position as a major cement group. The acquisition of Yunfu Xiangli Cement Company Limited (YFXL) in April 2018, as well as adding a cement grinding plant and jetty facilities in Yunfu City, strengthened our capacity to reach the main Pearl River Delta market. The Group's interests in Southeast Asia include shipping and mining activities. In recent years, we have been actively pursuing new business opportunities in environmental management projects.

For over 130 years, GIC has played a pivotal role in shaping Hong Kong and Mainland China's infrastructure, with our products laying the foundation for the economic growth of the Greater Bay Area. As the only integrated cement manufacturer in Hong Kong, we remain committed to maintaining Green Island as a quality standard by continuously innovating, diversifying our products and adopting sustainable technologies.

Yunmao Expressway is 130 kilometres long, connecting Yunfu City to Maoming City.

Nansha Port Terminal is the world's first fully automated terminal for river-sea-rail multimodal transportation.

Zhongshan West Ring Express-way Project is one of the key projects in Zhongshan City.

Kwu Tung North New Development Area, New Territories

Premium Logistics Centre Hong Kong International Airport

Kai Tak Development
– Stage 5B Infrastructure Works at the former North Apron Area

OUR COMMITMENT

As a responsible corporate citizen, Green Island is committed to supporting the community and protecting the environment. We aim to provide high-quality products and services that meet our customers' and the community's needs, driven by an integrated management system focused on quality, environmental care, safety and health.

Through periodic reviews by the Management Representative and Integrated Management Committee, we set and assess objectives for quality, pollution prevention, safety and stakeholder well-being. We are committed to continual improvement and compliance, striving to exceed regulatory requirements.

We foster a safe and sustainable culture through education, collaboration and the active involvement of employees, contractors and partners. This policy is communicated to all and made publicly available to ensure shared responsibility and engagement.

OUR MISSIONS

- To maintain Green Island as a quality label.
- To maintain Green Island's position as the leading manufacturer and distributor of cement and cementitious products in Hong Kong.
- To maintain an environmentally friendly production process that enhances efficient and effective waste management.
- To develop and expand the Company's environment-related activities on a global basis.

OUR CORE VALUES

We have integrated sustainability into our business practices, aligning with the industry's efforts to build a more sustainable future. Our six core values have guided us to formulate sustainability initiatives in relevant aspects of our business, namely: Quality Excellence, Environment Focused, Safety Oriented, Operational Efficiency, Proactive Innovation and Community Caring. We maintain a systematic approach to implementing sustainability measures through the guidance of our Integrated Quality, Environment & Safety Management System (IMS System). These will be discussed in detail in later chapters.

Quality Excellence

We treasure our brand name and commit to provide our customers with the best value products and services.

Operational Efficiency

We commit to optimise our processes to reduce our reliance on natural resources and reduce our carbon and water footprints.

Safety Oriented

We understand that nothing can compensate for the pain of an injured family member and commit to promote SHE culture to prevent any industrial accidents.

Environment Focused

We care about our Earth, and commit to conduct our operations sustainably, and use our unique processes to resolve waste problems in Hong Kong.

Continous Innovation

We are proud of our leadership in introducing new technologies to the industry, and continue to do so by engaging in innovation, research, partnership and new business opportunities.

Community Caring

We care for the needs of the community, especially our young people, and commit to provide our workforce with a family-friendly working environment.

EMBEDDING SUSTAINABILITY IN OUR BUSINESS STRATEGY

The COVID-19 pandemic significantly impacted the economy, with heightened competition in Hong Kong's construction industry from cement imports. The Russia-Ukraine conflict also disrupted the coal supply and prices, while the urgency of addressing climate-related challenges grew. To stay competitive and relevant, GIC has embedded sustainability and innovation at the core of its strategy. Below are some initiatives during the reporting period:

Hong Kong Operation:

- The adoption of T-Park Bed Ash in the cement production process, upcycling landfill waste into a valuable raw material.
- The installation of a low-NOx burner and a urea-based De-NOx system in March 2022 to reduce our NOx emissions.
- Completion of the trial burn of plastic-derived fuel as an alternative to power our operations.
- Research into biomass-calcium from waste oyster shells to replace the use of limestone.

Mainland China Operation:

- Retrofitted the raw mill induced draft fan of GICYF in 2021.
- Retrofitted the kiln induced draft fan of GICYF in 2022.
- Retrofitted the clinker cooler dust collecting system of GGGIC to a filter bag house in 2022 to improve dust emissions.
- Completed the commissioning of the hazardous waste treatment system of GICYF in April 2021, with its operating permit renewed in August 2022.

For details, please refer to the Greener Future section.

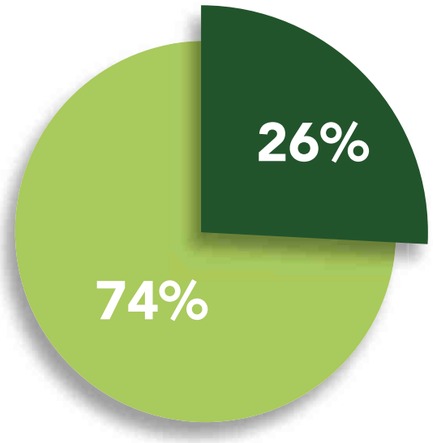
Integrating Sustainability into Product Quality Assurance

Cementitious materials are the key upstream material in construction, and their production significantly impacts the sustainability of the entire supply chain. At the same time, our customers are increasingly seeking products with minimal ecological footprint to achieve their environmental targets. To address this, we prioritise Quality Excellence as one of our core values, striving to produce high quality cementitious products that perform consistently while also being energy- and resource-efficient to minimise our carbon footprint as much as possible. With this quality, we enable concrete operators to optimise their mix design with minimal cementitious content, reducing the overall carbon footprint and preventing waste. Therefore, an effective quality assurance system, along with a statistical quality control programme, is the key to achieving this goal.

In Hong Kong, our Portland Cement complies with British Standards BS EN 197-1:2000 class 52.5N and BS EN197-1:2011 class 52.5N, while Classified Pulverised Fuel Ash meets BS3892:Part 1:1997 and Ground Granulated Blast Furnace Slag meets GB15167-1:2006. Our manufacturing processes are independently certified with ISO9001 and other relevant product certification schemes. Additionally, our Quality Control Laboratory is accredited by the Hong Kong Accreditation Service (HKAS) with ISO/IEC 17025:2017 to conduct specific laboratory activities within the test categories of Construction Materials and Environmental Testing. This accreditation ensures that the testing results obtained are traceable and reliable, and suitable for use in process control.

In Mainland China, our cement products comply with the product standards of Common Portland Cements GB175-2007 class P.II 52.5R, P.II 42.5R, P.O42.5R, P.O42.5 and M32.5. The quality assurance system was certified with ISO9001:2015. The production and services procedures have been developed according the requirements in GB/T19001, GB175-2007 and T/CBMF-2017.

During the reporting period, we maintained our efforts by incorporating 26% recycled material into our products manufacturing process without compromising quality. Classified Pulverised Fuel Ash and Ground Granulated Blast Furnace Slag, which have a much lower carbon footprint and enhanced durability performance, are produced for the Hong Kong market as substitute cement materials (SCMs) to partially replace Portland Cement in concrete production. These SCMs account for up to 13% of the total cementitious products sold in the Hong Kong market.



GOVERNANCE FOR GOOD: EMBEDDING SUSTAINABILITY

GOVERNANCE FOR GOOD: EMBEDDING SUSTAINABILITY

CORPORATE GOVERNANCE

We follow solid corporate governance practices rooted in transparency, independence, accountability, responsibility and fairness. These principles guide our business operations and are fully aligned with CK Infrastructure (CKI), our parent company. For further information about CKI, please visit the company's website.

SUSTAINABILITY GOVERNANCE

We established a Sustainability Committee, led by our CEO and composed of Directors, General Managers and representatives from CKI, to review and approve the company's sustainability objectives, strategies, priorities initiatives, goals and targets. The Committee meets at least twice a year to report on environmental and social performance, track the progress of sustainability-related initiatives, and discuss and identify potential risks and opportunities. Representatives from CKI also serve as a link between GIC and the Group's other businesses, facilitating the exchange of knowledge and best practices in ESG performance and reporting.

BUSINESS ETHICS AND INTEGRITY

We are committed to upholding the highest ethical standards to ensure integrity in our business decisions. We follow the Group's Code of Conduct, which outlines our ethical and legal responsibilities. To ensure business integrity, we have implemented various policies, including those addressing Prevention of Bribery, Acceptance of Advantages, Offering of Advantages, Entertainment and Conflict of Interest. The Code of Conduct also outlines the process for reporting concerns about illegal or unethical behaviour, along with preventive measures and whistleblowing procedures.

Our Employee Handbook further reinforces these standards by incorporating guidelines on corruption prevention, intellectual property protection and grievance handling. These topics are covered in our regular training programmes.

Our integrity training is aligned with the Group's policies, with a particular focus on the Code of Conduct, Anti-Corruption and Anti-Bribery measures, and Compliance with Competition Law.

During the reporting period, there were no legal cases concluded against our company or employees concerning corrupt practices or anti-competition.

RISK MANAGEMENT

Effective risk management is essential for our business to protect operational integrity, regulatory compliance and sustainable growth. By proactively identifying and addressing potential risks, we build resilience and support long-term success. To this end, we have a robust risk management framework that ensures comprehensive oversight and proactive risk assessment across key areas such as operations, manufacturing, integrity, tax compliance and sustainability.

Our management team leads the business units in identifying, evaluating and addressing emerging and significant risks while maintaining strong internal control systems. Regular reviews also assess the adequacy of resources, staff qualifications and budgets supporting our accounting, compliance and reporting functions.

Through these periodic risk assessments, we document and address any weaknesses, adapt to shifts in business conditions and respond promptly to external changes. This approach ensures that our operations are sustainable and compliant, and promotes a culture of continuous improvement, fostering resilience across all levels of the organisation.

Climate-related risks and opportunities

As climate change brings increasing risks across various aspects of our business, we are committed to proactive risk management, focusing on climate-related risks as part of the Group's strategy. In 2022, we assessed these risks using the Group's climate scenario analysis, identifying threats and opportunities. This assessment has helped us to develop mitigation plans that ensure long-term sustainability and resilience in our business operations.

We refer to the framework and recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to disclose our climate-related risks and opportunities. Below is a summary of our approach to corporate governance, strategy, risk management, and metrics and targets, aligning with the reporting framework.

Governance

The Board of Directors holds ultimate responsibility for overseeing risk management and is committed to embedding sustainability across all areas of our operations, while continuously improving our sustainability performance. The task of identifying, assessing and managing climate-related risks is handled by the Sustainability Committee, led by our CEO and composed of senior managers. The committee meets at least twice a year to ensure effective management of these risks.

Strategy

Cement production is a carbon-intensive industry, and we recognise our environmental impact contributes to climate change. At the same time, our business is vulnerable to rising sea levels, storm surges, flooding and changing rainfall patterns, which could disrupt plant operations, compromise employee safety and affect the delivery of products and raw materials. In addition to physical risks, we also face risks associated with the transition to a low-carbon economy.

Physical Risks	*Responses*
Increased Physical Impacts on Facilities Our plant equipment is securely situated 6.8 metres above sea level. However, extreme rainfall could cause the ditch near the oil separator of the storm pond to overflow, releasing untreated water into the sea. Heavy stormwater may also seep into electrical rooms, creating safety risks for both equipment and personnel. Additionally, typhoons pose threats to plant safety and ship unloaders, potentially disrupting cement operations.	We conducted a comprehensive physical risk assessment, evaluating the power distribution network, equipment at the barge jetty, drainage infrastructure, storm pump capacity, potential rainwater intrusion into electrical rooms and structural integrity of buildings under high-wind conditions. We have developed and implemented an action plan in response.
Material and Product Delivery Nearly 98% of our raw materials are delivered by sea, with 17.6% sourced from Mainland China via sea routes. However, frequent typhoons and flooding in Xijiang disrupt loading operations, while heavy rains affect the quality of limestone from Japan and clay from China. Additionally, one-third of our products are shipped via bulk marine vessels. As extreme weather events increase, they not only delay deliveries but also raise the risk of demurrage, impacting both raw material imports and product shipments to customers.	To mitigate risks in material delivery, we implement a diversified, locally sourced procurement strategy, reducing transportation disruptions caused by extreme weather. For unavoidable overseas imports, we secure multiple supply sources to ensure continuity. For product distribution, we leverage both maritime and road logistics, supported by ample on-site storage to buffer against temporary supply chain interruptions.

Strategy (Cond't)

Transitional Risks	*Responses*
Regulatory Pressures on Carbon Emissions The Hong Kong Government has introduced the *Climate Action Plan 2050*, targeting net-zero emissions by 2050 and the phase-out of coal-fired power by 2035, while Mainland China aims to hit peak carbon emissions by 2030 and achieve carbon neutrality by 2060. As cement production is highly carbon-intensive, we may face restrictive production caps under emerging policies.	We are addressing climate issues through a scientific approach, including a carbon footprint analysis. Strategic plans are in place to progressively reduce Scope 1 emissions per tonne of cementitious material. Our initiatives align with emerging regulations, contributing to the industry's carbon-reduction targets.
Market Challenges in Low-carbon Transition The current regulatory framework offers limited incentives for customers to adopt low-embodied-CO_2 cement and concrete products, which differ in performance from Ordinary Portland Cement (OPC). Additionally, customers are reluctant to absorb the higher costs of low-CO_2 OPC produced with advanced technologies, limiting industry investment in sustainable production processes.	We leverage substitute cement materials (SCMs) like Pulverised Fuel Ash (PFA), Ground Granulated Blast Furnace Slag (GGBS) and blended cement to reduce CO_2 intensity. These SCMs are by-products in nature, mainly involving Scope 2 emissions, making them more cost-effective than OPC and enhancing customer acceptance. As a market leader in PFA, we have diversified supply sources, regulated demands and implemented a reject grinding system, achieving 100% conversion. With local fly ash supply declining, we launched a GGBS grinding plant in Q4 2020. Our expertise in SCMs positions GGBS as a sustainable replacement for OPC and PFA, driving significant growth in adoption.

Strategy (Cond't)	
Transition Risks	***Responses***
Technological Barriers to Emission Reductions While efforts to reduce emissions are ongoing, carbon capture and utilisation (CCU) will be crucial for achieving net-zero targets. However, many of the technologies applicable to Hong Kong require significant land, which is scarce in the region.	Cement manufacturing offers unique opportunities for co-processing local waste, which reduces pressure on landfill space and lowers operational costs through waste-to-material and waste-to-energy initiatives. We have conducted trial burns to demonstrate the viability of replacing coal with waste-derived fuels without adversely affecting emissions. Our plant is licensed to use waste fuels from rubber, plastic, wood, yard waste and polyurethane residues. The next step involves streamlining the collection network to ensure a stable supply chain.
Reputational Risks and Stakeholder Impact Cement's association with high carbon emissions presents reputational risks, potentially undermining our attractiveness to key stakeholders, including investors, customers and talent.	Our commitment to carbon reduction and sustainable practices reinforces our position as an industry leader and enhances our reputation among stakeholders. By proactively addressing environmental challenges, we aim to maintain the trust of investors, customers and employees while ensuring compliance with evolving market expectations.

Metrics

Since 2015, we have disclosed our Scope 1 and 2 greenhouse gas emissions, our energy consumption and key initiatives related to carbon reduction. We have achieved ISO 14001 Environmental Management System certification, coupled with annual reviews of our environmental performance. In 2022, our roadmap towards carbon neutrality was presented to the Sustainability Committee, including the following key areas:

- Continue to expand the share of GGBS in our products, aiming to achieving a 25% decrease in operational carbon intensity per tonne of cementitious materials produced by 2035, as compared to the baseline in 2015.
- Replace fossil fuels used in the clinker sintering process with alternative fuels and biofuels, which can further reduce our carbon intensity by 30%.
- Explore the potential of adopting Carbon Capture and Utilisation (CCU) technology to achieve an additional 46% reduction in carbon emissions.

GOVERNANCE FOR GOOD: EMBEDDING SUSTAINABILITY

Customer data protection policy

We continue to build lasting relationships with our customers through the provision of quality products and services. By fostering innovation and continuously improving our services, we strive to create new value beyond our customers' expectations. We ensure quality service, while our *Customer Complaints Handling Procedure* outlines our commitments in handling customer complaints related to our products or services.

We recognise the importance of customer privacy and are committed to protecting our customer data. All personal data is appropriately handled in accordance with local regulatory requirements and protected. We safeguard customer data in our sales computing system, which is managed by our IT Department with the protection of firewalls. Only authorised staff at GIC can access personal data that has been collected through our customer service department, marketing activities or online platforms.

In addition to basic cybersecurity measures like firewalls and anti-malware software, we have also implemented a suite of security measures including a DNS-layer security, email threat protection, Multiple-Factor Authentication (MFA) in the email system and the virtual private network (VPN), Security Information and Event Management (SIEM), network access control (NAC) and endpoint detection and response (EDR) solutions to defend against cyber threats. We will continue to optimise these solutions and deploy new ones to enhance the overall resilience against various cyber- attacks.

Managing our Supply Chain

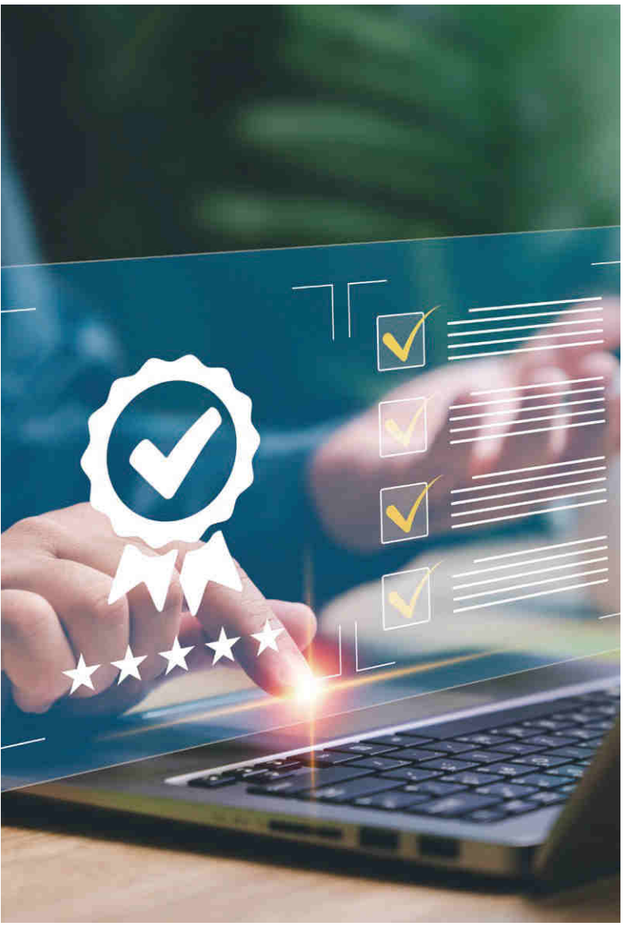
We collaborate closely with our suppliers, contractors and partners to ensure shared success. Guided by our Supplier Code of Conduct, we uphold the integrity of our supply chain and promote sustainable and ethical practices, including anti-collusion measures.

Our processes involve both pre-assessment and ongoing evaluations to monitor supplier performance in areas such as packaging, product quality and compliance with environmental, safety and quality standards. To ensure transparency and accountability, we also conduct random site visits to verify that no forced labour is used within our supply chain.

Currently, we work with 1,834 suppliers, 84% of whom are local. Many of our suppliers undergo screening based on environmental and social criteria that align with our sustainability goals. Most of our suppliers have maintained relationships with us for several years, reflecting the strength of our long-term partnerships.

POLICIES AND CERTIFICATIONS RELATED TO SUSTAINABILITY

To embed sustainability into our operations and realise our sustainability vision, we have adopted a suite of CKI's policies and established various system controls to maintain the highest standards in all our operations:



LIST OF KEY SUSTAINABILITY-RELATED POLICIES

Anti-fraud and Anti-bribery Policy
Anti-harassment Policy
CKI Sustainability Policies
Supplier Code of Conduct
Health and Safety Policy
Employee Code of Conduct
Information Security Policy
Media, Public Engagement and Donation Policy
Policy on Appointment of Third-party Representatives
Policy on Handling of Confidential Information, Information Disclosure and Securities Dealing
Whistleblowing Policy – Procedures for Reporting Possible Improprieties

CERTIFICATIONS AND STANDARDS

Integrated Management System Accredited Certification

- ISO 9001:2015 Accredited Certification
- ISO 14001:2015 Accredited Certification
- ISO 45001:2018 Accredited Certification

Product Certification Scheme

- The Hong Kong Concrete Institute, Product Conformity Certification Scheme for Cement Product (PCCS-CP) Issue 2 (2020)

Laboratory Accreditation Scheme

- The Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017

MATERIALITY AND STAKEHOLDER ENGAGEMENT

Recognising the importance of materiality for the sustainability of our operations, we conducted a materiality assessment in 2017 through surveys and stakeholder interviews. Given the stable nature of our business, these issues remain relevant for us and our stakeholders. However, in light of global megatrends and evolving stakeholder expectations, we plan to review and update these material issues in the coming year.

The 17 key material issues identified continue to guide the content of this report.

Environmental	Social	Governance
• Energy consumption • Air quality and carbon emissions	• Occupational health and safety of employees • Training on occupational health and safety • Facilities management • Employee compensation and benefits • Employee well-being • Talent attraction and retention	• Anti-corruption • Compliance with local laws and regulations • Brand and reputation • Business development strategies and prospects • Corporate governance • Corporate values and ethical standards • Quality control • Data security and protection • Quality customer service

Building on the foundation of our previous stakeholder engagement efforts, we identified several key areas where GIC needs to place a greater focus. We will discuss our progress and initiatives to address these areas later in this report.

- Energy-saving initiatives and reduction of emissions
- Improving employee training and benefits, and fostering a sense of belonging
- Reducing operational costs while continuing to enhance production quality

In addition, we continue to engage with internal and external stakeholders regularly through various channels such as staff engagement activities, surveys with suppliers, and meetings with partners and customers.

Commitment to Sustainable Development Goals (SDGs)

We continue our support of the United Nations' Sustainable Development Goals (the SDGs) and commit to the four SDGs that we have identified as most relevant to our business and that allow us to make the most significant contribution. Our progress on the SDGs in 2021-2022 is highlighted in the following table and details of the actions we have taken are discussed later in this report:

SDG	Motivation to:	Commitment to:	Progress in 2021-2022:
7 AFFORDABLE AND CLEAN ENERGY	• Increase the use of renewable energy sources. • Improve energy efficiency.	• Continue our research into the use of alternative fuels derived from unwanted solid waste to promote cleaner energy solutions and enhance waste management practices.	• Conducted a trial burn of plastics-derived fuel in Dec 2022. • In our Hong Kong operation, used 2,064 tonnes of waste-derived-fuel, including 133 tonnes of yard waste, reducing the use of coal by approximately 3,462 tonnes. • In our PRC operation, used 9,557 tonnes of waste-derived fuel, saving about 3,038 tonnes of coal. • In our PRC operation, retrofitted the raw mill ID fan and kiln ID fan of GICYF in 2021 and 2022 respectively. The energy savings achieved were 24.4% and 28.2% respectively.
8 DECENT WORK AND ECONOMIC GROWTH	• Enhance economic productivity through diversification, technological upgrades and innovation, with a focus on high-value-added and labour-intensive sectors.	• Safeguard our employees by providing a zero-harm workplace. • Offer tailor-made training that best develops the potential of our employees.	• Introduced a safety bonus scheme to encourage safe behaviour. • Provided an ongoing 20 hours of safety training per worker. • Introduced awareness training on extreme weather events, including heatstroke drills.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	• Optimise resource usage. • Align with Targets 12.2 (sustainable resource management) and 12.5 (waste reduction through prevention, recycling and reuse).	• Constantly source recycled materials to minimise our reliance on natural raw materials.	• Sourced 26% reused or recycled materials. • Researched using recycled bio-mass materials, including eggshells and oyster shells, in cement production.
13 CLIMATE ACTION	• Strengthen organisational capacity for awareness, strategy development and mitigation planning. • Build adaptive capacity and resilience to climate change impacts.	• Support innovative solutions to reduce emissions, including efforts to lower NOx and SOx levels. • Promote the use of SCMs as a cement replacement, as incorporating GGBS in concrete can reduce embodied carbon by up to 50%, while PFA offers a reduction of 25%.	• Installed a low-NOx burner in Hong Kong to reduce NOx emissions by over 30%. • Reduced clinker content of total cementitious products produced in Hong Kong to 78.2%, compared to 79.0% in 2019-2020. • Retrofitted the clinker cooler dust collecting system of GGGIC from an electrostatic precipitator to a bag house in 2022, reducing particulate emissions.

As a global corporate citizen, we will continue with our commitment to supporting these SDGs and helping to build a sustainable future.

GREENER FUTURE: OUR ENVIRONMENTAL RESPONSIBILITY

GREENER FUTURE: OUR ENVIRONMENTAL RESPONSIBILITY

PERFORMANCE HIGHLIGHTS

Performance in reducing ecological footprint of our input resources:

1 Recycled Materials Used:
26.0%

2 Clinker in all Cementitious Products:
81.5%

3 Substitute Cementitious Material in All Products Sold:
4.5%

4 Power from Waste Heat Power Generation:
20.0%

5 Waste-derived Alternative Fuel Used:
0.6%

6 Water from Recycled Sources:
45%

Performance per '000 HKD turnover, compared to the last reporting period:

Energy consumption

1 4.86 Coal intensity (GJ) per '000 HKD turnover – a decrease of **11%**

2 0.010 Diesel intensity (GJ) per '000 HKD turnover – a decrease of **12%**

3 145 Electricity intensity (kWh per '000 HKD turnover) – a decrease of **10%**

Emission

1 0.00063 NOx intensity (tonnes per '000 HKD turnover) – a decrease of **25%**

2 0.00003 particulates (tonnes per '000 HKD turnover) – a decrease of **49%**

3 1.24005 Scope 1 intensity (tonnes CO_2e per '000 HKD turnover) – a decrease of **11%**

4 0.07491 Scope 2 intensity (tonnes CO_2e per '000 HKD turnover) – a decrease of **16%**

Water

1 0.45 Water intensity (cubic metres per '000 HKD turnover) – a decrease of **5%**

Packaging

2 0.001125 Packaging materials intensity for the finished product (tonnes per '000 HKD turnover) – a decrease of **15%**

- Emission
- Energy consumption
- Packaging & Water
- Waste

Waste

1 0.00004 Hazardous waste intensity (tonnes per '000 HKD turnover) – an increase of **22%**

2 0.00132 Non-hazardous waste intensity (tonnes per '000 HKD turnover) – an increase of **17%**

Performance in reducing the emissions footprint of our products:

1 0.440 NOx Intensity (kg per tonne of clinker produced) – a decrease of **15%**

2 0.020 particulates (kg per tonne clinker produced) – a decrease of **42%**

3 0.867 Scope 1 intensity (tonnes CO_2e per tonne finished products) – no significant change

4 0.039 Scope 2 intensity (tonnes CO_2e per tonne finished products) – a decrease of **9%**

ENVIRONMENTAL MANAGEMENT APPROACH

As Hong Kong's only integrated cement manufacturer, we recognise our responsibility to minimise environmental impacts and contribute to global efforts against climate change. Our commitment extends beyond the regulatory requirements of the Environmental Protection Department (EPD) in Hong Kong and the Ministry of Ecology and Environment in Mainland China. We maintain environmental management systems aligned with international standards to ensure continuous improvement.

Our Integrated Management System (IMS) Policy guides us in fulfilling this commitment by focusing on carbon reduction, waste minimisation and resource conservation through the adoption of innovative technologies and initiatives.

We uphold our Environmental Policy and maintain ISO 14001:2015 certification for our Environmental Management System. The Integrated Management Committee conducts periodic reviews of our environmental objectives and targets, ensuring alignment with evolving sustainability goals.

Within this framework, we have implemented a range of environmental initiatives across our operations, with a particular focus on emissions reduction, waste-to-material and waste-to-energy solutions. We also promote low-embodied-carbon cementitious products to the Hong Kong construction industry, including Ground Granulated Blast Furnace Slag (GGBS) and classified Pulverised Fuel Ash (PFA), supporting sustainable development and circular economy practices.

Celebrating Our Commitment to Sustainability: Silver Prize at the BOCHK Corporate Environmental Leadership Awards 2021

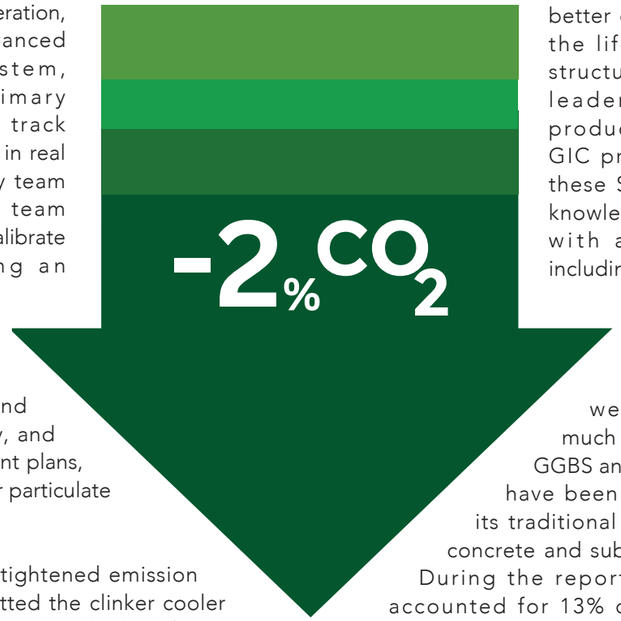
We are honoured to have won the **Silver Prize** at the **BOCHK Corporate Environmental Leadership Awards 2021**. This achievement reflects our commitment to sustainability, driven by years of research and development focused on turning waste into valuable materials and energy. A notable success from our efforts is the launch of **Ground Granulated Blast Furnace Slag (GGBS)**, a green construction material that reduces the carbon footprint of concrete by approximately **50%** while enhancing its durability.

REDUCING OUR EMISSIONS

We are committed to reducing air pollutants and carbon emissions across both our operations and products. While air emissions are an inherent part of cement production, we take proactive measures to ensure their impact is minimal.

Particulate emissions

In our Hong Kong operation, we installed an advanced Dust Monitor system, configured in primary and redundant, to track particulate emissions in real time. Our laboratory team and environmental team worked together to calibrate this system using an established procedure. This 24-hour monitoring system enables us to respond quickly and precisely, and formulate improvement plans, further minimising our particulate emissions.



To comply with the tightened emission standards, we retrofitted the clinker cooler dust collecting system at GGGIC from an electro-static precipitator to a bag house. The specific particulate intensities from the Hong Kong and Mainland China operations were 8 g/tonne and 25 g/tonne of clinker production respectively, representing reductions of 50% and 40%.

Carbon dioxide emissions

We promote the use of low-embodied-carbon cementitious materials, such as Classified PFA and Ground Granulated Blast Furnace Slag (GGBS), to replace Ordinary Portland Cement (OPC). Incorporating GGBS in concrete can reduce embodied carbon by up to 50%, while PFA offers a reduction of 25%. In addition, the GGBS concrete and PFA concrete exhibit better durability, improving the lifespan of concrete structures. As the market leader in cementitious products in Hong Kong, GIC promotes the use of these SCMs by sharing its knowledge and experience with all stakeholders, including competitors in the cementitious products and concrete supply markets. As a result, we have observed a much wider acceptance of GGBS and various applications have been developed beyond its traditional application in mass concrete and sub-structural concrete. During the reporting period, SCMs accounted for 13% of all cementitious products sold by the Hong Kong operation, with a specific gross CO2 intensity at 0.716 tCO2e per tonne of cementitious products, a reduction of 2% from the previous reporting period.

SOx emissions

The SOx emissions from a cement kiln usually result from the oxidation of sulphur compounds in raw materials at the upper stage cyclones of the preheating system, rather than from the combustion of fuel. The SO2 generated is dry-scrubbed by the nascent lime formed at the precalciner. Therefore, controlling the sulphur input in raw materials is the key to controlling the SOx emissions from a cement kiln. Unlike the Hong Kong operation, where the sulphur content in raw materials is very low, the sulphur content of limestone used in our Mainland China operations is quite high, as the secondary limestone quarry is still at the early stage of development, and low-quality limestone is still dominant. In order to better control the quality of limestone, we installed a real-time cross-belt elemental analyser. Nevertheless, we recorded a specific SOx intensity of 62g/t of clinker produced, representing an 18% increase compared to the previous reporting period. We completed an upgrade to the existing flue-gas treatment system (technology based on wet-scrubbing with limestone slurry) in late 2022 in both GICYF and GGGIC to address with this increased sulphur content from lower-quality limestone.

NOx emissions

The specific NOx intensity was 440g/t of clinker produced, representing a 15% reduction compared to the previous reporting period. This success can be attributed to the installation of a new low-NOx Burner in the Hong Kong operation, which has optimised combustion efficiency and reduced reliance on chemical treatments. Further details of this initiative can be found in our case study on the new NOx Burner.

Case Study

Reducing Thermal NOx emissions, a by-product of high-temperature combustion, is critical to minimising environmental impact. Maintaining a consistently lower flame-core temperature to limit NOx formation, while ensuring clinker quality, is challenging.

To address this, we explored low-NOx burners in 2018 but initially faced challenges in balancing emissions control with process stability and cement quality. We installed our second attempt in 2022, an advanced FCT low-NOx burner, leveraging innovative combustion technology to reduce NOx emissions while preserving product excellence. Key improvements include:

- Optimising burner design with CFD modelling at the engineering stage;
- Optimising the air-to-fuel ratio and mixing geometry;
- Reducing unnecessary air during burning; and
- Keeping flame temperatures balanced and controlled.

The new burner has proven highly effective, cutting NOx emissions by over 25% and significantly reducing – if not eliminating – the need for urea injections, which are used to manage emissions. This not only prevents urea usage but also lowers operational costs and minimises secondary environmental impacts.

Case Study:
Achieving Cleaner Production – Reducing NOx Emissions without Compromising Quality

The quality of the cement produced with this new burner has been verified by our laboratory, confirming compliance with the BS EN 197 standard. This ensures that our efforts to reduce emissions do not come at the expense of product excellence.

Our journey in emission control reflects a continuous commitment to innovation and sustainability. With the successful implementation of the new FCT low-NOx burner, we are not only reducing our environmental footprint but also maintaining the high quality standards that define our products.

REDUCING OUR OVERALL ENERGY CONSUMPTION

We continued to implement various energy-saving measures to further reduce emissions. At our newly commissioned slag grinding plant, we utilised waste heat from the cement plant to replace the conventional hot gas generation system, enhancing energy savings and further reducing the embodied carbon of the GGBS produced.

Our commitment to a waste-to-energy strategy is reflected in our use of alternative fuels, reducing reliance on fossil fuels. Notable initiatives include the use of woody wastes, Polyurethane Residue Derived Fuel from the Waste Electrical and Electronic Equipment Treatment and Recycling Facility, and Rubber Derived Fuel from waste tyre recyclers.

During the reporting period, we expanded our waste-to-energy efforts by utilising alternative fuel derived from non-recyclable plastics in our Hong Kong operation. The hazardous waste treatment system of GICYF officially began operating in April 2021, with its operating permit renewed in August 2022. The use of waste-derived fuel is still in the developing stage. To increase our current 0.6% contribution to fuel usage, we will continue securing the supply of these alternative fuels.

GREENER FUTURE: OUR ENVIRONMENTAL RESPONSIBILITY

Turning Plastic Waste into Sustainable Fuel

Hong Kong generates over 2,000 tonnes of plastic waste daily, with most of it ending up in landfills due to low recycling rates of the low-value portions. We see this challenge as an opportunity to reduce our reliance on coal while easing landfill pressure by converting non-recyclable waste plastics into alternative fuels for our operations.

In our manufacturing process, we harness the high calorific value of shredded rubber and crushed plastics. An operating temperature up to 1,450°C ensures the complete breakdown of plastics while preventing the formation of hazardous substances such as dioxins. We conducted a trial burn of plastic-derived fuel in December 2022. During the trial stage, we successfully used 18 tonnes of plastic waste as fuel to power our operations.

To help our staff understand the rationale behind this initiative, we launched Green Tuesday in July 2022 to raise awareness of plastic recycling and encourage employees to adopt clean recycling practices. Through this effort, our staff have come to understand the company's environmental efforts, while fostering sustainable habits and using community recycling facilities for a greener future.

We have installed waste heat power generation systems at our two cement operations in Mainland China. They have produced a total of 159GWh, amounting to about 20% of total power consumed, a 5% increase as compared to the previous report. We also retrofitted the induced draft fans of the raw mill and kiln at GICYF in 2021 and 2022 respectively, resulting in energy savings of 24.4% and 28.2%. The specific power consumption per tonne of cementitious material produced was 75.5kWh/t, a reduction of 3% as compared to the previous report.

CIRCULARITY IN MATERIAL EFFICIENCY

We recognise that the resources we consume carry an ecological footprint. In alignment with circular economy principles, we adopt a waste-to-material strategy by repurposing recycled materials generated from other industries, such as fly ash, bottom ash and gypsum from desulphurisation from coal power plants, slag from metal refining, quarry residues and waste glass bottles, which are used as raw material in the cement production.

During the reporting period, 26.0% of our input materials were from eco-friendly sources. We also launched two new waste-to-material projects, utilising oyster shells and waste Bed Ash from The Hong Kong Sludge Treatment Facility (T-PARK) to promote eco-friendly cement production. These initiatives reduce our reliance on limestone and other natural resources while addressing waste management by minimising disposal needs at the landfill.

Case Study

In our ongoing efforts to adopt sustainable practices, we are integrating oyster shells from hotels and Bed Ash from T-PARK's sludge treatment facility into our cement production process. By using these alternative materials, we reduce reliance on natural resources and help alleviate the burden on landfills.

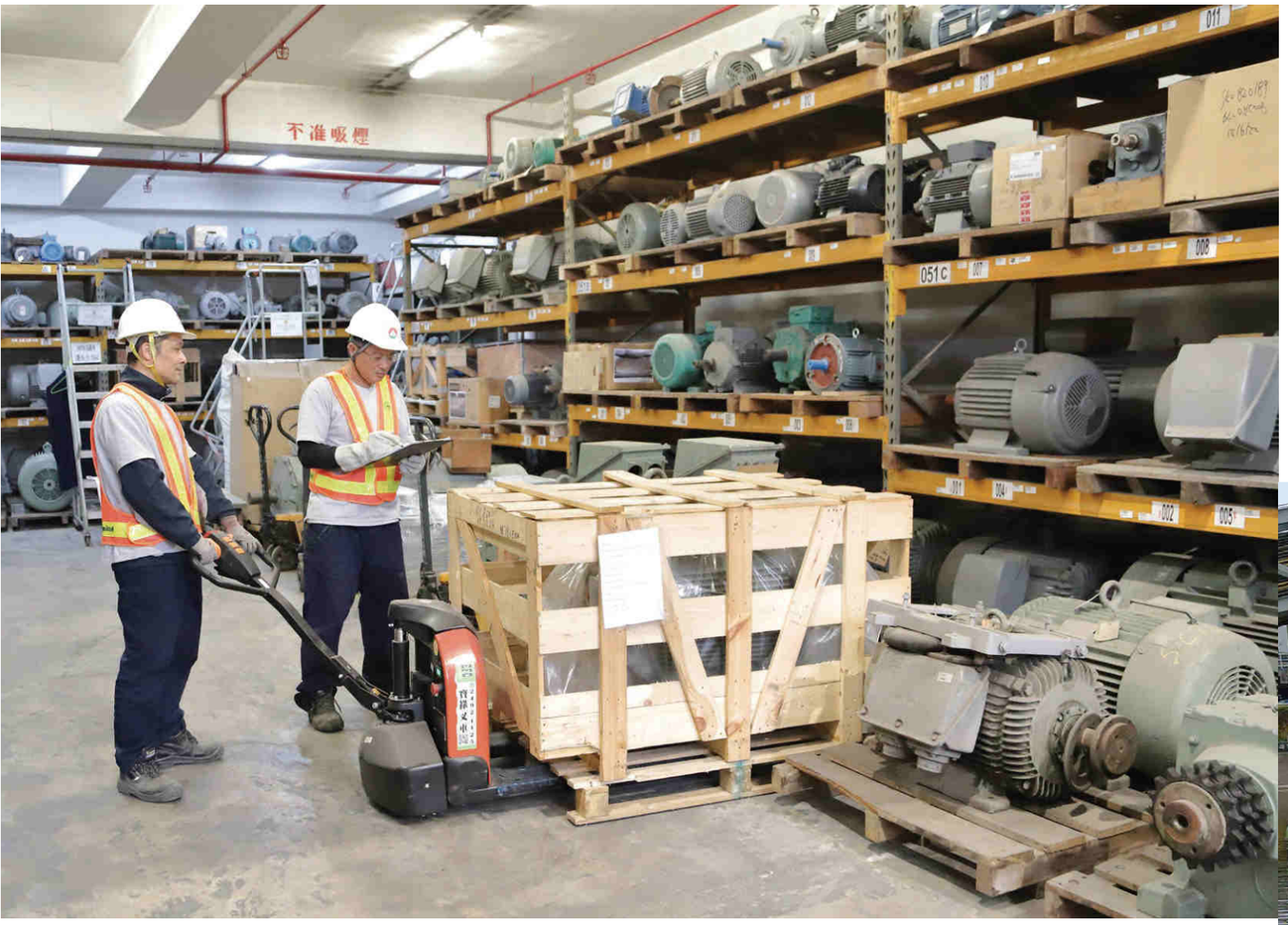
Oyster shells, rich in calcium carbonate ($CaCO_2$), are substitutes for limestone, reducing the need for natural mineral extraction and lowering carbon emissions. We are developing a business plan to effectively collect the consumed oyster shells for the upcycling process at our cement plant. This initiative promotes clean recycling to all stakeholders, emphasising that small changes in habits can make a big difference in the effectiveness of the waste reduction and recycling process.

GREENER FUTURE: OUR ENVIRONMENTAL RESPONSIBILITY

We have also partnered with T-PARK to upcycle the waste sand from its fluidised bed system (Bed Ash). After conducting comprehensive characterisation studies and trial use in our cement production line, we have now formalised this collaboration. By replacing natural silica sand with T-PARK's Bed Ash, we not only reduce material costs but also divert waste from landfills.

Case Study:
Turning Waste into Resources – Using Oyster Shells and T-PARK's Waste Sand in Cement Production

Together, these initiatives reflect our commitment to environmental stewardship – transforming waste into resources, reducing our carbon footprint and contributing to a circular economy.



SUSTAINABLE PROCUREMENT

In addition to using recycled materials, we source from geographically close regions, such as Mainland China and Japan, to lower our carbon footprint. Wherever possible, we prioritise suppliers with a commitment to sustainable practices, such as energy efficiency, environmental management and ISO14001 certification – particularly within our Mainland China operations. We regularly assess and engage with suppliers to review their environmental certifications, monitor sustainability practices and identify areas for improvement.

We further promote sustainability through our Purchasing Procedure for Indirect Materials and Works, which guides the selection of eco-friendly materials, minimises packaging for import shipments and prioritises contractors with good safety performance. This procedure also ensures the responsible use of potentially hazardous materials and controls the procurement of items with significant environmental impacts, such as ozone-depleting substances.

GREENER FUTURE: OUR ENVIRONMENTAL RESPONSIBILITY

WATER CONSERVATION

We are committed to minimising water use and ensuring sustainable practices across our operations. We do not discharge any industrial wastewater, which is recycled and used in production for process cooling. Additionally, we implement various water-saving initiatives, such as treating and sterilising domestic wastewater (grey water) for reuse within our plants.

We also collect rainwater, which is used to condition the flue gas stream, enhancing the particulate collection efficiency of our electrostatic precipitators. Recycled water also supports other activities, including road spraying and non-production applications, ensuring we make the most efficient use of water resources while reducing environmental impact.

During the reporting period, our purchased water consumption decreased by 14% despite the suspension of grey water recycling for flushing and irrigation, as well as the increased frequency of facility cleaning for hygiene reasons during the COVID-19 pandemic.

FOSTERING WELL-BEING: OUR PEOPLE AND COMMUNITIES

PERFORMANCE HIGHLIGHTS

As of 31 December 2022

1 Total employees
1,058

2 Turnover rate
7.0%

3 Male/ female ratio
6.8:1

4 Average hours of training
20

5 Lost days due to work injuries
237

6 Fatalities
0

EMPLOYEE MANAGEMENT

We are committed to providing equal opportunities for all employees, as outlined in our Employee Handbook. This document defines our fair employment practices, covering aspects such as hiring, compensation, promotion, leave, benefits, welfare, education and training, and our policies on anti-corruption and anti-collusion. Guided by our Equal Opportunities Policy, we uphold a zero-tolerance stance toward discrimination and harassment, fostering a respectful and inclusive work environment.

As one of the good employer branding, Green Island Cement always provides good retirement protection to employees in order to attract and retain talent. GIC together with our other subsidiaries has been awarded:

- Best All-round MPF Employer Award
- Good MPF Employer 5 Years+
- e-Contribution Award
- MPF Support Award

15 years+ 商界展關懷 caringcompany
Awarded by The Hong Kong Council of Social Service 香港社會服務聯會頒發

積金好僱主 Good MPF Employer

EMPLOYEE WELL-BEING

At GIC, we recognise that the physical and mental health of our employees is essential to sustaining productivity. To support their well-being, we offer a comprehensive range of programmes designed to promote physical health and alleviate stress. In 2021, we provided medical checkups for all employees and introduced Vaccination Caring Leave to protect staff health during the pandemic. Our commitment to fostering a family-friendly workplace is further reflected in flexible work arrangements, initiatives promoting work-life balance and leave benefits that exceed statutory requirements.

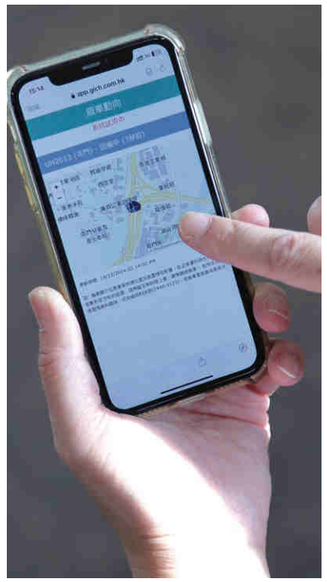
In 2020, we also introduced the Employee Assistance Programme (EAP), offering 24-hour counselling services to employees and their families. The EAP provides guidance on challenges related to career development, interpersonal relationships, emotional well-being and resilience in the face of adversity. In May 2021, we held an online EAP briefing session on happiness and in May 2022, with the easing of pandemic restrictions, we reopened the Caring Recreation Centre to provide recreational facilities for our staff.

We had launched a series of GIC Handmade Workshops, including the Relaxation Series – Dried Flower and Aromatherapy Candle Making workshops held in June and August 2022 respectively. These workshops were warmly welcomed by staff members, who experience the joy and tranquillity of creative handcrafting while achieving the objectives of well-being through mindful nurturing.

To celebrate the Mid-Autumn Festival and promote environmental protection, we invited all staff to participate in the GIC Online Lantern Riddles. We also shared some Green Tips for the festival, helping staff minimise waste while enjoying the festive season with family and friends.

We held a Cement Decoration Workshop in July 2022, in which 10 colleagues were able to experience the joy of creativity, using our own products to create handcrafted items, including a chess set.

The Green Tuesday Programme, held from July to November 2022, encouraged colleagues to collect their plastic waste from their homes and workplaces. The waste was weighed and sorted with the help of a plastic scanner to identify the types and quantities, offering insights for future reduction. To encourage participation, the top 10 contributors each Tuesday were rewarded eco-friendly gifts, such as glass meal boxes, as sustainable alternatives to single-use containers. During the period, 79 colleagues participated, collecting 400 kg of plastic waste.



New features on the GIC App

In 2021-2022, we continued to improve the features of the GIC App to better serve our employees. A key enhancement was the addition of the Company Coach Tracking System, which allows staff to track coaches in real time and check their punctuality.

We highly value employee feedback and use the app as a platform to engage with our workforce. Feedback tools such as the Canteen Feedback Form and the Coach Service Feedback e-Form provide convenient channels for employees to share their opinions and help us enhance our services.

Extending employees' well-being to the community

We encourage our employees to enhance their mental well-being by participating in voluntary service. Through volunteering, staff can experience the joy of helping others, fostering a sense of fulfilment and community connection. This involvement not only boosts their happiness but also contributes to a positive work environment, reinforcing our commitment to the well-being of our team.

The Construction Industry Blood Donation Day took place in July 2022, as part of the Lo Pan Service Month 2022. Our colleagues were invited to participate in this meaningful activity, demonstrating our support for the construction industry and promoting the spirit of contributing to society. The event saw six participants coming together to make a positive impact.

On Christmas Eve 2022, the Hong Kong Federation of Youth Groups organised the Neighbourhood First: Rice Giving with our Community volunteer service, during which our volunteers delivered rice directly to homes.

EMPLOYEE DEVELOPMENT

Building a talented workforce is our long-term goal. Our Human Resources and Training Team remains committed to offering diverse training programmes, ensuring employees stay updated in this ever-changing world.

During the reporting period, each employee received an average of 20.4 hours of training. We conducted 138 internal and 139 external courses, which took place on a regular basis, covering topics such as environmental management, IT skills, business etiquette, workplace safety and more.

In our Mainland China business units, GGGIC and GICYF implement staff development programmes focusing on product quality, environmental management, and occupational health and safety.

talented workforce

20.4 *hours of training*

138 *internal course*

139 *external course*

NURTURING FUTURE TALENT

To address the challenges of an ageing workforce, we strive to inspire and attract younger generations to join our team. In 2021 and 2022, we participated in various recruitment initiatives to engage new talent.

In June 2021, we joined the HKUST Co-Op Program, followed by setting up recruitment booths throughout 2021 and 2022 to connect with prospective candidates. In February 2022, we took part in the HKUST Career Mosaic, followed by the HKCA YMS Virtual Recruitment Fair in March 2022, where we engaged with candidates through live online chats. Later, in October 2022, we collaborated with the Construction Industry Recruitment Centre to further expand our recruitment efforts.

To promote diversity and inclusion, we participated in the Building a Multicultural Workplace Job Fair and the Professional Traineeship Programme for the Ethnic Minorities in November 2022, which included the "What a Multicultural Team!" Sharing Session.

Additionally, in 2022, we launched the company Facebook page to further enhance our outreach and engagement with potential candidates.

HEALTH AND SAFETY

We prioritise health and safety above all else, with a commitment to fostering safety awareness and creating an accident-free workplace. Through our Integrated Quality, Environmental, Safety and Health Management System (IMS), we implement proactive measures to protect our employees, contractors and customers.

Our safety management system follows the international standard ISO 45001:2018, ensuring alignment with the latest industry practices. In GGGIC, GICYF and Xiangli, we adhere to GB/T19001, GB/T24001 and GB/T45001 standards. As part of this process, we have also reviewed and updated our current safety management practices to fully meet these requirements.

We maintain a robust Occupational Health and Safety (OHS) training system to enhance safety awareness among employees. This includes implementing the Unsafe Acts/Conditions Control Procedure and the Safety Working Cycle. Regular training sessions cover both statutory and courses and others developed in-house, such as construction green card certification, electrical safety, working in confined spaces and occupational hygiene.

NON-SMOKING WORKPLACE

We prioritise the well-being of people we live and work with, striving to provide a safe, smoke-free working environment. We actively encourage smokers to quit and support non-smokers in maintaining a healthy lifestyle. To support our employees in quitting smoking, we offer incentives and foster a team-based support system, maintaining a non-smoking workplace since 1998. Each year on World No Smoking Day on 31 May, we promote a tobacco-free lifestyle through health awareness talks, health checks and seasonal fruit distribution.

GROUP SAFETY INCENTIVE SCHEME 2021

In April 2021, we launched a Group Safety Incentive Scheme centred around the principle that "Safety is everybody's responsibility, and everyone is a safety officer." This initiative emphasised the importance of ABC – Assessing safety, Being aware of hazards and Communicating effectively – to encourage safe behaviour while provider of timely reminder of which actions are unsafe. By creating a culture of safety awareness, we aim to foster a workplace where everyone contributes to a safer environment.

To support this initiative, all staff are encouraged to take accountability for unsafe acts and practise self-discipline. This proactive approach empowers employees to identify potential risks and take action to mitigate them. The safety bonus scheme was designed to operate efficiently and provide monthly rewards, reinforcing our commitment to safety at all levels of the organisation.

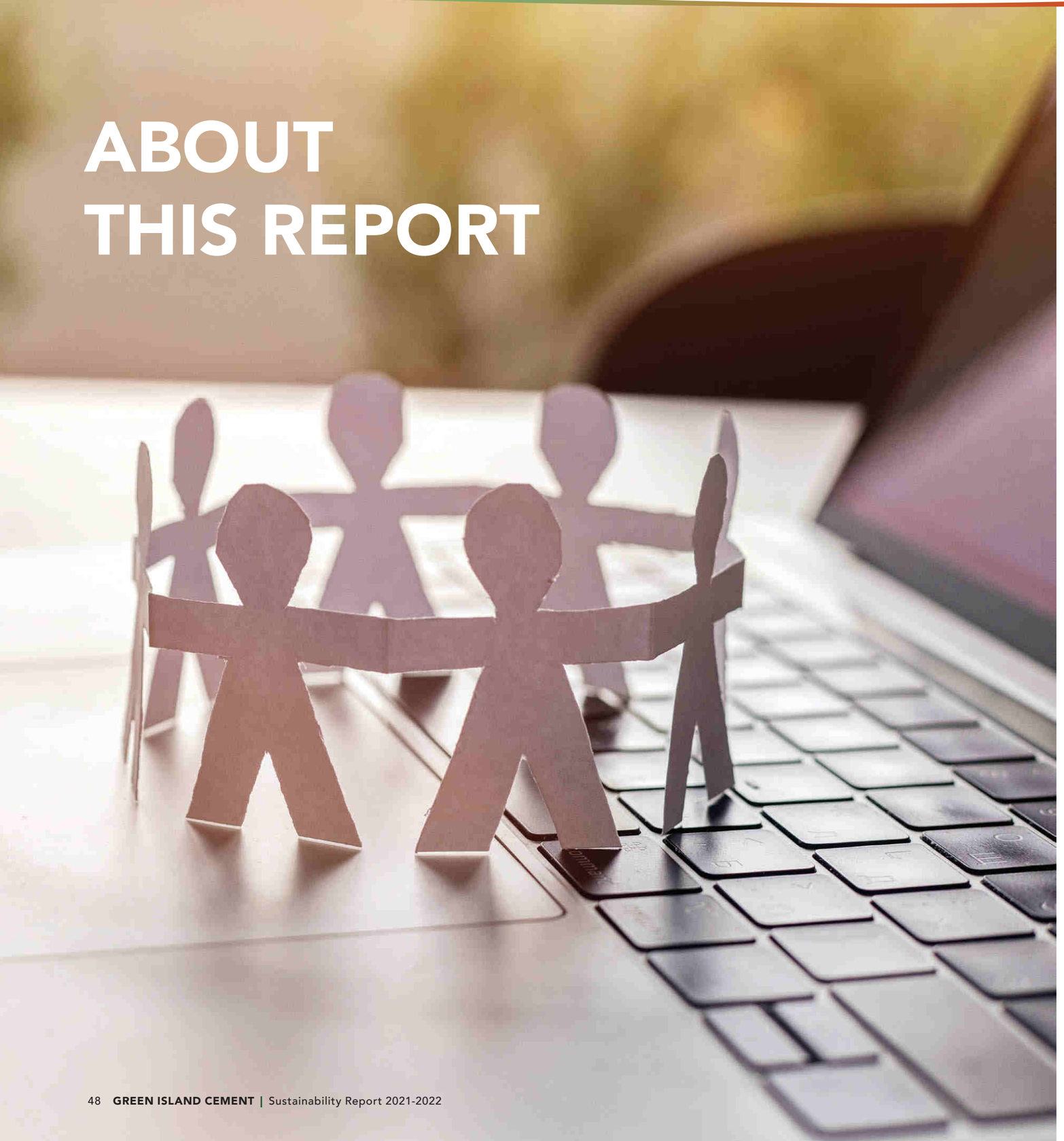
Through this programme, employees can earn a monthly incentive of HK$300 for working safely. However, to maintain high safety standards, penalties are also implemented for unsafe acts, with deduction of HK$100 for Level 1 violations and HK$300 for Level 2 violations. Our ultimate goal is to build a workplace culture where safety is everyone's responsibility, with each person acting as a safety officer. This commitment drives us toward achieving our vision of a zero-incident environment.

Enhancing Safety Awareness: Heat Stroke Drill at Tap Shek Kok Plant

With rising summer temperatures, we have implemented additional measures to protect employees working outdoors, including heat stroke assessments as part of our daily safety working cycle, and the installation of more shelters and portable drinking water stations to prevent heat-related illnesses. We also provide training on heat stroke awareness to enhance workers' understanding of the risks.

To further enhance safety awareness, we conducted a Heat Stroke Drill at the Tap Shek Kok Plant in August 2022, with 11 participants taking part in this 30-minute training session. Staff from the Security and Fire Service, Group Safety and Control Room, and Observers participated in the drill. Following the exercise, all parties collaborated to share insights and review the process, identifying areas for improvement. The Safety Officer subsequently prepared a comprehensive report, reinforcing our commitment to maintaining a safe working environment for all employees.

ABOUT THIS REPORT



We are pleased to present our Fourth Sustainability Report (the Report), which covers the reporting period from 1 January 2021 to 31 December 2022. The Report highlights our approach to and performance in sustainability throughout our operations in Hong Kong and Mainland China, with an emphasis on Hong Kong. You may refer to the Sustainability Report published by our Mainland China operations at https://www.gggic.com/link/devrep.html for more detailed information on their ESG performance.

SCOPE

The scope of this Report includes our three core business locations, namely our Hong Kong Division, Green Island Cement Company Limited (GICL) located in Tap Shek Kok; the Guangdong GITIC Green Island Cement Company Limited (GGGIC); and Green Island Cement (YunFu) Company Limited (GICYF); as well as Yunfu Xiangli Cement Company Limited (XiangLi), a cement grinding plant and jetty facility in Yunfu that we acquired in 2018. In this Report, we also provide an overview of our company, core values and commitment to sustainability. In addition, we have included our approach to managing various impacts from our operations and production, as well as initiatives regarding employees, suppliers and the community.

REPORTING STANDARDS

The Report has been developed referencing a locally recognised reporting framework, namely the Hong Kong Stock Exchange's (HKEx) Appendix 27 of the Main Board Listing Rules (HKEx ESG Guide). In addition, the report also refers to recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) to disclose climate-related information and progress on related initiatives. The Content Index of this report enables readers to cross-reference our disclosures.

WE VALUE YOUR FEEDBACK

Your feedback is valuable to our continuous improvement. We welcome feedback and questions on this Report and encourage you to share any queries or comments with us at sustainability@gich.com.hk.

SUSTAINABILITY AWARDS AND RECOGNITION

Category	Year	Award	Organization
Environment	2021	Hong Kong Awards for Environmental Excellence • (Manufacturing and Industrial Services) – Bronze	Environmental Campaign Committee X Environmental Protection Department
	2021	BOCHK Corporate Low-Carbon Environmental Leadership Awards • Silver	Federation of Hong Kong Industries
	2021	Hong Kong Green Awards, Green Management Award • (Corporate) – Gold	Green Council
	2022	BOCHK Corporate Low-Carbon Environmental Leadership Awards • Bronze	Federation of Hong Kong Industries
	2022	Hong Kong Awards for Environmental Excellence • (Manufacturing and Industrial Services) – Certificate of Merit	Environmental Campaign Committee X Environmental Protection Department
	2022	Hong Kong Green Awards, Green Management Award • (Corporate) – Gold	Green Council
Health and Safety	2021	The 20th Hong Kong Occupational Safety and Health Award • (Category: Safety Performance Award – Other Industries) – Outstanding Award	Occupational Safety and Health Council
	2021	Occupational Health Award 2020-21 • (Category: Joyful @ Healthy Workplace Best Practices Award – Enterprise/Organisation) – Outstanding Award	Occupational Safety and Health Council
	2022	The 21st Hong Kong Occupational Safety and Health Award • (Category: OSH Annual Report Award) – Merit Award	Occupational Safety and Health Council
	2022	Occupational Health Award 2021-22 • (Category: Joyful @ Healthy Workplace Best Practices Award – Enterprise/Organisation) – Excellence Award	Occupational Safety and Health Council

HKEX ESG GUIDE CONTENT INDEX

Subject Areas, Aspects, General Disclosures and KPIs			Section	Explanation/ Remarks
A. Environmental				
Aspect A1: Emissions	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste		Greener Future: Our Environmental Responsibility • Environmental Management Approach	During the reporting period, we complied with all applicable environmental laws and regulations related to emissions, water discharge and waste management, such as: Air Pollution Control Ordinance (Cap.311) Waste Disposal Ordinance (Cap.354) Water Pollution Control Ordinance (Cap.358) Noise Control Ordinance (Cap.400) Ozone Layer Protection Ordinance (Cap.403)
	KPI A1.1	The types of emissions and respective emissions data	Greener Future: Our Environmental Responsibility • Reducing our Emissions	2021 / 2022 NOx (tonnes) 1,618 **1,143** SOx (tonnes) 162 **124** Scope 1 emission (tonne CO_2e) 2,908,812 **2,531,156** Scope 2 emission (tonne CO_2e) 176,610 **152,021**
	KPI A1.2	Greenhouse gas emissions in total and intensity	Greener Future: Our Environmental Responsibility • Reducing our Emissions	
	KPI A1.3	Total hazardous waste produced and intensity	Content Index	2021 / 2022 Total hazardous waste produced (tonnes) 73 **85** Total non-hazardous waste produced (tonnes) 3,213 **2,597**
	KPI A1.4	Total non-hazardous waste produced and intensity		
	KPI A1.5	Description of emissions target(s) set and steps taken to achieve them	Governance for Good: Embedding Sustainability • Climate-related risks and opportunities Greener Future: Our Environmental Responsibility • Reducing our Emissions	
	KPI A1.6	How hazardous and non-hazardous waste is handled, reduction initiatives and results achieved	Content Index	The main chemical waste generated in Hong Kong includes spent machine lubrication liquid (L73) and grease (S73). It was collected and disposed of via an EPD-registered company.

Subject Areas, Aspects, General Disclosures and KPIs			Section	Explanation/ Remarks
A. Environmental *(Cond't)*				
Aspect A2: Use of Resources	General disclosure Policies on efficient use of resources, including energy, water and other raw materials		Greener Future: Our Environmental Responsibility • Reducing our Overall Energy Consumption • Circularity in Material Efficiency	
	KPI A2.1	Direct and/or indirect energy consumption by type and intensity	Greener Future: Our Environmental Responsibility • Reducing our Overall Energy Consumption	2021 / 2022 Electricity purchased (MWh) 346,010 **291,057** Coal or Coal Products (GJ) 11,403,275 **9,930,251** Water consumption (cubic metres) 1,944,219 **1,647,655**
	KPI A2.2	Total water consumption and intensity	Greener Future: Our Environmental Responsibility • Water Conservation	
	KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them	Greener Future: Our Environmental Responsibility • Reducing our Overall Energy Consumption	
	KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them	Greener Future: Our Environmental Responsibility • Water Conservation	We are not aware of any issues in sourcing water that is fit for purpose. We collect rainwater and treated domestic waste water to supplement the purchased domestic water; they account for up to 45% of total water consumption.
	KPI A2.5	Total packaging material used for finished products	Greener Future: Our Environmental Responsibility • Circularity in Material Efficiency	2021 / 2022 Total packaging material used for finished products (tonnes) 2,613 **2,321**
Aspect A3: The environment and natural resources	General disclosure Policies on minimising the issuer's significant impact on the environment and natural resources		Greener Future: Our Environmental Responsibility • Circularity in Material Efficiency	
	KPI A3.1	The significant impacts of activities on the environment and natural resources, and the actions taken to manage them		

Subject Areas, Aspects, General Disclosures and KPIs			Section	Explanation/ Remarks
A. Environmental *(Cond't)*				
Aspect A4: Climate Change	General disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer		Governance for Good: Embedding Sustainability • Climate-related risks and opportunities	
	KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them	Governance for Good: Embedding Sustainability • Climate-related risks and opportunities	
B. Social – Employment and Labour Practices				
Aspect B1: Employment	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunities, diversity, anti-discrimination and other benefits and welfare		Fostering Well-being: Our People and Communities • Employee Management	
	KPI B1.1	Total workforce by gender, employment type, age group and geographical region	Content Index	**2021** / **2022** Total workforce by gender: Male 926 / Female 134 / **Male 925** / **Female 131** Total workforce by geographical region: Hong Kong 354 / Mainland 706 / **Hong Kong 349** / **Mainland 707**
	KPI B1.2	Employee turnover rate by gender, age group and geographical region		Employee turnover rate by gender: Male 5.0% / Female 1.6% / **Male 6.0%** / **Female 1.5%** Employee turnover rate by geographical region: Hong Kong 14.4% / Mainland 2.7% / **Hong Kong 16.3%** / **Mainland 3.1%**
Aspect B2: Health and safety	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards		Fostering Well-being: Our People and Communities • Health and Safety	
	KPI B2.1	Number and rate of work-related fatalities		
	KPI B2.2	Lost days due to work injury		
	KPI B2.3	Occupational health and safety measures adopted, how they are implemented and monitored		

Subject Areas, Aspects, General Disclosures and KPIs			Section	Explanation/ Remarks
B. Social – Employment and Labour Practices *(Cond't)*				
Aspect B3: Development and training	General disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities		Fostering Well-being: Our People and Communities • Employee Development	
	KPI B3.1	The percentage of employees trained by gender and employee category	Content Index	**2021** / **2022** Percentage of employees trained by employment category: Non-manager 97% / Manager 3% / **Non-manager 97%** / **Manager 3%** Percentage of employees trained by gender: Male 87% / Female 13% / **Male 87%** / **Female 13%**
	KPI B3.2	The average training hours completed per employee by gender and employee category	Content Index	**2021** / **2022** Average training hours by employment category: Non-manager 20.3 / Manager 22.7 / **Non-manager 21.29** / **Manager 49.2** Average training hours by gender: Male 20.3 / Female 20.5 / **Male 21.8** / **Female 23.9**
Aspect B4: Labour standards	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child or forced labour		Fostering Well-being: Our People and Communities • Employee Management	We adhere to the guidance of and remain in compliance with the Employment of Children Regulations under the Hong Kong Employment Ordinance (Cap. 57) and Mainland China's the Law on the Protection of Minors, Regulations on the Prohibition of Child Labour and the Notice on the Prohibition of Child Labour.
	KPI B4.1	Measures to review employment practices to avoid child and forced labour		
	KPI B4.2	Steps taken to eliminate such practices when discovered		

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Subject Areas, Aspects, General Disclosures and KPIs			Section	Explanation/ Remarks
B. Social – Operating Practices				
Aspect B5: Supply chain management	General disclosure Policies on managing environmental and social risks of supply chain		Governance for Good: Embedding Sustainability • Managing our Supply Chain	**Number of suppliers by geographical region** 2021 2022 Hong Kong 1,339 **624** Mainland China 616 **520** Asia 112 **54** UK 58 **11** Continental Europe 71 **30** Australia 30 **19** Canada 11 **0** Others (USA, Bahamas) 138 **35** Total 2,375 **1,293**
	KPI B5.1	Number of suppliers by geographical region	Content Index	
	KPI B5.2	Practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored	Governance for Good: Embedding Sustainability • Managing our Supply Chain	
	KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored	Governance for Good: Embedding Sustainability • Managing our Supply Chain	
	KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored	Governance for Good: Embedding Sustainability • Managing our Supply Chain Greener Future: Our Environmental Responsibility • Sustainable Procurement	
Aspect B6: Product responsibility	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress		About Green Island Cement • Integrating Sustainability in Product Quality Assurance Content Index	No products sold or shipped were subject to recalls for safety and health reasons and no products and service-related complaints were received during the reporting period.
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons		
	KPI B6.2	Number of products and service-related complaints received and how they are dealt with		
	KPI B6.3	Practices relating to observing and protecting intellectual property rights		
	KPI B6.4	Quality assurance process and recall procedures		
	KPI B6.5	Consumer data protection and privacy policies, how they are implemented and monitored	Governance for Good: Embedding Sustainability • Customer Data Protection Policy	

Subject Areas, Aspects, General Disclosures and KPIs			Section	Explanation/ Remarks
B. Social – Operating Practices *(Cond't)*				
Aspect B7: Anti-corruption	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering		Governance for Good: Embedding Sustainability • Business Ethics and Integrity	
	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases		
	KPI B7.2	Preventive measures and whistleblowing procedures, how they are implemented and monitored		
	KPI B7.3	Description of anti-corruption training provided to directors and staff		
B. Social – Community				
Aspect B8: Community Investment	General disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests		Fostering Well-being: Our People and Communities • Extending employees' well-being to the community	
	KPI B8.1	Focus areas of contribution		
	KPI B8.2	Resources contributed to the focus area		

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