

Prepared by Green Council in September 2025

ENVIRONMENTAL SOCIAL AND GOVERNANCE REPORT 2025

Site formation and infrastructure
works for Yuen Long South
First Phase Development - Contact 3
Contract No. YL/2022/01



Green Council supports the Sustainable Development Goals

Anniversary
Anniversary of Hong K

Sustainable Impact Award

Road and
中國路橋

香港綠色日
綠續日誌



GOVERNANCE



SOCIAL



ENVIRONMENTAL



中國路橋工程有限責任公司
CHINA ROAD AND BRIDGE CORPORATION

INTRODUCTION

China Road and Bridge Corporation (Hong Kong) (referred to as “CRBC”) is a leading construction firm offering a comprehensive range of services, including design, engineering, construction, project management, and investment in various infrastructure projects. This Environmental, Social and Governance Report (the “ESG Report”) outlines the environmental, social, and governance (“ESG”) initiatives, strategies, and performance at Yuen Long South First Phase Development - Contract 3 (YL/2022/01) (the “Site”), highlighting its commitment to sustainable development. The Site works include site clearance, land decontamination, reconstruction of the Tong Yan San Tsuen Interchange, and improvements to existing roads such as Shan Ha Road, Long Hon Road, and Tong Tai Road. Additional activities comprise the construction of water mains, drainage and sewerage systems, subways, cycle tracks, and footpaths, as well as environmental mitigation measures like noise barriers and low-noise road surfacing.

The ESG Governance Structure

The top management is responsible for overseeing and defining the Site’s ESG strategies. It also ensures the effectiveness of the Site’s risk management and internal controls by conducting an annual assessment.

The Site has established an ESG Force Group (“ESG Group”) led by senior management to systematically address ESG matters. The ESG Group is responsible for collecting and analysing relevant ESG data, as well as identifying the Site’s key ESG challenges. It also participates in training programmes and workshops on ESG, climate-related risks, and other critical topics. These initiatives ensure that top management remains informed of the evolving ESG landscape and are equipped to effectively discharge their responsibilities. In addition, the ESG Group provides periodic reports to top management to facilitate the evaluation, implementation, and continuous refinement of the Site’s ESG strategies.

REPORTING SCOPE

The ESG Report covers the Site’s working activities in Hong Kong, where its operations are based.

REPORTING FRAMEWORK

For the reporting framework, the Site collaborates with the Green Council (GC) by adopting the Framework for ESG Assessment for Construction Sectors (ESGACS). This framework is built on seven guiding principles and covers fifteen aspects, while the Site adopts the framework, only the applicable aspects are implemented. For aspects deemed not applicable, an evaluation is conducted, and the reasons for their non-application are documented where necessary.



ESG Assessment for Construction Sectors (ESGACS)

The ESG Report has also been prepared with reference to the Hong Kong Exchanges and Clearing Limited’s Environmental, Social and Governance reporting framework.

REPORTING PERIOD

The ESG Report provides a comprehensive account of the Site’s environmental, social, and governance activities and measures implemented during the financial year ended 30 June 2025 (the “Year”). The Report outlines key initiatives undertaken to strengthen sustainability performance, enhance stakeholder engagement, and ensure compliance with applicable regulatory and governance standards.

STAKEHOLDER ENGAGEMENT

To strengthen the Site's sustainable development initiatives, key stakeholders were engaged to identify material sustainability topics and potential risks through various channels, including routine meetings and communications. Key stakeholders include, but are not limited to, client (government), contractors/subcontractors, employees, suppliers, and the public. Stakeholders' expectations have been taken into account through a range of diversified engagement methods, as outlined below:

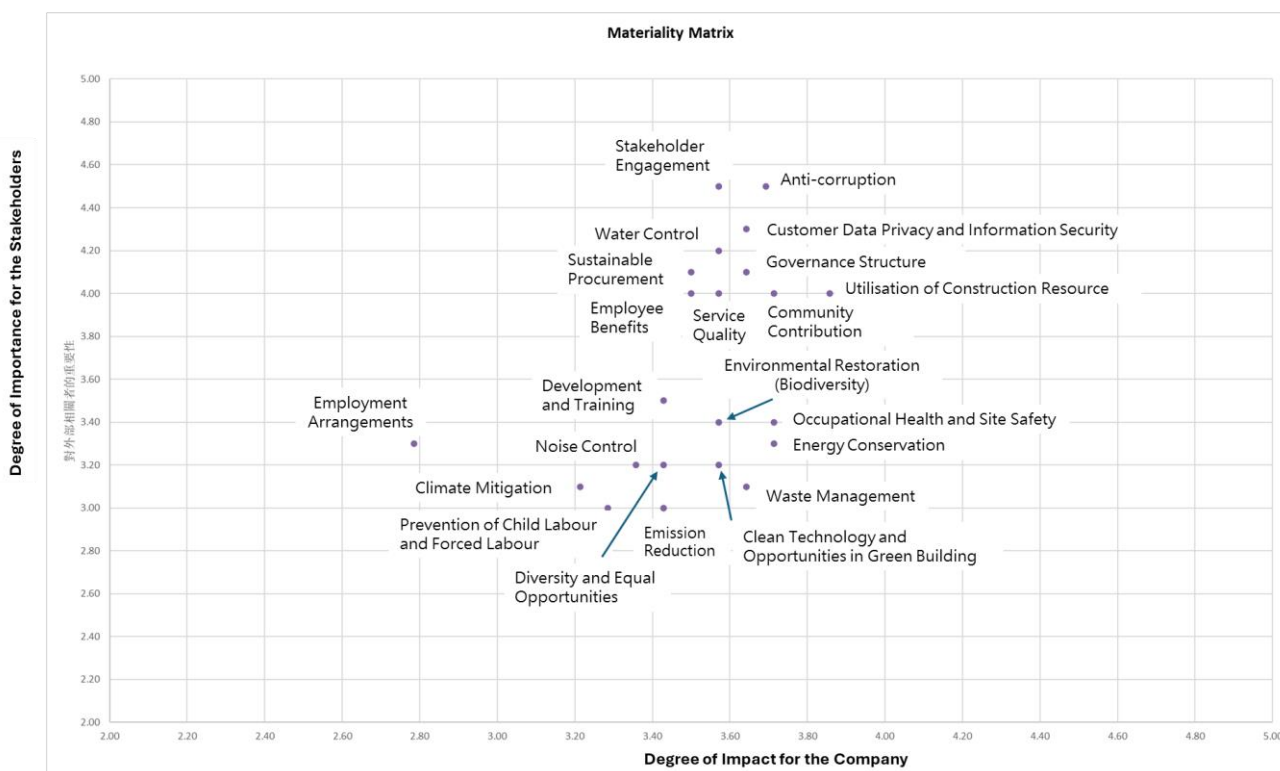
Stakeholders	Engagement Methods	Expectations
Client/Government	<ul style="list-style-type: none"> Regular progress meetings Annual, quarterly and interim reports Direct communication 	<ul style="list-style-type: none"> Compliance with laws and regulations Timely delivery Cost efficiency Quality assurance Transparency
Contractors/Subcontractors	<ul style="list-style-type: none"> Regular site meetings Performance reviews 	<ul style="list-style-type: none"> Fair contracts Safe working conditions Timely payments
Employees	<ul style="list-style-type: none"> Toolbox talks/safety training Email and suggestion boxes Welfare facilities 	<ul style="list-style-type: none"> Safe workplace Fair wages Proper equipment
Suppliers	<ul style="list-style-type: none"> Procurement meetings Contractual agreements 	<ul style="list-style-type: none"> Fair and open procurement Long-term partnerships Timely payments
Public	<ul style="list-style-type: none"> Public engagement sessions Newsletters Company website 	<ul style="list-style-type: none"> Transparency Minimal disruption Accountability

The Site endeavours to actively listen to and collaborate with its stakeholders, ensuring that their opinions are expressed through effective communication channels.

MATERIALITY ASSESSMENT

The Board and management are responsible for the Site’s key functions that have actively participated in the preparation of the ESG Report. They supported the Site in reviewing its operations, identifying key ESG issues, and assessing their significance to both the business and its stakeholders. In alignment with the Site’s sustainability vision, operations will continue to be conducted with high ethical standards while delivering sustainable returns to stakeholders.

To ensure a comprehensive reflection of stakeholder perspectives, the Site developed a questionnaire based on the material ESG aspects identified and invited various stakeholder groups to provide input. The results of this materiality assessment are presented in the form of a materiality matrix, as shown below:



The analysis of the Materiality Matrix reveals a clear prioritisation of issues based on their significance to both stakeholders and the Site. High-priority issues located in the top-right quadrant, such as Occupational Health and Site Safety, Service Quality, Emission Reduction and Climate Mitigation, Waste Management and Energy Conservation, Clean Technology and Opportunities in Green Building, Customer Data Privacy and Information Security, and the Prevention of Child Labour and Forced Labour, are critical and must be integrated into project execution and sustainability strategies as they represent the company’s licence to operate.

These issues demand immediate attention and resources to ensure compliance, risk mitigation, and alignment with stakeholder expectations. Operationally significant issues, including Utilisation of Construction Resources, Governance Structure, and Sustainable Procurement, while less visible to external stakeholders, play a vital role in enhancing efficiency, governance, resilience, and cost-effectiveness, thereby supporting the project's long-term sustainability. Stakeholder-driven issues like

Community Contribution, Development and Training, Diversity and Equal Opportunities, Noise Control, and Environmental Restoration highlight the social expectations for inclusivity and community value, which are essential for maintaining reputation and trust within the communities impacted by the project. Lastly, lower-priority issues such as Water Control, Anti-corruption, Employment Arrangements, and Employee Benefits, though currently less material, remain fundamental baseline requirements whose importance may fluctuate depending on project context, geography, and regulatory factors, necessitating ongoing monitoring to adapt to changing conditions and maintain compliance.

During the Year, the Site confirmed that it had established appropriate and effective management policies and internal control systems for ESG matters and verified that the disclosures complied with the requirements of the ESG Reporting Guide.

A. ENVIRONMENTAL

A1. Emissions

General Disclosure and KPIs

Air Emissions

As an infrastructure contractor, the Site recognises its responsibility to reduce emissions. Given that the majority of operations are construction-based, the Site has implemented an environmental management system and procedures designed to effectively reduce emission levels. The Site remains fully committed to complying with all applicable environmental laws and regulations in Hong Kong, including the Motor Vehicle Idling (Fixed Penalty) Ordinance (Cap. 611) and the Road Traffic Ordinance (Cap. 374). Furthermore, there were no concluded cases relating to emissions brought against the Site or its employees during the year.

The Site's air pollutant emissions are categorised into two sources — (i) machinery, equipment and generators used at construction sites; and (ii) passenger cars for management and staff transportation and motor vehicles for the delivery of construction materials.

Indicators	Unit	For the year ended 30 June 2025
Nitrogen oxides (NOx)	kg	15,683.61
Sulphur oxide (SOx)	kg	1,030.02
Particulate matter (PM10)	kg	1,102.95

Sprinklers and mist machines were deployed at the construction site to suppress dust and improve air quality.

GHG Emissions

The Site's principal GHG emissions were generated from petrol and diesel consumption by vehicles (Scope 1); purchased electricity (Scope 2) and electricity used for processing fresh water and sewage by government departments, paper waste disposal at landfills, and business air travel (Scope 3).

Scope 1 – Direct GHG Emissions

The Site has implemented the following measures to mitigate direct GHG emissions arising from petrol and diesel consumption by vehicles in its operations:

- Switched off vehicle engines when not in use
- Encouraged the use of public transportation in place of Site vehicles for business commutes

Scope 2 – Energy Indirect GHG Emissions

Electricity consumption accounted for the largest share of GHG emissions within the Site. To address this, the Site has implemented measures aimed at reducing energy consumption, which are detailed under “Aspect A2 – Use of Resources.”

Scope 3 – Other Indirect GHG Emissions

Electricity used for processing fresh water and sewage, office paper & general waste disposal and business air travel are classified under the category of other indirect GHG emissions. Recognising that air travel generates significant GHG emissions, the Site undertakes such travel only when necessary, with teleconferences and web conferences serving as the preferred communication channels.

Summary of GHG emissions performances:

Indicators ¹	Unit ²	For the year ended 30 June 2025
Scope 1 – Direct GHG Emissions		
• Petrol and diesel consumption	MTCO ₂ e	650.05
Scope 2 – Energy Indirect GHG Emissions		
• Purchased electricity	MTCO ₂ e	82.47
Scope 3 – Other Indirect GHG Emissions		
Fresh Water	MTCO ₂ e	7.70
Sewage	MTCO ₂ e	6.61
Paper (Recycled)	MTCO ₂ e	(2.51)
Total GHG Emissions	MTCO ₂ e	744.32
Total GHG Emissions Intensity (Site Area)	MTCO ₂ e/m ²	0.0031

Note:

1. GHG emissions data is presented in terms of carbon dioxide equivalent and is based on, but not limited to, “The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standards” issued by the World Resources Institute and the World Business Council for Sustainable Development, “How to prepare an ESG report – Appendix 2: Reporting Guidance on Environmental KPIs” issued by the Stock Exchange, the “Global Warming Potential Values” from the IPCC Fifth Assessment Report, 2014 (AR5), the Sustainability Report published by the CLP Power Hong Kong Limited, Annual Report published by the Water Supplies Department of Hong Kong and the Sustainability Report published by the Drainage Services Department of Hong Kong.
2. MTCO₂e is defined as tonnes of carbon dioxide equivalent.

Sewage Discharges into Water and Land

Due to the Site's business nature, the discharges into land were insignificant. Similarly, discharges into water were insignificant; sewage discharge was covered by the water bill.

Waste Management

Hazardous Waste Management

Due to the Site's business nature, no material hazardous waste was generated during the Year.

Non-hazardous Waste Management

Non-hazardous waste was generated primarily from construction activities, office operations, and daily site functions. To minimise environmental impact, the Site adopted a structured waste management hierarchy:

Waste Reduction: Measures were implemented to reduce waste at source, including digitalisation of documents to cut paper use. C Easy, an electronic ticketing system to handle and process e-Chit, was introduced to replace traditional paper tickets.

Reuse and Recycling: Recycling bins were placed across the Site to facilitate recycling of paper, plastics and metals. The Site also contracted licenced recycling companies to recycle non-reusable tires and water-filled barriers on a regular basis. External rock fill resources were reused to build temporary access roads, reducing construction and demolition (C&D) waste generated. Furniture and electrical appliances from the headquarters were also reused.



Responsible Disposal: Non-recyclable waste was collected and disposed of through licensed contractors in compliance with regulations, ensuring safe and environmentally responsible treatment. Crushers were used for structural demolition projects. Driven hydraulically, the crusher breaks structural materials directly into smaller blocks or particles, facilitating subsequent clean-up and recycling.



By using Ground Granulated Blast Furnace Slag (GGBS) concrete, the demand for natural resources such as limestone can be significantly reduced.

Summary of Excavated Material production performance:

Indicators	Unit	For the year ended 30 June 2025
Excavated Material	MT	56,602.83
Reused / Recycled Excavated Material	MT	10,340.73
Reused / Recycled Excavated Material Percentage	%	18.27%

Summary of major non-hazardous waste production performance:

Indicators	Unit	For the year ended 30 June 2025
Metal	kg	176
Plastic	kg	234
Paper / Cardboard	kg	523
Total non-hazardous waste produced	kg	N/A

A2. Use of Resources

General Disclosure and KPIs

The site has demonstrated strong governance foundations, reinforced by the implementation of internationally recognised ISO management systems, ISO 9001 QMS, ISO 14001 EMS, ISO 45001 OHSMS and ISO 50001 EnMS. These ISO management systems complement the Site's governance framework by embedding measurable performance indicators and standardised processes.

Energy Consumption

In addition, the Site strives to further reduce energy consumption by adopting the following measures:

- Electric excavators featured high energy efficiency with lower operating costs and less maintenance were used
- Solar-powered road lighting, flashing warning lights, as well as fences and sensors were installed to improve safety at the construction site
- Solar-powered container units have been installed as rest areas for workers to provide a comfortable resting space
- Anomaly in electricity consumption will be investigated and preventive measures will be taken.



Summary of energy consumption performances:

Indicators	Unit	For the year ended 30 June 2025
Direct Energy Consumption • Petrol • Diesel	kWh	2,395,502.37
Indirect Energy Consumption • Electricity	kWh	217,014.00
Total Energy Consumption	kWh	2,612,516.37
Intensity (Site Area)	kWh/m ²	10.71

The next step is to install smart meters and conduct baseline audits, deploy additional renewable energy solutions, and adopt low-carbon technologies such as EV charging and electrification. Preventive maintenance programmes and internal carbon pricing in procurement will further embed energy efficiency into operations.

Water Consumption

The Site recognises the importance of water conservation. Apart from posting water conservation reminders around the Site's premises, the Site also regularly inspects water taps to prevent leakage and installs dual flush water cistern in toilets where possible. This was mainly due to the adoption of water-intensive practices for general cleaning and maintaining personal hygiene. Through the implementation of said water-saving measures, employees' awareness of water conservation has increased.

Sewage treatment and reuse systems are in place, rainwater and greywater are collected for cooling piling, and treated effluent is reused for non-potable applications such as cleaning operations.

Summary of water consumption performance:

Indicators	Unit	For the year ended 30 June 2025
Total water consumption	m ³	30,061.00
Intensity (Site Area)	m ³ /m ²	0.12

To build resilience, the site should protect water sources, minimise impervious surfaces, and install water-saving fixtures. Expanding rainwater harvesting, greywater recycling, and smart irrigation with native planting will enhance conservation.

A3. The Environment and Natural Resources

General Disclosure and KPIs

The Site does not engage in industrial production, therefore the overall environmental impact from the Site's business operations is relatively low. Nevertheless, the Site remains conscious of its existing and potential impacts, therefore regularly assesses the environmental risks of its business model, adopts preventive measures and ensures compliance with relevant laws and regulations.

Indoor Air Quality

Indoor air quality was regularly monitored and measured to safeguard the health and well-being of employees. During the Year, the indoor air quality of the Site's premises was assessed as satisfactory, meeting relevant standards and regulatory requirements.

To further enhance air quality, air purifying equipment was strategically placed throughout the premises to filter pollutants, contaminants, and dust particles. In addition, the air conditioning system was cleaned and maintained on a periodic basis, ensuring efficient ventilation and circulation of fresh air. These measures collectively contributed to maintaining a clean and healthy indoor environment.

Noise

The Site recognises noise as a critical environmental and social impact factor during construction activities. To mitigate potential disturbances, comprehensive noise control measures are implemented, including the use of low-noise machinery, the installation of soundproof barriers, and the scheduling of high-noise operations during designated hours to minimise disruption to surrounding communities.



Steel sheet pile construction was undertaken using a Silent Piler, which hydraulically presses steel sheet piles into the ground, significantly reducing noise compared to conventional methods. Wire saws were employed for cutting operations to minimise vibration and noise. In addition, Magnetic Tuned

Mass Dampers (MTMDs) were applied during sheet piling to absorb and counteract vibration energy, thereby reducing both vibration and noise pollution throughout the construction process.

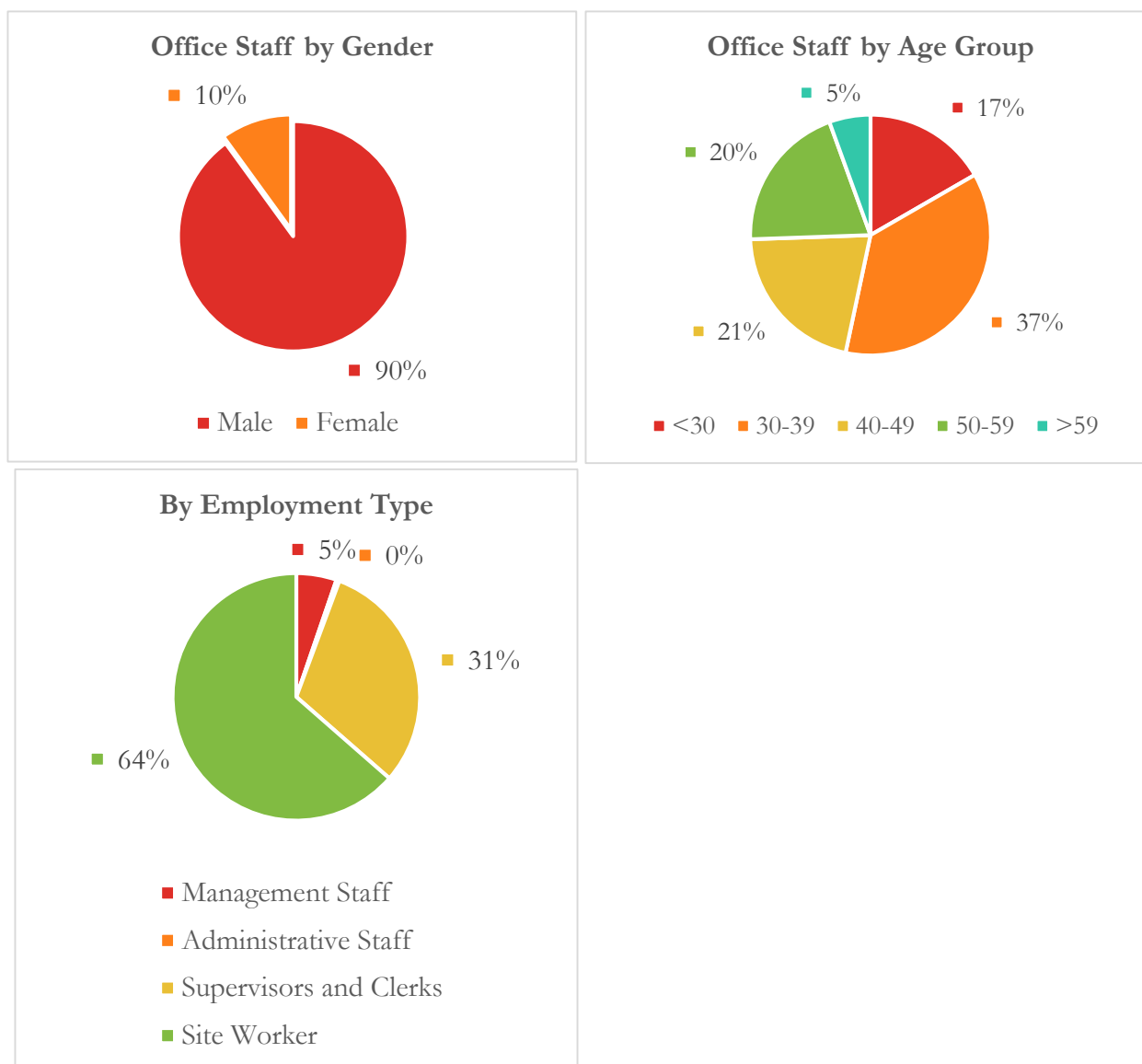
Continuous monitoring ensures compliance with regulatory standards, while proactive communication with stakeholders—including nearby residents and businesses—helps to address concerns, foster transparency, and maintain community trust.

B. Social

B1. Employment

General Disclosure

Human resources are the cornerstone of the Site. The Site recognises that its continued success is dependent on employees' talents and their dedication. Employment policies are formally documented in the Employee Handbook, covering recruitment, compensations, remuneration, diversity and equal opportunities, etc. The Site periodically reviews existing policies and employment practices to ensure continuous improvement of its employment standards and competitiveness against service providers of the similar industry. As of 30 June 2025, the Site employed a total of 157 site workers and 90 office staff, which included management, administrative personnel, supervisors, and clerks. The Site has a total of 157 site workers and 90 office staff covering management, administrative staff, supervisor and clerks. The breakdown of office staff by gender, age group and employment type were as follows:



During the Year, the overall employee turnover rate was 26%. The breakdown of turnover rate was as follows:

	Number of Employees Resigned	Percentage (%)
By Gender		
Male	23	100%
Female	0	0%
By Age Group		
<30 years old	2	9%
30-39 years old	12	52%
40-49 years old	6	26%
50-59 years old	3	13%
> 59 years old	0	0%

During the Year, the Site was not aware of any material non-compliance with employment-related laws and regulations that could significantly impact operations, including but not limited to the Employment Ordinance, Sex Discrimination Ordinance, Disability Discrimination Ordinance, Family Status Discrimination Ordinance, Race Discrimination Ordinance, and Minimum Wage Ordinance of Hong Kong.

Recruitment, Diversity and Equal Opportunities

Sustainable growth at the site relies on a non-discriminatory recruitment process and diverse talent. Employees are recruited through a robust, transparent, and fair process based solely on their experience and expertise, without regard to age, ethnicity, origin, gender identity, marital status, sexual orientation, or religion. This process is supported by the Site’s Recruitment Policy, which ensures a standardised selection procedure.

The Site believes all employees have the right to work in an environment free from discrimination, harassment, and vilification. It is committed to fostering an inclusive and harmonious workplace culture and maintains a strict zero-tolerance policy against any such behaviours.

Benefits and Welfare



The Site understands that robust benefits and welfare initiatives encourage employee retention and foster a sense of belonging. It offers attractive remuneration packages to employees and provides free on-site flu vaccinations, health checks, and blood donation opportunities to promote physical health and well-being, directly supporting SDG 3: Good Health and Well-Being.

Additionally, the Site hosted mental wellness seminars and created a supportive work environment, advancing SDG 8: Decent Work and Economic Growth, as well as SDG 11: Sustainable Cities and Communities by prioritising employee welfare and community resilience.

Promotion and Performance Review

Employee salaries are reviewed based on the results of their performance evaluations. Promotions are granted based on performance and the extent to which employees demonstrate the attributes necessary for the higher position.

Compensation and Dismissal

The Site compensates employees per the Employees' Compensation Ordinance of Hong Kong for injuries or diseases related to their employment. Unreasonable dismissal is strictly prohibited. Any dismissals will be based on lawful and reasonable grounds in accordance with internal policies.

B2. Health and Safety

General Disclosure

During the Year, the site was not aware of any material non-compliance with health and safety-related laws and regulations that could significantly impact operations, including but not limited to the Occupational Safety and Health Ordinance of Hong Kong.

Throughout the Year, there were no work-related fatalities. The site recorded 0 days lost due to work injuries and reported no cases of work-related injuries.

Occupational Health and Safety Management

The Site places a high priority on providing employees with a safe and healthy working environment and is committed to safeguarding the wellbeing of all employees. The Site achieved "One Million Safe Work Hours" milestone, celebrating its strong safety culture and commitment to zero accidents. The Site places a high priority on providing employees with a safe and healthy working environment, demonstrating a commitment to safeguarding the well-being of all staff. The site achieved the "One Million Safe Work Hours" milestone, a testament to its strong safety culture and commitment to zero accidents.

By distributing watermelons and herbal tea, arranging ice cream trucks, and providing a variety of cooling supplies, the Site actively safeguards workers' health and well-being during periods of extreme heat.



B3. Development and Training

General Disclosure



Provision of Training Opportunities

To further enhance workplace safety, the Site implements regular safety training programmes. These training sessions cover essential safety practices, emergency response procedures, and risk assessment strategies, ensuring that the staff is equipped with the knowledge and skills needed to maintain a safe working environment.

During the Year, the Site’s number of training hours were as follows:

	Training hours	Percentage (%)
By employment category		
Management	36	5
Other employees	752	95

B4. Labour Standards

General Disclosure

Prevention of Child and Forced Labour

The site ensures that no employee is compelled to work against their will, and the recruitment of child labour is strictly prohibited, with all employees being over 18 years old. Personal data is collected, and original supporting documents are required for candidate verification. The Human Resources Department verifies identity documents, and overtime work is voluntary to protect employee interests. Any violations of labour standards will be addressed immediately in accordance with applicable laws.

During the year, the site was not aware of any material non-compliance with laws related to child and forced labour that could significantly impact operations, including the Employment Ordinance of Hong Kong.

B5. Supply Chain Management

General Disclosure

Procurement Process

For the procurement of goods and services, the Site follows a green procurement policy that prioritises the reputation of suppliers, prevailing market prices, and delivery times. To mitigate over-reliance on any single supplier, the Site engages multiple suppliers for each category of goods and services, thereby ensuring a stable supply chain.

The Site periodically evaluates and monitors supplier performance to confirm compliance with established quality and service standards. If a supplier's services fall below the agreed-upon standards, the partnership may be terminated.

B6. Product/Service Responsibility

General Disclosure

The Site has implemented a comprehensive quality assurance process to ensure that the products and services provided comply with relevant local laws and regulations and meet exceptional quality standards.

During the Year, the Site was not aware of any non-compliance with laws and regulations related to health and safety, advertising, labelling, or privacy matters concerning products and services. Additionally, the site did not receive any complaints related to products or services during the year.

Data Privacy Protection

The Site is committed to safeguarding all sensitive information related to its stakeholders. Unauthorised access to the site's information systems and the disclosure of business terms are strictly prohibited. Additionally, all employees are required to sign an Employee Non-Disclosure Agreement and are held accountable for any unauthorised dissemination of confidential customer information without prior consent.

B7. Anti-corruption

General Disclosure

Solid corporate governance is essential for the Site's sustainable growth. The Site firmly adheres to a zero-tolerance policy regarding behaviours that violate Hong Kong laws and regulations and significantly undermine the business integrity and reputation of the Site.

The Site has established an Anti-Bribery and Corruption Policy regarding the acceptance of business courtesies and gratuities. Bribery, fraud, and corruption in any form or in relation to any parties are strictly prohibited on the Site.

To reinforce this commitment, the Site provides regular anti-bribery training to staff, ensuring that all employees are aware of their responsibilities and the importance of maintaining ethical standards.

During the year, the Site was not aware of any material non-compliance with laws and regulations related to bribery, extortion, fraud, or money laundering that could significantly impact operations. Additionally, there were no legal cases concluded regarding corrupt practices against the site or its employees during the Year.

B8. Community Investment

General Disclosure

The Site's people-oriented culture extends beyond its operations. It has long been committed to supporting local communities and has established policies aimed at addressing social and community needs through community investment.

During the Year, the site conducted 24 stakeholder meetings and proactively engaged with villagers and their representatives to understand concerns and collaboratively develop solutions to minimise surrounding construction disturbances.

The site sponsored four community events and participated in six volunteer initiatives, contributing a total of 25 volunteer hours. The Site took part in the Green Council's "Hong Kong Green Day 綠續回贈" campaign, raising environmental awareness and supporting ESG and CSR initiatives in alignment with SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action).

The Site participated in Yuen Long Christmas volunteer activities and toy donations, supporting underprivileged families and promoting social inclusion, thereby advancing SDG 1 (No Poverty), SDG 10 (Reduced Inequalities), and SDG 11 (Sustainable Cities and Communities). Additionally, the Site joined the Lifewire Run TKO 2024 to raise awareness and funds for children with rare diseases, fostering community engagement and well-being in alignment with SDG 3 (Good Health and Well-Being) and SDG 17 (Partnerships for the Goals).

The Site also organised volunteer activities in Yuen Long to collect surplus bread from bakeries and distribute it to those in need, helping to alleviate hunger and reduce food waste. This initiative supports SDG 2 (Zero Hunger), SDG 12 (Responsible Consumption and Production), and SDG 11 (Sustainable Cities and Communities) by promoting resource sharing and community care.

These initiatives underscore the impact of community engagement in driving progress toward the Sustainable Development Goals and building a more equitable and resilient society. Looking ahead, the site intends to further engage with the community through more active participation in programmes that not only benefit society but also foster a strong corporate culture.

