



As trustworthy investment, construction and operation service provider with global business footprints, China Overseas Holdings Limited ("COHL" or the "Group") adheres to the corporate mission of "We Manage Happiness" and continues to strengthen its services and expand its research and development ("R&D") capabilities in the face of the COVID-19 pandemic. In 2022, the Group continues to invest resources in the business fields of property development and operation, construction and infrastructure investment and property services. It benefits from strong demand from customers for industry-leading services, with an overall operating revenue of HKD316.4 billion.

Date of Establishment

June 1979

Total assets

Over HKD 1,278.3 billion

Business coverage

Hong Kong, Macau, more than 100 major cities in Mainland China and overseas regions such as the United States, Canada, the United Kingdom, Australia, Singapore, and Portugal

Total number of employees

More than 75,000 people

Operating revenue

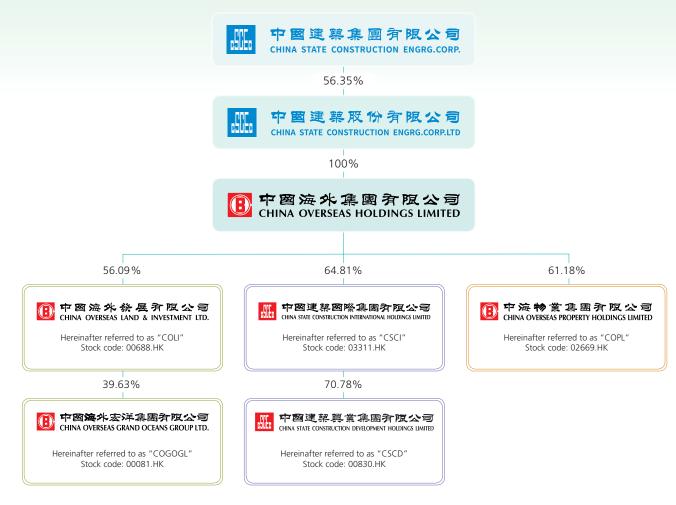
нко 321.5 billion

Sum of newly signed contracts

нко 532.5 billion

The above data is as of 31 December 2022

ORGANISATIONAL STRUCTURE



Shareholding percentage as at 31 December 2022

BUSINESS OVERVIEW

COHL is a subsidiary of China State Construction Engineering Corporation ("CSCEC"). The Group has five listed companies in Hong Kong, covering property development and operation, construction and infrastructure investment and property services. It has constructed a whole industry chain model integrating investment, construction, operation and services.

Property development and operation business

As a pioneer and leader in the real estate industry in Mainland China, the property development and operation business of the Group has achieved contracted property sales of HKD329.7 billion¹ in 2022, ranking top three in the industry. It has been awarded the title of "China Blue Chip Real Estate Developer" and "Leading Brand of China Real Estate Company" for 19 consecutive years.

The Group deeply cultivates three major business operations of real estate development, urban services and design services, reshaping urban regional functions, optimising urban spatial layout, and boosting local economic and social development. Its operating areas include Mainland China, Hong Kong, Macau, and overseas regions.

 Property development

COLI

- Commercial development
- Urban services
 Senior care industry

COGO

Education industry

The construction and infrastructure investment business adheres to a "technology-empowered" strategy and has developed a business model integrating "technology + investment + construction + asset operation", aiming to become a new type of building industrialisation group with strong international competitiveness.

In 2022, the Group promotes business expansion with its years of experience developing the Guangdong-Hong Kong-Macau Greater Bay Area. The construction and infrastructure investment business has achieved a newly signed contract amount of HKD160.7 billion, operating revenue of HKD102 billion and a net profit of HKD14 billion during the Year. Compared with the previous year, its operating revenue and net profit increased by 32% and 17% respectively.

- Buildina construction
- Curtain wall system
- Infrastructure investment
- Bridge management
- Civil engineering
- Prefabricated construction
- Thermal power plant





CSCI

CSCD

Property services business

The property services business provides full lifecycle services with excellent construction products, and is committed to standardisation, delicacy, professionalism and customisation, creating higher value for customers and business partners, as well as facilitating industry development.

In 2022, its operating revenue and profit attributable to shareholders amounted to HKD12.6 billion and HKD1.2 billion respectively. Compared with the previous year, the two increased by 34% and 29% respectively.

- Property management services
- Value-added services to non-residents
- Value-added services to residents
- Car parking space trading business
- City operations



COPL

Calculated at the exchange rate of RMB1 to HKD1.1185 on 30 December 2022.

KEY PROJECT REVIEW

Carbon Emission Management



Organic Resources Recovery Centre Phase 2 (O·PARK2) in Hong Kong

As the first construction project in Hong Kong and Mainland China to achieve carbon neutrality during the construction period, O·PARK2 has comprehensively considered carbon emissions throughout the building's lifecycle, from project design, material selection, construction, and operation and maintenance. It uses green low-carbon building materials including CO₂ mineral carbonation curing concrete building blocks based on carbon capture, utilisation and storage ("CCUS") technology and 100% recycled steel bars, and utilises its self-developed carbon-neutral cloud platform to monitor carbon emission data in real-time, setting a benchmark for sustainability in the construction industry.

- A carbon-neutral project throughout its lifecycle
- Developed a carbon-neutral cloud platform
- Used 100% recycled steel bars and CO₂ mineral carbonation curing concrete building blocks

KEY PROJECT REVIEW

COGO's Glorioushire Project in Hohhot, Inner Mongolia

Located in Hohhot, Inner Mongolia, COGO's Glorioushire Project is the first large-scale ultra-low energy consumption residential cluster demonstration project in China's severe cold area. The project consists of 9 ultra-low energy residential buildings with a total area of over 130,000 square meters. It comprehensively utilises ultra-low energy technologies of need-end energy-saving and utilisationend carbon reduction, achieving an overall heating and energy-saving rate of 92% and a carbon dioxide emission reduction of 30%. The project was designed according to ultra-low energy, three-star green building, and three-star healthy building certification standards, and has obtained 12 national patents, 3 provincial engineering methods, and 8 other awards including the Golden Award for Quality Structure in the Autonomous Region. It was also selected as a "Zero-Carbon Building Science and Technology Demonstration Project" by the Ministry of Housing and Urban-Rural Development in 2022.

- The only zero-carbon residential buildings in Hohhot
- Successfully listed in the 2022 science and technology demonstration project of the Ministry of Housing and Urban-Rural Development
- Showcased in the series of themed exhibitions of "Great Power Construction" hosted by the Hong Kong government



KEY PROJECT REVIEW

Technology Application

Murray Project in Central, Hong Kong

The facade project in Murray Road of Central, Hong Kong, adopts unit facades. In order to illustrate the form and layers of the blooming Bauhinia buds, the glass curtain wall has an area of 25,000 square meters, including nearly 3,000 units of flat, curved, hyperbolic, and conical glass curtain wall, of which curved units account for 60%. As some of the curtain walls are inclined inward and deviated more than 4 meters from the maximum horizontal distance to the suspension point, the installation difficulty is extremely high. The team solved the installation technical problem by using the Building Information Modelling ("BIM") model to perform collision inspection and lifting simulation, and conducting trial lifting in the factory in advance.

- Applied BIM technology throughout the process to solve technical problems
- Adopted automated production to improve the production efficiency of project units
- Introduced bending and shaping technology and adopted a 3D scanning system to conduct a real-time comparative analysis with the design model, ensuring that the quality and accuracy of the whole production process are up to the standards



KEY PROJECT REVIEW

Longhua Talent Housing Project in Shenzher

The Longhua Talent Housing Project in Shenzhen plans to construct 5 28-storey, 99.7-meter-high affordable housing buildings, which is expected to provide 2,740 units of affordable rental housing. The project adopts the Design for Manufacturing and Assembly ("DfMA") for the roof mechanical and electrical room, the Concrete Modular Integrated Construction ("MiC"), and the MiC basement fast construction system. It is the country's first modular high-rise building with concrete MiC technology and the first BIM digital delivery of MiC project for full life-cycle. The project construction period took only one year, which is one-third of the conventional construction method. Therefore, the project is also the high-rise affordable housing with the fastest construction speed in the country.

- The first concrete modular integrated building in China with a height of nearly 100 meters, with the MiC construction area accounting for 115,000 square meters
- Used intelligent precision verification systems and traceable digital management platforms
- Providing 2,740 units of affordable rental housing



KEY PROJECT REVIEW

Green Building



Beijing China Overseas Fortune Center

Beijing China Overseas Fortune Center (Jin'an) enjoys the transportation advantage of locating at the intersection of three subway lines at Jin'an Qiao. It is designed in accordance with international grade A standards to realise the coordinated development of humanities, buildings and the natural environment, and has obtained LEED platinum certification and three-star green building certification. The project has a construction area of about 230,000 square meters, with approximately 134,000 square meters of international grade A office buildings and approximately 23,000 square meters of shopping centres. The office area features a full glass curtain wall and column-free design, with a standard floor height of 4.5 meters for 360-degree panoramic lighting. The project is equipped with 24hour cooling water to meet the constant temperature requirements of the machine room.

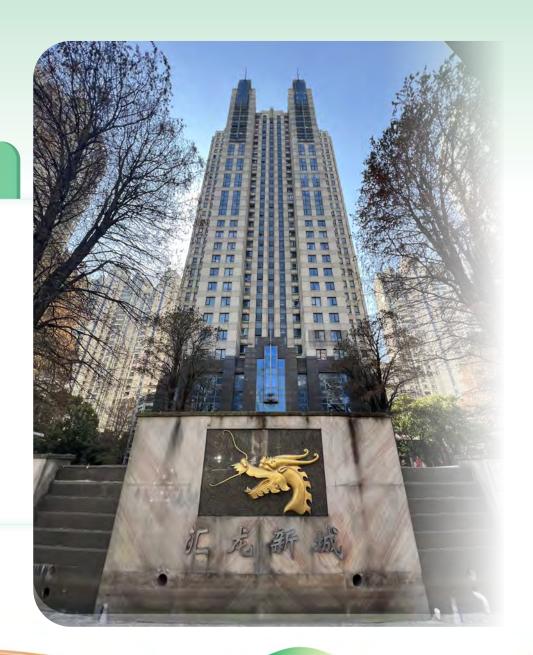
- Obtained WELL V2 CORE platinum certification, which was the world's first unconventional office project with platinum-grade
- Obtained LEED platinum certification and three-star green building certification
- Equipped with air quality monitoring mechanisms, with indoor sensors and outdoor fresh air sensing, using natural devices to regulate the air

KEY PROJECT REVIEW

Huilong New City community in Shanghai

Huilong New City Community in Shanghai, managed by the Group, is the first community in Asia to be LEED v4.1 Gold certified, and the second batch of Shanghai's exemplary low-carbon communities. The LEED-certified Huilong New City project has achieved sustainable development in terms of energy-saving, water conservation and ecological protection, as evidenced by its data performance and strategic leadership, and has scored highly in three key categories: "Natural Ecological Protection", "Transportation and Land Use", and "Energy and Greenhouse Gas ("GHG") Emissions".

- Retrofitted the water pumps in the common areas to inverter pumps
- Upgraded traditional garden lights to solar garden lights
- Installed solar guide signs



KEY PROJECT REVIEW

Reshaping Cities



COOC (China Overseas Office Capital) Shenyang China Overseas Plaza

China Overseas Office Capital ("COOC") is an internationalised integrated operator of commercial assets, leading the office building economy with the brand of "Global Commercial Asset Management Brand Flagship". It stimulates the endogenous growth of cities, industries, and sectors, and brings new imagination to cities.

Located in Shenyang, COOC Shenyang China Overseas Plaza witnesses Shenyang's transformation from an industrial city to the centre of the Northeast Asia Economic Circle and the Circum-Bohai Sea Economic Zone, a key core city of the three northeastern provinces, and a key core city in the national free trade zone layout, attracting numerous high-quality enterprises and elite talents and promoting urban life through industrial upgrades.

- Linked internal and external resources and providing opportunities and platforms for cooperation between tenants and resource providers and among tenants
- Launched the "Chasing a Dream" and continuously introduced COHL's ecological resources to empower enterprise development and individual growth
- Adopted green building standards and established a carbon management platform to guide brand merchants, tenants, and consumers to practise low-carbon living

KEY PROJECT REVIEW

Jinan Huashan Resettlement area

The Jinan Huashan Resettlement area has a total area of 2.4059 million square metres, with 12,111 residential households, involving 22 administrative villages and over 20,000 villagers. It is a key village relocation project in Jinan. Since the Group has taken over in 2019, the property fee collection rate in the resettlement area has reached over 99% for 4 consecutive years. The Group is working with the community and residents to improve the quality of residents and cultivate good living habits through the construction of spiritual civilisation, and to provide residents with happiness and assist them to integrate into city life by providing high-quality services, which is highly praised by the local government.

- Coordinated the construction of carports and the deployment of charging stations
- Provided online and offline round-the-clock UN+ butler services
- Regularly launched special campaigns such as "Clean the Park" and "Open the Lifeline"



COHL has always been pursuing the concept of sustainable development. In 2022, the Group upholds the mission of "We Manage Happiness" to establish a sustainable development vision, echoing the United Nations' Sustainable Development Goals ("SDGs") and linking with the Group's core strengths. The Group continues to strengthen sustainable development governance in four aspects of employees, operations, environment and communities.

Building a Happy Life for **Employees** Leading a Safe and Inclusive Team

Employees are the force behind the creation and implementation of enterprise value. Adhering to the talent management concept of "Assembling the Enterprising Ones and Motivating the Promising Ones", COHL has been continually advancing the talent management system. In order to create an equal, safe and harmonious working environment where employees can grow, it always respects the value aspirations of employees, and fulfils their pursuit of happiness in both work and life.







Building a **Green** and Happy Life Leading an Environmental-friendly and Low-carbon Space

COHL attaches great importance to the environmental impact of its operational processes, and incorporates the concepts of environmental protection and sustainable development into its daily operations. It strives to minimise the environmental impact of operation through developing green real estate and buildings, adopting energy-saving and emission reduction technologies and practising green office, so as to lead the trend of green building development.





Building a Happy Life for **Customers** Leading Quality and Efficient Operation

COHL is committed to cultivating a high-quality and efficient corporate culture, adhering to the core values of "customer-oriented, quality assurance and value creation". It sustains a green and sustainable supply chain and asserts that quality is above everything else. It continues to provide customers with products and services that satisfy their needs and surpass expectations, so as to constantly improve customer satisfaction.







Building a Happy Life for **Communities**Leading a Harmonious and Prosperous Society

Believing that communities are the soil for the survival and development of enterprises, COHL endorses the concept of nurturing and contributing to society. By engaging in people's livelihood construction, reinforcing community connections, and actively participating in poverty alleviation and charitable donations, the Group is dedicated to fulfilling its corporate social responsibilities and building a harmonious and prosperous community life.





TARGETS AND ACTIONS

Various units of the Group are actively contributing to the construction of a sustainable future, setting specific targets and work plans, and have achieved significant results to date.

Property development and operation business						
Building a Happy Life for Employees Leading	g a Safe and Inclusive Team					
Target	Work and achievement in 2022					
Strategy: Promote a diverse and inclusive working	g environment					
Maintain employee satisfaction score of no less than 80	 Reviewed the effectiveness of the share option incentive scheme on improving employee satisfaction, reducing turnover and raising work efficiency, and enhanced employees' satisfaction and happiness at work by continuously improving system, welfare and management 					
Maintain employee male-to-female ratio within 2.8:1	Actively improved new employee male-to-female ratio (2022: 2.12:1)					
Equal pay for equal work for men and women	 Completed annual salary review to examine the median salaries of male and female employees at the same level and in similar positions in the company 					
Strategy: Reserve future talent capabilities						
Maintain training hours per employee no less than 75 hours per year	 Offered a variety of physical and online courses, constructing diverse learning resources 					
Strategy: Protecting the health and safety of colleagues						
Zero work-related injuries and zero work-related fatalities • Provided physical examination and supplementary medical insurance coverage for all employees						
	 Continuously improved the safety production management system and formulated a series of phased goals according to the nature of the operation, including: 					
	 Control the incidence rate of serious injury and above within 0.0035/HKD100 million revenue and ensure the incidence rate of safety production accidents with large and above grade to be zero 					
	o Achieve less than 1% of minor injuries of employees					
	 Achieve less than 50 working days lost due to work-related injuries (including employees of major contractors) 					
	o Achieve zero incidence rate of serious injury and above by 2025					
	o Achieve less than 0.5% of minor injuries of employees and less than 30 working days lost due to work-related injuries by 2030 (including employees					

of major contractors)





Training hours per employee



Rate of workrelated injuries and work-related fatalities





TARGETS AND ACTIONS

Target	Work and achievement in 2022	
Strategy: Provide the best customer service		
Achieve a 30-minute response rate of no less than 95% for customer reports in 2023	The handler is required to respond within 30 minutes	Respor
Increase customer experience points	 6-point real-time evaluation covering first visit, contract signing, construction site, delivery, maintenance, and complaints was fully launched, 960,000 questionnaires were sent, and 290,000 were returned, with a feedback rate of 31% 	reporte
Maintain a high level of customer satisfaction	 Completed annual customer satisfaction survey; mystery guest score at sales sites was 91, mystery guest score at residential projects was 85, customer satisfaction of office buildings was 91.5%, and customer satisfaction of shopping malls was 91.2% 	Overall within after d
Improve the delivery evaluation system	The perfect delivery rate increased from 17.8% to 25.6%	achiev

Response rate for reported incidents

Annual overall customer satisfaction score

91

0 👸

Overall satisfaction within one month after delivery achieved

95 percentile

Target	Work and achievement in 2022
Strategy: Climate change risk management	
Conduct climate risk assessment work	Completed the climate change scenario analysis
Reduce carbon emissions	 Commenced the formulation of an integrated carbon emission management plan for commercial projects in 2022 to carry out carbon emission measurement and control for projects under operation
	 Commenced the formulation of an energy-saving renovation plan for educational projects, such as Nankai Experimental School, on a larger scale, including initiating energy-saving renovation of classrooms in the laboratory building and energy-saving of the classrooms in the primary section of Nankai Experimental School
Increase the proportion of renewable energy consumption in current operating buildings	 Primarily collected and compiled statistics on the amount and percentage of renewable energy consumption in current operating buildings, and developed targeted enhancement strategies
	 Aimed to increase the proportion of renewable energy consumption in operating buildings to 1% by 2025; to 3% by 2030



Completed the climate change scenario analysis

TARGETS AND ACTIONS

Target	Work and achievement in 2022
Strategy: Create a shared value chain	
Complete life-cycle assessment of building materials	 Percentage of life-cycle assessment of building materials complying with ISO14025, 14040/14044, EN15804 or ISO21931, or life-cycle assessmen complying with ISO14044, Environmental Product Declaration ("EPD") or Health Product Declaration
	o 15% by 2023; 40% by 2025; 80% by 2030
Increase the procurement from green standard suppliers	 Had 41 certified suppliers that meet the green standards, accounting for 62% of the total number of suppliers, and achieved the established goal of 60% by 2023 in advance
	Reviewed and updated the goals for the coming year
	o 65% by 2023; 70% by 2025; 80% by 2030



Building a Happy Life for Communities Leading a Harmonious and Prosperous Society

Target

Work and achievement in 2022

Strategy: Mobilise grassroots forces to improve community development

Complete a total construction area of 5 million m^2 of affordable housing projects

Had 1.088 million m² of affordable housing under construction, and 49,000 m² of new affordable housing commenced construction, and the construction of 734,000 m² of new affordable housing

Put forward design proposals that can preserve local history and culture for urban renewal projects Beijing Beixin'an Project, Shanghai East Jianguo Road Project and Beijing CITIC Town Project, etc. adopted design proposals that can preserve local history and culture

Develop high-standard senior living projects, provide senior living services for 5,000 families in total by 2030

Invested and operated nearly 1,000 elderly care beds in Tianjin, Jinan, Qingdao and Wuxi

Promote sustainable living-related community work in innovative projects and involve 20,000 households by 2030

 Actively carried out community environmental protection publicity work, covering a total of about 1,000 new community residents, accounting for about 4,000 households in total Invested and operated nearly

Carried out community environmental protection publicity work to 4,000 residents



TARGETS AND ACTIONS

(Const	truct	ion a	and i	nf	frastruc [:]	ture i	invest	ment	busi	ness

Construction and initiastructure investing	ient business	
Building a Happy Life for Employees Leading	g a Safe and Inclusive Team	
Target	Work and achievement in 2022	
Strategy: Promote a diverse and inclusive working	ng environment	
Employee turnover rate reach below 25% by 2025	 Expanded targeted recruitment programs, improved internal job mobility and conducted an anonymous employee satisfaction survey; employee turnover rate was 23% 	Perc of perfo
Strategy: Reserve future talent capabilities		
Reach 100% of personal performance review for monthly paid employees by 2023	Established a performance-based compensation assessment system for monthly paid staff	9

· Provided a variety of training for employees

Strategy: Protecting the health and safety of colleagues

Occupational injury rate: reach below 6.0 per 1,000 persons by 2025

Reach 100% of training for monthly paid

employees by 2023

- Reach 100% employee coverage for annual safety and health training by 2025
- Established a specific mechanism for subcontractor workers to report safety hazards; occupational injury rate was 4.0 per 1,000 persons
- Provided safety education and training to employees, and implemented key supervision and special inspections for key regions (such as Guangdong, Hong Kong, and Macau, Anhui Hefei, etc.), key projects (such as China Construction Group's qualifications winning projects, large investment projects, and 3311-level safety risk projects), and key moments (such as statutory holidays, the "July 1st" Hong Kong return anniversary, and around the "20th National Congress");

Percentage of personal performance review

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Percentage of employees trained 95 %

Employee coverage for safety and health training

95

TARGETS AND ACTIONS

Building a Happy Life for Customers Leading	Qu	ality and Efficient Operation
Target	W	ork and achievement in 2022
Strategy: Pursue innovative solutions		
R&D investment accounts for 2.5% of annual turnover by 2025	•	Continuously invested in clean to industrial automation, reuse and re

- Have 20 research and application projects of innovative technologies per year
- Increase the number of patents, engineering methods, and papers year by year
- Achieve 100% of training rate in innovative concepts and tools among science and technology-related personnel by 2025
- technology R&D, related technologies include ecycling of waste, waste treatment, desalination and information technology optimisation
- Established Xiangiiang Management Institute to meet the business' s strategic development needs, with the goal of strengthening innovation and governance capabilities, and broadening students' international perspectives
- Obtained 19 national and provincial engineering methods, and published a total of 67 independent or joint research papers in various influential academic journals
- Provided a variety of training for employees and helped them acquire futureoriented skills

Research and application projects of innovative technologies



Training rate in innovative concepts and tools among science and technology-related personnel



Building a Green and Happy Life Leading an Environmental-friendly and Low-Carbon Space

Work and achievement in 2022 Target

Strategy: Climate change risk management Reduce carbon intensity by 25% in 2025 compared with 2018 (carbon emissions/

turnover), and reach carbon neutrality by 2060

Increase the use of green and low-carbon construction materials and equipment

Reach 100% of adoption rate of lowcarbon and environmentally friendly generators in Hong Kong by 2026

- Established a Low Carbon Strategy Committee in 2022, and supported customers in reducing their carbon footprint
- · Selected pilot projects, included low-carbon audits in the environmental review process, and implemented carbon assessments during the construction phase
- Established the Sunrise Green Technology Limited to be responsible for the procurement of green materials
- Collaborated with suppliers and other business partners to promote low-carbon construction

Carbon intensity reduced by

compared with 2018

Adoption rate of low-carbon and environmentally friendly generators was over

Utilisation rate of green and low-carbon construction materials and equipment increased over

TARGETS AND ACTIONS

Building a Green and Happy Life Leading an Environmental-friendly and Low-Carbon Space Work and achievement in 2022 **Target**

Strategy: Create a shared value chain

Increase the use of green and low-carbon construction materials and equipment

Develop a "Sustainability Initiative" applicable to the business' s suppliers and subcontractors in 2023

Collaborated with suppliers and other business partners to promote low-carbon construction

• Initiated the development of "Sustainability Initiative"

Recycling rate of nonhazardous waste

Strategy: Proper handling of waste to prevent pollution

Increase non-hazardous waste recycling

 Reduced and recycled construction site waste, especially from civil engineering activities, and reused excavated materials for backfilling or environmental restoration of the site; the recycling rate was 2.54%

Building a Happy Life for Communities Leading a Harmonious and Prosperous Society

Work and achievement in 2022

Strategy: Mobilise grassroots forces to improve community development

Organised/co-organised/participated in at least 80 community projects per year, and increase community investment amount by 15% compared with 2020 by 2025

Increase employee volunteer hours by 15% compared with 2020, and increase employee volunteer attendance by 15% compared with 2020 by 2025

Provide 30 places per year for young apprentices with low-income backgrounds from 2022 onwards

· Organised community construction work through the establishment of the "Caring for the Community Volunteer Branch"; community investment amount increased by 3%

 Organised community construction work through the establishment of the "Caring for the Community Volunteer Branch"; employee volunteer attendance increased by 14%

Provided generous learning subsidies to encourage students from low-income backgrounds

Participated in community projects

Employee volunteer hours increased by



TARGETS AND ACTIONS

Property services business

Target	Work and achievement in 2022				
Strategy: Promote a diverse and inclusive wor	king environment				
Enhance talent incentive mechanism	Conducted annual appraisal with corresponding salary adjustments				
	 Put in place the Incentive Management Measure with a differentiated remuneration system designed for different personnel categories 				
	 A total of 20,769 recruits were employed through community and campus recruitment, representing an increase of approximately 10% compared with 202 				
Zero violation case of employment and labour standards	No violation cases of employment and labour standards				
Strategy: Reserve future talent capabilities					
Implemented a mechanism of "Tiered Training, Joint Training"	 Each unit at all levels conducted a survey on annual training demand, and organised various training and nurturing projects; 89.50% of senior management, 95.80% of middle management, 100% of foundation management and 99.99% of general employees 				
Strategy: Protecting the health and safety of co	olleagues				
Zero safety incident in 2023	Optimised safe production measures, such as:				
	 Implemented all-rounded and whole-process monitoring, evaluation, control and management of occupational diseases and key factors that endange employees' health 				
	 Set up a dedicated health fund for employees' health education, mental health counselling and health services at professional organisations 				
	 Offered allowances and subsidies to frontline workers for heatstroke preventior and cooling 				
	o Operated mutual funds for employees in some regions, and established funding pools to provide subsidies to employees with serious illnesses				

Percentage of employees trained

Violation case of employment and labour standards

recruits were employed

TARGETS AND ACTIONS

Target	Work and achievement in 2022	
trategy: Provide the best customer service		
ntroduce smart property management	 Participation rate of the third-party customer satisfaction survey has increased by nearly 40% over last year, with ratings covering safety management, hygiene and cleanliness, greening maintenance, maintenance of public facilities, renovation management, the performance of property staff, organisation of community activities and cultural atmosphere, resulting in an overall satisfaction score of 90 	Overall satisfaction score of the third-party customer satisfaction survey

Target	Work and achievement in 2022
Strategy: Climate change risk management	
Develop climate-related financial risks and opportunities response plan	 Carried out work on the Task Force on Climate-related Financial Disclosure ("TCFD"), including formulating climate change policies, disclosing response plans
Plan to gradually reduce carbon emissions intensity from 2021	 Implemented energy-saving operation and maintenance of cold stations in 3 projects, saving approximately HKD806,000¹ of electricity costs per year

Shanghai with more cities to be covered

Saving approximately HKD 806,000 of electricity costs per year

Building a Happy Life for Communities Leading a Harmonious and Prosperous Society

Target

Work and achievement in 2022

Strategy: Mobilise grassroots forces to improve community development

Use property management projects as a central platform to care for the community

Increase waste sorting rate

 Focused on making contributions in the fields of rural revitalisation, education, environment and culture in 2022, centring around the four main objectives of community services, including acting together against the pandemic, green and environmental protection, elderly services and community services

· Carried out waste sorting work in 62 cities such as Suzhou, Guangzhou, and

Time devoted in community investment projects 16,325.5

RECOGNITION AND AWARDS



MSCI ESG Ratings

COLI

MSCI ESG Ratings — BBB



Refinitiv ESG score

COLI

received an ESG score of 91 by Refinitiv (total score 100), ranking first among 479 real estate companies



Sustainalytics

 $\begin{tabular}{ll} COLI \\ rated as "low risk" by Sustainalytics \\ \end{tabular}$



Carbon Disclosure Project (CDP)

SCI

awarded the "2022 Environmental Leap Forward Award" by the CDP Global Environmental Information Research Center



FTSE4Good Index

CSCI

selected as a constituent stock of the FTSE4Good Index for six consecutive years



恒生可持續發展企業指數系列

Hang Seng Corporate Sustainability Index (HSSUS)

COL

included in the "Hang Seng Corporate Sustainability Index" for consecutive 13 years, and rated A+, ranking TOP 30 among over 2,200 companies listed in Hong Kong
 included in the newly launched "Hang Seng Climate Change 1.5 c Target Index"

Company	Name of award	Issuing authority
Property dev	elopment and operation business	
COLI	 No.1 in China's Top 10 Green Property 2022 (State-owned Enterprises) Included as a constituent of the HSSUS for consecutive 13 years 2022 Influential Companies for ESG Development 	 The Investment Consulting Special Committee of International Advisory Council Hang Seng Indexes Company Limited Guandian Index Academy
COGO	 Standardised Project of Production Safety in China Safety Industry Construction Sector Pioneer Employers of Human Resource in 2022 	 China Safety Industry Construction Sector Branch TOP HR
Construction	and infrastructure investment business	
	 Global Champion in Agriculture and Food Sector for UNIDO Global Call 2022 (O-PARK2) (China State Construction Engineering (Hong Kong) Limited) 	United Nations Industrial Development Organisation
CSCI	 Selected as a constituent stock of the FTSE4Good Index for 6 consecutive years 	FTSE Russell
	 Outstanding Contribution to Carbon Neutrality in the Hong Kong International Carbon Market and participation in the first batch of institutions in the new carbon market platform by Hong Kong Exchanges and Clearing Limited 	Hong Kong Exchanges and Clearing Limited
	China Construction Engineering Luban Prize	China Construction Industry Association
CSCD	National Quality Project Award	China Association of Construction Enterprise Management
	Sustainable Operations Award 2022	SocietyNext Foundation
Property serv	vices business	
COPL	Included in "ESG Governance of Central Enterprises — Pioneer of 50 Index" in 2022	Social Responsibility Bureau of State-owned Assets Supervision and Administration Commission of the State Council
COPL	 No.1 Property Service Enterprises with Outstanding ESG Development in China 	China Index Academy

Sustainable Development Feature Story



INTRODUCE LOW-CARBON INTELLIGENT TECHNOLOGIES TO PROMOTE EMISSION REDUCTION AND LOW-CARBON OPERATIONS

The Group is actively employing digital technologies to achieve the "dual carbon" goal and promote group-wide transformation. Meanwhile, high-quality carbon emission data is an important foundation for evaluating emission reduction policies, formulating emission reduction strategies, and managing carbon assets. Therefore, various business units of the Group are proactively investing resources to strengthen "carbon capabilities" such as low-carbon intelligent decision-making capability and low-carbon operation and management capability.

Case Study

INTRODUCTION OF BLOCKCHAIN AND INTERNET OF THINGS ("IOT") TECHNOLOGY TO THE CARBON-NEUTRAL CLOUD PLATFORM

To improve governance efficiency, the Group actively promotes digital ecology. Taking its construction and infrastructure investment business as an example, the Group has developed a carbon-neutral cloud platform, combining cutting-edge technologies such as blockchain, Artificial Intelligence ("AI"), IoT, and big data to form a carbon-neutral solution for the building's entire lifecycle. The carbon-neutral cloud platform can automatically obtain data such as energy consumption, which fully ensures the accuracy of the data and establishes an important foundation for other functions to be performed. For example, by analysing data obtained through big data technology, the carbon-neutral cloud platform can identify changes in energy consumption, improving the carbon neutralisation accounting process.

In addition, to promote the development of industry carbon accounting standardisation, the carbon-neutral cloud platform refers to many literature patents and papers to establish an accurate carbon factor database and lay a foundation for a unified methodology. In terms of practical engineering applications, the carbon-neutral cloud platform brings together decades of emission reduction cases in the construction industry. By analysing factors such as scenario practicability and input-output ratio, it can provide the best emission reduction plan in different scenarios, and comprehensively assist the company in planning emission reduction plans. It also cooperates with the application of new technologies to establish emission reduction models to explore the effects of applying emerging emission reduction technologies and lead the industry in emission reduction. Currently, the carbonneutral cloud platform is being promoted and used in Hong Kong, Macau and Mainland China, including O·PARK2 in Hong Kong, Macau Senior Apartment Housing, and the Shenzhen Houhai Headquarters Base of COLI, and other projects.



Case Study

LOW-CARBON BUILDINGS INTELLIGENT PLATFORM IN COOC

Under the dual carbon context, the proportion of new energy electricity continues to increase, and more attention needs to be paid to the challenges of its intermittency, randomness, and volatility to the existing power system of buildings. Therefore, the second step in carbon emission management and carbon neutrality achievement is to build flexible power capacity in buildings. The Carbon Management Platform selected typical flexible electricity equipment such as distributed photovoltaics, energy storage batteries and two-way charging piles, to monitor the operational data of the equipment in real-time.

In addition, the COOC implements carbon credit operation. All actions in production and life are connected and tracked through digitalisation, which will be classified for carbon credit calculation, and the interests of the credits will belong to the Group. The carbon credit operation encourages employees to actively participate in energy conservation and enhances experience and satisfaction. Users are rewarded with "carbon credits" based on the amount of energy saved from air conditioning on working days: the saved energy on air conditioning can be exchanged for extra air conditioning hours on weekends, and they are rewarded for actively turning off the equipment in public meeting rooms after meetings.









CONTINUOUSLY MAINTAIN TECHNOLOGICAL LEADERSHIP AND PROMOTE INDUSTRY COOPERATION

The Group continues to participate in the compilation of technical standards related to sustainable buildings and is committed to the concept of green and low-carbon development. It proposed that the standards should adhere to the principles of "people-oriented" and "energy and carbon control, energy-saving priority", so as to develop an international industry technical standard with originality, foresight, and operability. Using its property development and operation business as an example, the business participated in the preparation of "Low Carbon Office Building Technical Specification" of the China Association for Engineering Construction Standardisation, and invited relevant government agencies, scientific research institutions, large design institutes, consultants, real estate companies and low-carbon professional technology companies to jointly carry out the compilation work.

In 2022, the Group strengthened industry exchanges, cooperation and innovation. The Group's property development and operation business collaborated with the China Academy of Building Research to conduct a study on dual carbon. Under the unified leadership of the China Association of Building Energy Efficiency, it has jointly set up the Professional Committee on Low Carbon and Healthy Real Estate of China Association of Building Energy Efficiency, together with leading real estate enterprises such as CMSK, and other well-known research institutions in the industry, such as iGreen Think Tank. The Professional Committee adheres to the development concept of "Low-carbon Construction and Healthy Living Space", promotes the establishment of business scopes such as low-carbon real estate and healthy living space, and improves the quality of living space and the low-carbon transformation and upgrading of the real estate industry and residential construction industry, striving to achieve carbon peak and carbon neutrality in the real estate industry and residential construction industry as soon as possible.

Case Study

COLLABORATION BETWEEN INDUSTRY AND SCHOOL

To promote the exchange of industry and academia for green construction, construction and infrastructure investment business of the Group and Harbin Institute of Technology (Shenzhen) jointly established the "Harbin Institute of Technology-3311 MiC Cooperation Research and Development Centre", which focuses on the core technology of MiC. The Group has also collaborated with iFlytek to explore core technologies such as AI technology management for international hospitals and modular schools, taking advantage of iFlytek's technical expertise in AI smart hospitals and AI smart education. Furthermore, the Group is promoting cooperation with the Environmental Flame Retardant Material Application Engineering Technology Centre of the University of Science and Technology of China to jointly research and promote high-performance environmentally friendly flame retardant materials to reduce application costs.

During the Year, the construction and infrastructure investment business's Low-carbon Research and Development Center and Rapid Construction Research Institute held an unveiling ceremony, focusing on research on low-carbon and construction technologies, in strive to become a think tank for the green transformation of the construction industry. It also intends to collaborate with Mainland China's scientific research institutes, universities, and social associations.



Case Study

GREEN, LOW-CARBON AND HEALTH DEMONSTRATION PROJECT

The Group's property development and operation business continues to explore in the field of green and low-carbon buildings, and landed the first and largest ultra-low energy consumption cluster demonstration project in China's severe cold area through the COGO's Glorioushire Project. The project conducted research in such aspects as the design method, construction technology, monitoring, and operation and maintenance to solve the technology application bottleneck of ultra-low energy buildings in severe cold areas, and developed a technical system with sound practicality and implementation, winning high recognition and continuous attention of the ministries of China, Inner Mongolia Autonomous Region, China Real Estate Association, China Energy Conservation Association, other governmental and industrial associations, and other sectors of society.

- In terms of construction: The business established the construction technology system for ultra-low energy buildings, improved the construction process and construction method, and summarised and extracted the process criteria and guidelines for ultra-low energy buildings. In the implementation stage, the model-first strategy was implemented to ensure the high-quality construction of ultra-low energy buildings.
- In terms of intelligent operation and maintenance: The business built an energy control system and an air quality control system. The energy and environmental monitoring of typical apartment types of the buildings was also conducted for energy consumption statistics and analysis, and problem diagnosis. Combined with ultra-low energy building technology, green and low-carbon building technology, and intelligent technology, a healthy living environment of high quality, low-energy consumption, and low-carbon emission is created.
- In terms of energy consumption monitoring: The two-year monitoring results of model house tests showed that the energy-saving and carbon reduction benefits generated by ultra-low energy building were significant, reaching the level of ultra-low energy and micro-level carbon emissions, and meeting the indoor comfortable temperature and humidity targets, specifications and requirements for ultra-low energy consumption design.



PROMOTE LOW-CARBON AND GREEN INDUSTRIAL REVOLUTION AND TECHNOLOGICAL TRANSFORMATION

As proposed in China's 14th Five-Year Plan, "carbon peak and carbon neutrality" has become a core issue in China's modernisation drive. Realising zero-energy building is one of the most effective ways to achieve carbon neutrality and promote green and sustainable development worldwide. The Group is committed to adopting lower-carbon and environmentally friendly technologies and methods to promote sustainable development of the economy, society, and the environment. The Group's construction and infrastructure investment business is focusing on the development of new green building technologies such as MiC and Building-integrated Photovoltaics ("BIPV"), as well as continuous improvement of green building construction standards and capabilities.

MiC allows the construction site to quickly complete the entire construction project by assembling each stereo space unit like "building blocks". Each unit completes decoration, plumbing, electromechanical, and other processes in the factory, and wastewater and waste materials can be recycled in the factory, saving material and water use, greatly reducing construction waste, construction carbon emissions, and material waste.



The application of BIPV technology can help building projects achieve low-carbon emissions during operation. The technology integrates solar power generation products into buildings, ensuring efficient energy storage in buildings through light storage, direct current, or grid connection, and continuously creating economic benefits afterwards.

In recent years, the Group has developed the core technology for the design and manufacture of hyperbolic curtain walls. It is expected that its research on glass cold-bending technology will have a revolutionary effect on the industry. Moreover, the Group has developed a third-generation window wall system that is powered by photovoltaic energy (BIPV unit curtain wall), effectively integrating innovative technologies and products into the entire industry chain, completing R&D of the Light series of BIPV products for building facades, as well as promoting the construction of multiple template buildings. The "Light S" developed by the Group is a new type of lightweight imitation stone photovoltaic component, which represents

a major innovation in the field of "integrated photovoltaic wall surfaces". "Light S" is beautiful, light and thin, with a thickness of only 4mm, its weight is a quarter of traditional stone. It is also stable and has properties such as fire resistance and wind resistance. Furthermore, each 100 square meter of "Light S" photovoltaic facade is capable of generating an average of 7,000 kilowatt-hours of electricity per year, which can meet the annual electricity needs of



3 households. As a result of the installation of one wall, 7 tons of carbon dioxide emissions can be reduced, equivalent to the planting of 21 trees. This can help promote a green and low-carbon transformation in the construction industry. For example, O·PARK2's low-carbon building exhibition hall uses BIPV technology in its glass curtain wall, making the park a group of power-generating buildings and a benchmark for green buildings. When sunlight shines on the glass curtain wall, it absorbs solar energy directly and converts it into electricity, which can supply the building or the power grid.

Another example is a staff canteen with photovoltaic curtain walls by the Far East (Zhuhai), a subsidiary of the Group. The canteen incorporates low-carbon concepts and state-of-the-art technologies into its building design. By reducing power consumption with technology, it can achieve net zero carbon during construction while maintaining the aesthetics. The top and the facades of the staff canteen with photovoltaic curtain walls are composed of 192 and 32 photovoltaic power generation units respectively. The photovoltaic panels of the canteen are installed with cadmium telluride thin film solar cells, which can generate 39,000 units of green electricity every year and reduce the use of approximately 11.9 tons of standard coal, or the emission of 38.8 tons of carbon dioxide, per year.

In addition, the Group sets up an "Annual Innovation and Technology Work Plan" every year to stipulate its internal technology work plan and establish R&D projects related to curtain walls, supervision and thermal electricity businesses, including formulating technology project content list, result list, major milestones, patent and construction method application volume, and technology R&D and R&D funding volume, so as to expand the application and research of various technologies, such as AI, IoT and big data, Virtual Reality ("VR") and Augmented Reality ("AR"), project integrated management system ("PIMS"), the establishment of the intelligent management system, etc.

Case Study

SYSTEM OPTIMISATION OF HUANGGU THERMOELECTRICITY

For the Group's construction and infrastructure investment business, Huanggu Thermoelectricity launched 20 different technology and innovation projects during the Year, including 11 related to facility upgrade, 2 related to technological transformation, 4 related to dual carbon and environmental protection and 3 related to smart management, to further enhance the Group's technological innovation level and continuously strengthen its core competence. Moreover, Huanggu Thermoelectricity has set targets for the optimisation and transformation of the primary network and heat exchange station system, which will be implemented year by year to improve the safety and reliability of the pipeline network operation and achieve energy-saving and consumption reduction.

Huanggu Thermoelectricity has carried out various projects at the same time, including the renovation of the outlet flue of the desulphurisation tower, the upgrading of the high-efficiency fibre filter, the upgrading of the slag cooler, the application of new equipment such as sulphur hexafluoride ("SF6") circuit breakers and double-walled calorimeters, etc. The optimisation and transformation targets of Huanggu Thermoelectricity are as follows:

- Modification of water quality technology for high-temperature grids
- Launch of the technical transformation of the dual network balance, 2–3 million square metres per year,
 with an expansion of the scale to carry out project construction within the scope of 6 communities in 2022
- Retrofitting of boiler ACS system technology
- Retrofitting of ultra-low emission technology for hot water boilers
- Improvement of service quality with technology by using WeChat as a communication platform, improving the user-oriented service system and establishing a full-featured service platform

Besides, Huanggu Thermoelectricity has formulated the "Carbon Assets Management Measures" for carbon quota and carbon trading, regulating the reporting and collection standards of carbon emission data, while clearly setting out data responsibilities and statistical norms. The Group also actively responds to the development of low-carbon technology through green financing and invests in optimising existing facilities to enhance energy efficiency.



ENHANCE GOVERNANCE AND EXECUTION CAPABILITIES, EFFECTIVELY PROMOTE DUAL CARBON WORK

Through the execution framework of sustainable development, COHL and stakeholders establish good interaction and create shared value. The Group has a clear vision and mission for sustainable development, and requires its listed subsidiary companies to integrate environmental, social, and governance factors into their operational models, with the board of directors (the "Board") responsible for the overall sustainability governance of the company. At the same time, the subsidiaries are required to assess, identify, and monitor the environmental, social, and governance performance and risks related to their businesses. In order to more effectively promote dual carbon work, various business units are actively enhancing their governance and execution capabilities and setting medium-to long-term development directions and goals.

Case Study

REPEATEDLY VALIDATING GREEN BENEFITS, FIRMLY MOVING TOWARDS CARBON EMISSION TARGETS

The property development and operation business of the Group established the "Carbon Peak and Carbon Neutrality Working Leadership" and completed decarbonisation background research and analysis, as well as a comprehensive carbon audit during the Year. It has also set medium- to long-term decarbonisation targets, including reducing at least 30% Scope 1 and 2 carbon emission intensity per unit area by 2030 (2019 baseline year), and striving to achieve carbon neutrality by 2060. In the formulation of its decarbonisation action plans, a series of carbon reduction technologies and initiatives will be adopted to effectively reduce its operational carbon emissions, and to meet China's requirements on "early peaking, low peak value, less backloaded emissions, short plateau period and deep carbon neutrality".

The property development and operation business also conducted an analysis and study on the future "carbon peaking and carbon neutrality" within its operational boundaries, and put forward a carbon neutrality action plan, building a "3+10+5" carbon neutrality action system covering 3 dimensions, 10 major measures, and 5 braces.

- Create a model of the business's low-carbon management: the business will promote low-carbon management from aspects such as saving energy and improving efficiency in office space, increasing the utilisation proportion of clean energy, and encouraging low-carbon behaviours among employees
- Lead the low-carbon and healthy development of the industry: Based on the emission reduction targets in the whole life cycle of the building, the business will tap the emission reduction potential of various key processes, and formulate scientific and feasible emission reduction strategies for the stages of building materials production and transportation, construction, operation and maintenance, and demolition of abandoned buildings
- Promote the low-carbon transformation of the supply chain: While solidly reducing our emissions, the business will join hands with upstream and downstream enterprises in the industry to explore comprehensive solutions for zero-carbon buildings and promote value chain stakeholders to move towards a more sustainable future

Sustainable Development Feature Story



02 Building Happiness Together

The United Nations has formulated 17 SDGs in commitment to connect companies around the world to solve important social issues. Against this backdrop, China emphasises the unity of the people of all ethnic groups to continuously create a better life and gradually realise happy life for all. Over the years, COHL has complemented the transformation of the national economic model from high-speed growth to sustainable development, leveraging its resource advantages and social influence to contribute to the happy life of all people.

FULFIL CORPORATE RESPONSIBILITY AND CREATE A HARMONIOUS AND BETTER SOCIETY TOGETHER

COHL actively fulfils its corporate social responsibility. Through various forms, it supports community development and vulnerable groups, shares its development achievements with society, and promotes social harmony and integration, contributing to the long-term development, prosperity and stability of Hong Kong.

Case Study

STRIVE AND RISE PROGRAMME

In the post-pandemic era, global economic recovery is not synchronised, and the contradictions brought about by growth differences have become more prominent. The sustainability of global economic and social development is facing immense pressure. In order to assist underprivileged families, the Hong Kong SAR Government announced the launch of the "Strive and Rise Programme" in August. COHL immediately responded to the call by joining as a strategic partner committee member and donating HKD1 million to support youth development. During the Year, the Group provided communication skills training for COHL mentors to help mentees establish positive thinking and values, and become a new generation who are responsible and enthusiastic and are willing to strive for the future of the country and Hong Kong.

In early 2023, the Group held the "Future Builders of Hong Kong — Junior Engineers Workshop" activities at its under-construction project, the First Stage of Tseung Kwan O Desalination Plant. The mentees were provided with a sharing session on the theme of "desalination" and visited the safety construction technology exhibition hall. During the event, the Chief Secretary for Administration of the Hong Kong SAR Government, Chan Kwok-ki, and the mentees visited the VR safety experience hall, where some students were eager to try on the VR headsets to experience safety construction technology in the form of VR. The event aims to help mentees understand the technology and principles of desalination, and learn to cherish resources and maintain the habit of water conservation in daily life.



Case Study

FIGHT AGAINST THE EPIDEMIC TOGETHER

The epidemic prevention situation in Hong Kong faced its most severe test in over two years due to the fifth wave of outbreaks that occurred during the Year. With the support of CSCEC, the Group adhered to "Together, we fight the virus" and "Time is life", leveraging its advantage of operating in two regions to coordinate employee donation activities in both regions. Various parties raised funds to purchase antipandemic materials and quickly transported them to Hong Kong. It donated over HKD1 million worth of epidemic prevention and daily necessities to society through the China Overseas Charity Fund and the COHL "Caring for the Community" Volunteer Association, actively fulfilling its corporate social responsibility and joining hands with society to fight against the epidemic.

The donated materials included high-level masks, face shields, protective clothing, rapid testing reagents, disinfectants, food, etc. By donating the materials to various non-profit organisations and public welfare organisations in Hong Kong, including Distinctive Learning Society, St. James' settlement, Lutheran Church Hong Kong Synod, Hong Kong Playground Association, Feeding Hong Kong, Ronald McDonald House Charities, Methodist Centre (2 subsidiary elderly homes), Hans Andersen Club (4 subsidiary branches), as well as related social figures, the materials were then distributed to grassroots residents and elderly people in the community in need.

Furthermore, the construction and infrastructure investment business of the Group overcame difficulties and urgently constructed 8 medical facility projects, providing approximately 40,000 isolation beds. The Penny's Bay and Kai Tak community isolation facilities were completed and delivered within 122 days of construction. Penny's Bay's isolation facility is 2 stories high, and Kai Tak's isolation facility is 4 stories high and equipped with elevators, with each unit having an independent toilet and bathroom. The first 6 community isolation facilities were completed within 29 days, located in Tsing Yi, Qian Xintian Shopping Centre, Artificial Island at the Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities, Ma Shi Road, Fanling, Hung Shui Kiu near Ji Bo Ling Road, and Tam Mei, Yuen Long. Among them, the Tsing Yi community isolation facility was built in just 7 days, creating a "Hong Kong construction miracle". Additionally, the Kai Tak cruise terminal community isolation facility and Penny's Bay community isolation facility were designed to be permanent facilities, which accommodate their use during and following the epidemic period, thereby solving the housing problem for approximately 20,000 individuals by serving as isolation facilities during the epidemic and converting them into transitional housing for society with a few modifications on-site or after relocation in the future.

Office employees



Distributed 180 anti-pandemic kits

Infected employees



Distributed 100 antipandemic material kits and nearly HKD 1.2 million of solatium

Shelter hospital patients



Distributed 200 antiepidemic daily material kits to the first batch of patients admitted to the shelter hospital in Tsing Yi

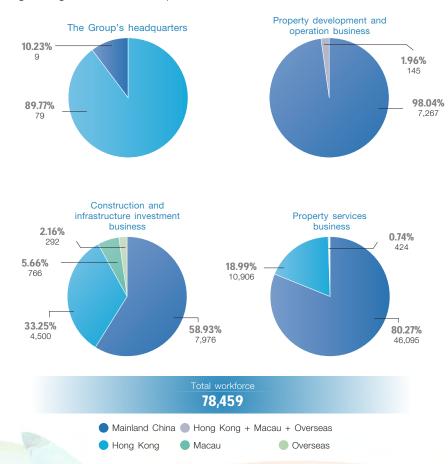
Non-profit organisations



Donated over HKD 1 million of antipandemic material to more than 10 organisations

PROVIDE A PEOPLE-ORIENTED WORKING ENVIRONMENT

COHL actively recruits and treats employees well, creating a harmonious working environment and continuously enhancing employees' sense of happiness and belonging. The Group is committed to safeguarding employee benefits, striving to create a diverse and inclusive working environment, allowing employees to fully demonstrate their talents and grow together with the Group.



Case Study

PROMOTE INTEGRATION AND DEVELOPMENT OF HONG KONG PROFESSIONALS INTO THE GREATER BAY AREA

The Group's construction and infrastructure investment business has become the first to obtain the Qianhai professional personnel practice filing certificate (No. Qianhai Personnel 0001–0004) and the first professional institution practice filing certificate (No. Qianhai Institution 0001). It became the first professional institution in the field of engineering and construction in Hong Kong to obtain the practice qualification in Qianhai, which means that the Group can introduce more advanced experience in engineering and construction from Hong Kong to Qianhai, and provide a platform for Hong Kong's professional talents to learn about the overall development of the country.

To facilitate the integration and development of Hong Kong professionals into the Greater Bay Area, the construction and infrastructure investment business of the Group has launched the "Qianhai Experience Program" during the Year, aiming to send 1,000 Hong Kong personnel across Shenzhen River to work in Mainland China during the 14th Five-Year Plan period. The Group provides potential and aspiring professionals and young people in Hong Kong with the opportunity to work in the Greater Bay Area for long-term or short-term rotations and exchanges, and then return to Hong Kong to make valuable contributions to the construction industry in the future.

In addition, in order to enable Hong Kong youth to realise their career aspirations and find a path and platform to participate in the construction of the motherland, the Group has initiated the "Double Hundred Programme", which provides at least 100 job opportunities in the Greater Bay Area for graduates of Hong Kong tertiary institutions every year, as well as at least 100 internship and exchange opportunities in the Greater Bay Area for Hong Kong students every year.

Case Study

SHARE ACHIEVEMENTS WITH EMPLOYEES

Taking its property development and operation business as an example, the Group improves its performance evaluation system through the "Professional Manager" and shares achievements with employees. The "Professional Manager" system includes a series of talent management measures, covering areas such as eligibility, performance evaluation, remuneration and incentives, and keeping only the best, effectively enhancing the value creation ability of the management team. In 2022, the Group systematically sorted out the experience and achievements of the first phase of professional managers and carried out the second phase of professional manager selection and recruitment, attracting the participation of the younger generation. At the same time, the Group granted share options under the share option incentive scheme in 2018, 2020 and 2021, granting approximately 107.32 million, 285.84 million and 7.13 million share options respectively to 404, 1,131 and 62 directors, senior management, core technical personnel and management respectively.

On the other hand, the Group's property services business communicates regularly with employees and understands market trends to adopt feasible recommendations and continuously improve policies and measures. During the Year, the Group put in place the Incentive Management Measure with a differentiated remuneration system designed for different personnel categories. The Human Resources Department also analyses the employment needs of each department and devises an annual recruitment work plan. A total of 20,769 recruits were employed through community and campus recruitment.

Share Option Incentive Scheme

2018

Directors. Senior Management, **Core Technical** Personnel and Management

Share Options

107.32

Million

2020

Directors. Senior Management, **Core Technical** Personnel and Management

Share Options

285.84

Million

2021

Directors. Senior Management, **Core Technical** Personnel and Management

Share Options

7.13

Million

37

Sustainable Development Management

Building a Happy Life for Employees

Leading a Safe and Inclusive Team

Employees are the force behind the creation and implementation of enterprise value. Adhering to the talent management concept of "Assembling the Enterprising Ones and Motivating the Promising Ones", COHL has been continually advancing the talent management system. With the aim to creating an equal, safe and harmonious working environment where employees can grow, it always respects employees' value aspirations and satisfies their pursuit of happiness in work and life.









OCCUPATIONAL HEALTH AND SAFETY

The Group regards the safety, health, and well-being of employees and business partners as a top priority. To enhance production safety, the Group adheres to strict, high-standard occupational health and safety standards, and proactively identifies and eliminates potential occupational health and safety risks in the workplace. In addition, the Group adopts various measures and advanced technologies to continuously improve its occupational health and safety performance, ensuring the provision and maintenance of a harmless working environment.

The Group has established a sound occupational health and safety system to promote the systematic and efficient implementation of occupational health and safety management. As the Group's highest decision-making body for safety management, the Safety Production Supervision and Management Committee is responsible for supervising management work, including reviewing major policies, standards, and systems, as well as approving the annual safety assessment indicators, etc. To ensure the effectiveness of the management system, the Committee holds meetings every six months to discuss production safety issues and examine the implementation of safety management work. Under the Committee, the Project Management Department of the Headquarters is responsible for implementing rules and regulations, operating procedures, and emergency rescue plans, formulating mediumand long-term development plans and work targets, and conducting safety assessments, inspections, and training to ensure the safety of all relevant personnel.

Organisational structure for production safety management



At the implementation level, the Group follows the safety management policy of "safety first, prevention first and comprehensive management", and has formulated a series of policies and internal documents, including "COHL Safety Production Management Measures", "COHL Safety Production Management Manual" and "COHL Safety Production Responsibility List", etc., which clearly define production safety targets and guide management personnel to implement their safety responsibilities and requirements, in order to regulate the production safety management of its subsidiaries. In 2022, the Group continues to reinforce its special safety production initiatives, and focus on rectifying and managing potential safety hazards, including prompting the establishment of a comprehensive employee production safety responsibility system, developing a hierarchical management and control system for production safety risks, etc. Each unit strictly controls safety risks with full coverage of risk projects, the frequency and severity of safety incidents are reduced as much as possible. During the Year, the Group has achieved the targeting indicators in the "Letter of Responsibility for Safety Production" and has no major production safety responsibility incidents.

To realise its safety targets, the Group has signed the "Letter of Responsibility for Safety Production of COHL" with the operating entities of its subsidiaries, which clarifies the production safety requirements and indicators to be considered in the performance appraisal process. To manage production safety risks, the Group and its subsidiaries have established a four-level management and control system for production safety risks, with project companies conducting daily self-inspection, superior management organisation of the project conducting regular full coverage inspections, business units of the Group conducting key inspection and the Group headquarter conducting spot check.

Occupational Health and Safety Management System

The Group upholds the safety management approach of "life and safety operation first", continuously improves the occupational safety and health management system, and regulates safe production management practices with homogeneity and standardisation. As for its construction and infrastructure investment business, the Group's occupational safety and health management system meets internationally recognised standards, and its subsidiaries are working on obtaining ISO45001 certification. Its Hong Kong and Macau units also review, update, and publish their safety and health policies every year, including safety and health commitments and annual safety management objectives.

Under the management system, in order to further improve production safety supervision and management, the Group organised multiple meetings to deploy safety hazard inspections during the Year to strengthen safety hazard rectification. Among them, the Group implemented key supervision and special inspections for key regions, key projects, and key moments, and deployed special rectifying actions for firefighting, infrastructure, tower cranes, and high support formwork safety hazards to ensure the comprehensive promotion of safety hazard inspections. Through the "same-city joint inspection" system, the Group also implemented reporting from the last position to improve the efficiency of hazard elimination.

Building Construction Safety Inspection

The Group attaches great importance to and focuses on redressing the potential risks in large machinery and equipment and foundation pit support. Taking its property development and operation business as an example, the Group has developed an industry-leading review system for foundation pit support solutions, with a standard review process and differentiated management mechanism. In 2022, the Group carried out special assessments on foundation pits and the "Gate-keeping Action" special inspections on the inspection of the construction risks in foundation pits and the gate management of construction sites. The Group also strictly limits the entry of overdue equipment, and 100% of machinery and equipment of projects under construction are tested twice a year. Equipment with potential risks is prohibited from being used on construction sites until the rectification is completed.

To ensure compliance of projects with the "Safety Inspection Standards for Building Construction" (JGJ59-2011), the Group has established and initiated a "safe and codecompliant" comprehensive assessment mechanism 343 times, conducted 2 random inspections on regional project sites within the Group, covering 192 projects under construction. It also checked safety equipment, building materials, electricity consumption, fire safety management and other inspection items of business partners, and determined the score weight of the assessment mechanism according to safety risks of projects. Occupational safety risks at the Group's construction sites were assessed based on quantitative criteria, and relevant data are systematically recorded in the "Assessment Form for Qualified Rate of On-site Safe and Civil Construction".



Safety Hazard Identification and Risk Assessment

The Group optimises the safety assessment system to promote a comprehensive safety supervision system. The Group's property services business has established the "4+4" safety inspection system, including weekly inspections by projects, monthly inspections by city companies, quarterly inspections by platform companies, random inspections by headquarters, mystery customer inspections, leader inspections, unscheduled special inspections and preholiday safety inspections. To eliminate major and significant safety hazards, the Group has established a hidden safety supervision mechanism, which records the hidden dangers in the office automation system for supervision. During the Year, a total of 193 major and significant hidden safety risks were recorded for the property services business, with an overall elimination rate of 90.7%. In addition, the Group coordinates units at all levels to adopt the LEC evaluation method to identify the hazard sources and risk levels in the property service process, so as to keep track of the safety trends and dynamics of the industry. By summarising the occurrence of risk events and analysing the sources, characteristics and patterns of risk events or accidents with big data, the "Public Security Big Data Database Construction Plan" is formed, which helps improve the efficiency of emergency response and prevent and reduce unsafe incidents.

Project Safety Risk Management and Control

Using its property development and operation business as an example, the Group continues to strengthen risk management and control of the project development cycle by setting up seven "stop point inspections". In 2022, a total of 450 inspections were carried out, covering 100% of the projects under construction. The Group conducts a comprehensive investigation of the potential risks of the project according to the different development stages of the project. Inter-departmental risk prevention and control meetings are held monthly to follow up and review related risk events continuously. The Group combined it with BI data physical examination, regular early warning notification and exposure, to remove risks from mediumand high-risk projects in advance. In 2022, the accuracy rate of early warning was 100%, and a total of 50 delivery projects were warned, the complete risk removal rate for delivery in coordination with various functions after early warning was 93%.



Safety Production Education

The Group is committed to maintaining standards in the qualification and training of safe production management and ensuring safety during production, and therefore places great emphasis on providing safety education and training to employees. Taking its property development and operation business as an example, the project department of each construction unit is required to have a safety director and an appointed safety officer in place, providing all construction workers with safety education and conducting training and assessment annually. In 2022, the Group organised a total of 1,110 hours of safety training, with 100% of contractors participating in at least 10 hours of safety training. To further enhance employees' safety awareness, morning assemblies are held on each project site on a daily basis to draw attention to safe production. During the Year, safety education activities were carried out with over 4 million attendances to ensure the smooth progress of safe production throughout the Year.

The Group's property service business has also established a comprehensive safe production training mechanism and organised up to 581 safety training during the Year. The training covers all levels of employees, and mandatory training is subject to the training frequency requirements of each level. Online and offline training are carried out, delivering content such as safe production laws and regulations, safety rules and regulations of the company and incident warning education as well as simulation training, experiential training, and multimedia training.

On the other hand, the Group is taking multiple measures to safeguard the physical and mental health of its employees. Employees enjoy a range of health and safety guarantees, including supplementary medical insurance and health benefits, as well as physical examination arrangements and subsidies. In 2022, the Group's property development and operation business created "HRSSC", an EAP project brand of COGO, providing provide mental care and benefits for all employees and their families. Through regular professional counselling, training, and guidance, employees are reminded to pay attention to their physical and mental health.











LEGITIMATE EMPLOYMENT MANAGEMENT

Reserve Capabilities of Future Talents

The Group understands the importance of attracting and nurturing talents for the long-term development of the business. With the talent notion of "to assemble the enterprising ones and motivate the promising ones", it is committed to creating an inclusive and diverse working environment, allowing employees to fully tap their potential and grow together with the Group. Through the "COHL Human Resources Management System", the Group has established a comprehensive talent management system, providing employees with competitive compensation packages and employee benefits, regularly reviewing remuneration, implementing assessment and incentives, and providing equal and diverse job and promotion opportunities to achieve healthy competition and fair development of talents. Meanwhile, the Group actively establishes a talent pool and echelon, enhancing employees' competitiveness and professional skills through internal and external training, to promote the development of the Group's business and employees' personal development.

The Group continues to strengthen the authorisation and control system of its subsidiaries, with the principle of "distinguishing heroes by performance, deciding reward and punishment by contribution". Among them, the Group implements the professional manager system in accordance with the "COHL Leader Management Measures", "Professional Manager Management Measures" and "COHL Total Remuneration Management Measures (Trial Implementation)", optimising the three-level leader management system involving CSCEC, COHL and the listed companies. Taking its property development and operation business as an example, the Group has implemented a series of talent management measures, improving the eligibility, performance evaluation, remuneration and incentives, keeping only the best of managers, and strengthening the value creation ability of the management team, thus realising a mechanism in which assessments are conducted at all levels and responsibilities are rested on all levels.

Talent Training Mechanism

The Group insists on attracting all kinds of talents and continues to expand its recruitment channels through three brands namely "Sons of the Sea", "Sea's Recruits" and "Stars of the Sea". It has designed a training plan meeting the development needs of fresh graduates and people with work experience, so as to enhance diversity and capability of talents to fuel its future development. With that, its property development and operation business has continued to create an employment system catering to different employee groups, and thus attracted exceptional talents on all fronts.

"Sons of the Sea" Scheme

"Sons of the Sea" is a strategic talent scheme of the Group designed to recruit fresh graduates for property development and business management positions, and cultivate them into the Group's comprehensive management talents through a training and development plan composed of six segments.

Sons of the Sea Study Scheme	Conducted study camps at 29 target universities in 15 cities, allowing participating students to go on internships at companies of the Group in different regions and learn about its career orientation and corporate culture
Sons of the Sea Recruitment Scheme	Launched 12 stations nationwide, and set up an overseas online website for recruitment, covering top key universities both inside and outside the country, due to the pandemic, certain stations were organised online during the Year
Sons of the Sea Training Scheme	Explained the Group's corporate culture, talent philosophy and strategy, career path and talent development mechanism and simulated corporate operations to newly recruited "Sons of the Sea" on various occasions
Sons of the Sea Internship Scheme	College students participating in the study camp can be assigned to regional subsidiaries of the Group for summer internship
Sons of the Sea Advanced Internship Scheme	Tracked the growth of "Son of the Sea" in their first three years of employment, and arranged more experienced employees to serve as their mentors, continuously promoting their advancement by means of professional coaching, practical training and management empowerment
Sons of the Sea Pilot Training Scheme	During the first six months of employment, "Son of the Sea" will be assigned to a representative internal base company for intensive cross-functional job rotation, with three types of core training: front-line practice, cross-job training, and round-table forums, which they can experience at the front line of the base company's business

"Stars of the Sea" Scheme

"Stars of the Sea" provides employment opportunities for graduates with different majors, fulfilling the Group's talent needs from four business lines of sales, commerce, education and elderly care. Based on localisation, the Scheme recruits outstanding local fresh graduates to attract potential talents and provide them with professional training, in order to cultivate local elite talents.

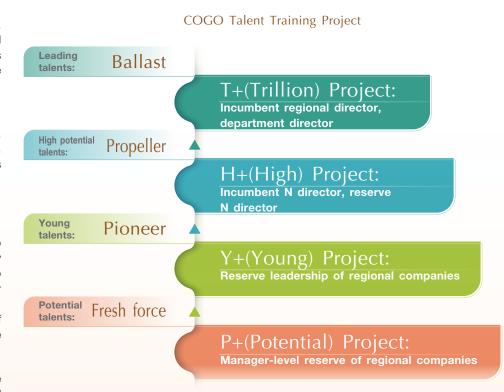
"COLI Sea's Recruits" Scheme

"COLI Sea's Recruits" Scheme targets professionals with at least two years of work experience, which recruits through 3 channels: daily recruitment, elite recruitment and intensive recruitment. The Group also organises special training, which training in 2022 covered topics such as company development, project development, finance and human resource management, allowing new employees to guickly understand the business operation of the company.

Enriched Talent Pool of Cadres

The Group concerns about its talent reserve for key positions, focusing on the leadership development of special talents. For its property development and operation business, the company has initiated the "COGO Talent Training Project" based on the Group's "LEADER+" leadership model since 2021, to build a core talent supply chain and provide a solid talent guarantee for the high-quality development of the Group. The Group set the training content in different layers, grades and stages, developed the professional skills, leadership skills and innovation skills of employees through rotation and exchange, mentorship, and special training, designed a ladder-like development pathway for trainees, so as to build a talent supply chain for the Group.

Besides, the Group's construction and infrastructure investment business has established the Xiangjiang Management Institute to provide training for senior management, key personnel, and young students, cultivating a high-quality cadre force. In accordance with the Group's strategic development needs, the Institute concentrates on strengthening innovation and governance capabilities, to broaden students' international perspectives. The Institute offers comprehensive courses and invites senior leaders and external lecturers as teachers. Moreover, the Group is working on the construction and management of a knowledge base, which consists of a variety of training content, question banks, courseware, and videos, as well as work guidelines, engineering summaries, and research reports. Several workshops and external exchange visits are also organised to share learning results and encourage the continuous development of employees.



Continuous and Diversified Training

The Group continues to invest resources in staff development and set up targeted special training to build an industry-leading team. Using its property development and operation business as an example, the theme for 2022 is "consolidating professional activities and empowering organisational talents". Focusing on deep professional cultivation and based on the problems found in the process of business development and guided by value creation, the Group nurtures talents to boost its business development. It continued to carry out a systematic talent development plan, namely "Set sail", "Sailor", "Voyage" and "Headsail" to provide appropriate training for different levels of employee groups, including "Big shots coming!", "Team Workshop III", "Gold Lecture", etc. During the Year, the Group held more than 2,300 training sessions, covering more than 70,000 person-times.

In addition, the Group strives to improve its training system, promoting the systematic and comprehensive training of employees. Its property services business has an online learning platform where employees can choose, at their own discretion, courses from the diversified and targeted curriculum. Online learning is also included as an important consideration for permanence appointment, re-designation and promotion. In 2022, a total of 7,022 taught programmes were held for 46,095 participants with a monthly average of 3.04 hours of learning time per person.



Advocating a Diverse and Inclusive Workplace Environment

As a caring and responsible employer, the Group is committed to safeguarding the welfare of its employees and maintaining a sound labour relation with its employees through constant and sincere communication and consultation. The Group strictly complies with the laws and regulations governing employment, health and safety, training and development and labour standards in the regions where it operates, ensuring the basic rights of its employees. At the same time, adhering to the human resources strategy of "inclusive and people-oriented", the Group has established a sound employment system, and promoted employment compliance and employee management, to build an excellent and vigorous talent team.

The Group values employee diversity and respects all employees regardless of their gender, age, family, disability, race, religion, nationality or cultural background, it is committed to providing an inclusive, safe, diverse, and non-discriminatory working environment for employees from different backgrounds. The Group provides equal opportunities for talents of different genders, and with various cultural and professional backgrounds, and follows a fair and equal standard in recruitment, remuneration, promotion, transfer, training, dismissal, and layoff decisions. It adopts a zero-tolerance approach to inequality, discrimination and harassment in the workplace. Moreover, the Group advocates equal pay for equal work for men and women, and assesses performance of employees by unified standards through the performance review system, ensuring that employees are not treated unfairly due to their gender.

The Group actively promotes diversity among its board members in order to avoid a tendency to "groupthink", and provide a more objective and balanced viewpoint, so as to enhance the efficiency of corporate governance and foster business and sustainable development strategies. The Group has formulated the "Board Diversity Policy", which stipulates that the Board Nomination Committee will consider the required skills, experience, and diversified perspectives based on business needs and ensure that candidates commit enough time and make contributions to the Board. Taking its property development and operation business, the Nomination Committee under the Board is responsible for monitoring the implementation of the policy and reviewing the structure and policies of the Board and the procedures for appointment, election and removal of directors, so as to ensure that its corporate governance is in line with industry trends and requirements. As of 31 December 2022, COLI has 9 directors, including 3 independent non-executive directors, 1 of whom was female, which represented 11.1% of the members of the Board.





Safeguarding Labour Relations and Labour Rights

The Group is committed to creating a fair and equal working environment, and pays substantial attention to protecting human and labour rights. It strictly forbids the use of child labour or any form of forced labour in all scopes of business or supply chain partners, and implements a stringent employment approval process. All new employees are required to provide personal identification and information documents before employment, and sign a job application form to confirm their willingness to work, in order to eliminate illegal labour.

For its construction and infrastructure investment business, the Group focuses on improving the subcontractor employment management system to protect the rights and interests of relevant workers. The Group has labour officers on construction sites who are responsible for receiving complaints from workers, maintaining attendance records in the registration system, overseeing subcontractor wages, and managing and supervising labour rights of subcontractors, as well as conducting labour-management review meetings with all subcontractors on a monthly basis. In addition, the Group encourages workers to report unfair treatment. A notice listing complaint channels is posted on construction sites to ensure workers are aware of their rights and ways to obtain assistance.

The Group values its employees' opinions and actively builds a communication channel with front-line employees. To protect employees' freedom of assembly and association, its property development and operation business established the trade union of COLI in 2019 and complete its renewal in 2022. All of its 83 subsidiaries have set up trade unions covering all the cities where its business operates, and 100% of employees are trade union members. During the Year, its trade unions at all levels held 134 employee communication activities, regularly carried out social activities and implemented workplace improvement measures, and arranged local employees to participate in community and charity activities from time to time. Furthermore, the Group organised 4 cadre training courses in 2022, with a total of 248 attendances in the study of advanced theory and business knowledge. Through theoretical study and professional training, trade union workers gained a better understanding of labour rights and standards, and their ability to implement trade union rules and carry out business was strengthened.

The Group has always been committed to promoting communication and engagement with employees by establishing various channels, it encourages the management to maintain communication with employees to enhance team cohesion towards the aligned development goals. Taking its property development and operation business as an example, the Group engages third-party institutions to conduct employee satisfaction and engagement surveys every year. The 2022 survey results showed an employee engagement score of 88 and a satisfaction score of 82. Based on the survey results, the Group understands and meets the needs of employees and its future development direction, and effectively formulates policies for team building, cultural publicity and welfare system improvement. With that, the Group implements the principle of "serving the people in a down-to-earth manner" and creates a harmonious working atmosphere. By means of internal and external, online and offline training activities, "Meritorious Medal System", employee feedback channels, etc., the Group enhances employees' working skills and emotional connections with the company. In addition, the Group has held more than 700 employee activities during the Year, such as cooling and warming events, trade union groups, women's health activities, and other themed events, to strengthen interaction and communication among employees and improve team cohesion and employees' vitality.

Sustainable Development Management

Building a Happy Life for Customers Leading Quality and Efficient Operation

COHL committed to cultivating a high-quality and efficient corporate culture, adhering to the core values of "customer-oriented, quality assurance and value creation". It sustains a green and sustainable supply chain and asserts that quality is above everything else. It continues to provide customers with products and services that satisfy their needs and surpass expectations, so as to constantly improve customer satisfaction.









TECHNOLOGICAL INNOVATION

The Group is committed to developing and applying innovative technologies to enhance productivity and strengthen quality control. It actively participates in industrial exchange activities to understand market trends and customer needs, promoting the sustainable development of the Group.

Professional Research Team

The construction and infrastructure investment business of the Group has established 7 research centres to promote the development of building technology:

Assembly Prefabricated Construction Research Centre

It has a professional team across the whole industry chain, including design, manufacturing, construction, materials, and so on. Its main research topics are the MiC system of concrete and steel structures, prefabricated construction, and new building materials. It focuses on key technologies in the whole process of prefabricated construction.

Building Information Model Research Centre

It studies the complete process of integrating the application of BIM technology, and explores new scenarios where BIM+ is applicable. It is devoted to technical training, standard development, and building component libraries of BIM. It integrates information on building materials, installation progress, and cost management into the practical application of BIM technology through developing plug-ins, using computer software, and combining AR and scanning technologies.

Intelligent Construction Research Centre

It incorporates 5G, VR, AI, IoT, robotics, blockchain and other technologies to independently develop the C-Smart intelligent site series products. It is committed to building a digital construction integrated management platform with independent intellectual property rights that aims at real-time and comprehensive engineering management.

Medical Construction Research Centre

With a professional team of medical planning, design, construction, operation and maintenance, it is dedicated to the integrated construction technology research of modern hospitals that meet international standards and the core technology R&D of modular hospital construction. It supports medical construction projects and accumulates medical-related construction technologies.

Hotel Construction Research Centre

It focuses on the key technology research of large modern hotels that meet international standards. It summarises previous hotel projects, enhances project management and coordination capabilities, and innovates key construction technologies so as to upgrade the level of hotel construction and thus enhance market competitiveness.

Infrastructure Engineering Technology Research Centre

It consists of 4 sub-centres, for road and bridge engineering technology, infrastructure investment model innovation, safety technology and new green construction technology. It studies core construction technologies such as the control of subgrade settlement and deformation, tunnel engineering in complex geological environment, undersea immersed tunnel engineering, highway construction and maintenance, and large-scale environmental protection facilities construction.

Intelligent Curtain Wall Research Centre

It conducts R&D of complex curtain wall standardised design, intelligent production, and complete set of technology for efficient installation. It upgrades the existing products and applies new technologies to enhance the technological level of curtain wall production and construction by combining the market demand and emerging materials.

Digital Ecology

Under the national strategy driven by technological innovation, to improve its operational efficiency and productivity, the Group has vigorously developed digital ecology in recent years, helping it to control the operation of various businesses and make efficient decisions and adjustments.

C-SYS+

C-SYS+ is independently developed by the Group's construction and infrastructure investment business, which is an innovative digital management system in the construction industry, with the aim of realising online business, digital management, intelligent decision-making, normalised innovation and ecological synergy. The system integrates different management platforms, and introduces advanced technologies such as data collection, analysis, Al comparison, prediction, and robot development, providing comprehensive solutions for the construction industry. C-SYS+ automatically collects and organises internal and external data through the system and platform connecting various departments and business areas, timely and accurately constructs intelligent decision-making models, and covers a wide range of dimensions, including cost, schedule, quality, etc., breaking the information island between departments and laying a foundation for corporate governance and strategic leading.



C-Smart

C-Smart combines technologies such as AR and VR to provide all-round and full-cycle supervision, in order to ensure construction quality and on-site construction scheduling, and to achieve digitisation, refinement and intellectualisation of construction site management. C-Smart integrates technologies such as facial recognition, IoT, AI, and cloud computing in order to collect comprehensive and automated construction site information, and then aggregate it into an integrated management platform. After analysing the information through the platform, it can assist in construction management and decision-making, as well as achieve all-round intelligent monitoring and comprehensive management of personnel, safety, environmental protection, progress, materials, and other aspects of construction engineering. Additionally, the Group continues to improve C-Smart, enabling digital delivery and facilitating intelligent transportation by connecting the entire process of logistics management from factory production to on-site logistics management, such as MiC. It will continue to upgrade the C-Smart smart construction site platform, connect the entire process of design, production, transportation, construction, and operation, and promote the digital transformation of the construction industry.

Xinghai Wulian

The property services business of the Group has established a sub-brand, Xinghai Wulian, which is committed to becoming an overall solution service provider for smart parks to provide the whole value chain services with a focus on IoT mid-platform, intelligent hardware and Al technology. Xinghai Wulian has built up its own domestic and self-developed products based on the Xingqi IoT Platform. At present, products such as intelligent cloud screen, home gateway, domestic BA and end-brain are in mass production and launched in the market. Moreover, it aims to realise the upgrade of new smart park construction through digital technology, creating a truly visible, excellent and controllable intelligent scene, and improving the construction of smart business parks.

Looking forward, Xinghai Wulian will actively participate in research in the fields such as smart commercial operation, smart commercial property management, commercial big data analysis, corporate digital transformation, etc. It adheres to the collaborative strategy of "Platform + Ecology" in building a more diverse smart park ecosystem.

Smart Technology Platform

To protect the safety of contractors and employees during production, the Group's property development and operation business promotes the informatisation of project site management. It piloted the implementation of the Zaiont Tech Smart Construction Site System with several functions, such as safety monitoring, staff management and monitoring and early warning, to improve the safety management and control in construction sites.

In addition, the Group has actively expanded upstream and downstream investments, building a technology investment ecosystem and a number of investment-oriented subsidiaries driven by technology. It has established the Shenzhen Haizhichuang Technology Company Limited, which focuses on empowering real estate development with technology, aiming at digital transformation, product upgrade and technological ecology in fields such as digital systems, intelligence, and green and health. It is committed to becoming an outstanding smart real estate technology platform.

Promoting Industrial Exchange and Academic-Industry Collaboration

Promoting industrial exchange is an important driver of technological development. Through continuous communication and interaction, the industry can better grasp industry trends and market demands, accelerating product R&D and innovation.

Guangdong-Hong Kong-Macao Greater Bay Area Property Innovation Development Forum

With the theme of "Brand Ecology of COPL", the Group's property services business has showcased the development process, business characteristics, business logic and property development prospects of its subsidiary brands:

COPL Brand	Highlights
Zhonghai Chengfu	 Steer demand and supply with innovation 2 Reforms: "improving supply chain collaborative relationships" and "reforming the management system of project performance"
Haina Wanshang	Provide full life-cycle property management services, full value-chain commercial asset operation services for the non-residential property management sector
Xinghai Wulian	Provide integrated solutions for smart parks, with intelligent hardware and AI technology as the core
Engineering Company	Provide full life-cycle engineering services of construction space through three business segments, namely developing services, engineering services, intelligent operation and maintenance
UN+	Provide a one-stop life service platform centring around the full life-cycle of customers

At the Forum, the property services business put forward its goal to realise management changes and smart properties and build a modern service industry through digitalisation, in response to the concerns of "customers, the industry and the society" with "Good Seasons, Good Property, Good Community".

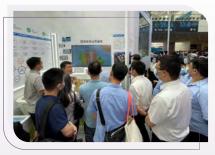
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"Spirit of the Times Shining in Hong Kong": "Great Power Construction" Themed Exhibition

The property development and operation business of the Group developed the COGO Glorioushire Project, which is the first and largest ultra-low energy consumption cluster demonstration project in China's severe cold area. It was successfully listed in the 2022 Science and Technology Demonstration Project of the Ministry of Housing and Urban-Rural Development as the only residential zero-carbon building. The property development and operation business participated in the "Great Power Construction" exhibition hosted by the Hong Kong government, showcasing one-stop industrial solutions in the construction field of planning, design, construction, operation, and maintenance of buildings throughout the whole industrial chain, cutting-edge trends, and the latest achievements. It also promoted exchanges with industry peers, students, and different professional organisations, accelerating product R&D and innovation.





QUALITY EXCELLENCE

With its in-depth experience, the Group proactively participated in the preparation of technological standards related to sustainable building, and develop high-quality, reliable, sustainable and disaster-resilient infrastructure. It also provides customers with high-quality services to achieve efficient operations. Its subsidiaries have formulated quality management policies and systems according to their business characteristics to ensure the standards and consistency of products or services and satisfy customers' needs:

Business	Quality management policies and systems
Dusiness	Quanty management poncies and systems
Property development and operation business	 Established the evaluation scale of delivery quality to further optimise and improve the delivery evaluation system For quality monitoring before and after project delivery, set up an industry-first customer delivery early warning system for continuous tracking and early warning of product quality from 90 days before delivery to after delivery, thus achieving a quantifiable, traceable and assessable process for product quality assessment by establishing a project-based dynamic monitoring platform Set up a "Housing Maintenance Centre" in each residential project to rectify problems found in internal inspections, process engineering quality complaints, manage handover affairs, and render after-sales and maintenance services Formulated the "Move-in SOP Guidelines for COLI's Projects", to ensure a standard and orderly process covering early preparation, inspection, property services and shop decoration management for centrally managed commercial projects
Construction and infrastructure investment business	 Formulated the "Engineering Management System", which sets up a management structure and defines the responsibilities of each department and position, and specifies work requirements and procedures for contractors, contracts and costs, project progress, quality technology, safety and environmental protection, and other aspects Conduct internal audits regularly, monitor quality performance, and continuously improve quality management processes Human Resources Department organises quality management training for new employees to ensure that they are familiar with the quality management system and related work processes Work closely with customers to collect feedback in order to manage construction quality Implemented comprehensive management review, and introduced a "red/yellow card" system to warn underperforming sites and their managers and to reward high-performing sites
Property services business	 Progressively obtained the ISO system certification since 1996: ISO9001 Quality Control System Certification, ISO14001 Environmental Management System Certification, ISO45001 Occupational Safety and Health Management System, ISO50001 Energy Management System Certification Commissioned a certification company to conduct an independent audit of the GB/T45001-2020 Occupational Health and Safety Management System Value full life-cycle quality control and carry out scientific certification management in five key development stages including property preliminary work, project inspection, occupancy simulation, project central delivery, and post-project

evaluation according to five systems of "Quality, Environment, Occupational Safety and Health, Energy Management, and Information Security Management"

Standard Development and Report Publication

With the continuous development of society and technology, the competition in the real estate market is becoming increasingly intense, and customers' requirements for product quality and user experience are also rising. The property development and operation business of the Group actively carries out standardised, modularised and industrialised product R&D. It continued to improve the standardised product system in 2021 and completed the preparation of 16 standards and guidelines. In 2022, it also developed the "Standards for Facilities of Integrated Residential Products — Green and Health", providing a model reference for the industry. Additionally, in line with the national strategic goal of "Healthy China 2030" and the dual carbon goals, the property development and operation business published the "COLI Standards for Green and Healthy Residential Properties" in 2020, and started the research on zero-carbon and ultra-low energy consumption buildings, to cater for health and green demand for future residential properties.

The Group's property development and operation business won 7 awards, including "No.1 in China's Top 10 Green Property 2022 (State-owned Enterprises)" and "No.2 in China's Top 10 Green and Low Carbon Property Index 2022". It was the only real estate developer invited to attend the Summit on Achieving Carbon Peak and Carbon Neutrality of the China Science Conference, and released the report on "Green and Low-carbon Office Building R&D and Practices of China Overseas", promoting the common development and progress of the industry.

System Improvement to Fulfil Customer Needs

In order to enhance customer experience and the health and green attributes of products, while combining aesthetic experience renewal and actual function convenience, the property development and operation business of the Group stays steadfast in the "12345" Good Product System and builds the "Happy Garden System". It empowered the product renewal and technological innovation of the projects with "experience enhancement, innovation as priority, cost optimisation, fine workmanship creating and objective achieving", in which many projects had become the benchmark of the product capacity in the local places, providing customers with a better living experience.

Besides, the Group's property development and operation business established and applied the first business intelligence system in the industry for quality assessment management in 2022, performing uniform recording, visual presentation, and intelligent analysis for the results of the process assessment, delivery assessment, safe unannounced inspection, special inspection on refined decorations and special inspections on foundation pits. It accurately mastered the assessment results of each cooperative unit in each dimension, and intelligently extracted various quality issues and risk data, to efficiently carry out performance assessment management and contribute to precise management.

	"12345 Good Product System"							
One leader	Structural planning							
Two key points	Building typeHouse type							
Three presentations	 The first presentation before the first opening of new buildings The second presentation in the sales process The third presentation before the housewarming 							
Four special projects	 Supporting facilities for all age groups Route arrangement for returning home Intelligent technology Green and health 							
Five aspects	 Facade Garden Basement Refined decoration Doors and windows 							

Efficient Customer Communication

To establishes open and transparent communication and supervision channels with customers, the property services business of the Group communicates with customers through customer satisfaction survey, mystery customer inspections, immediate QR code evaluation, door-to-door visits, property owner annual meetings, corporate APP, WeChat groups, QQ groups, telephone, customer meetings, etc. Meanwhile, to ensure that all customer opinions are well-received, the Group launched the Customer QR Code Supervision, continuously optimising the experience of "Soft Service" and achieving the professionalism of "Hard Standard" by leveraging online platform supervision. In addition, the Group adheres to the open and transparent service philosophy, which service standards and responsible person announcements have been uploaded to the platform, to ensure that employees understand the Group's service philosophy.

The property services business of the Group regulates the handling procedures of customer complaints according to the "Customer Complaint Management Measures" to enhance the efficiency of complaint handling, preventing and reducing complaint cases effectively. It has developed channels such as 400 Call Centre, feedback on the Internet, messages on the official website, transfers from superior units, customer visits, and emails to handle complaints, and classify the complaints according to their content.

As a free customer communication channel, the 400 Call Centre service is responsible for receiving complaints from customers across the country regarding service quality, hidden safety hazards, maintenance and management of public facilities, and environmental sanitation. The property services business reviews the performance of the 400 Call Centre every month by evaluating the quantity, quality and performance of the complaints received by employees to ensure all complaints are handled in accordance with established procedures and standards, so as to guarantee service quality.

Multi-dimensional Participation in Community Management

Aiming to create a safe, civilised and environmental friendly community, the property services business of the Group innovated its service model. It has promoted employment, enhanced environmental protection of living spaces, created civilised lifestyles, fostered economic development, and participated in community management in a multi-dimensional manner, achieving the vision of "Good Seasons, Good Property, Good Community" for a better life.

To assist in the socialisation of urban services of Urumqi, Xinjiang and to constitute service-oriented governmental reforms in the new era with a "Universal Intelligent Governance", the Group entered the site in May 2022 to conduct comprehensive services such as community management and maintenance, greening management and protection, river management, non-motor vehicle management and intelligent services, actively exploring the linkage and co-building mechanism and pioneering the urban service model of the "Three-Elements Co-Governance", in which the City + Residents + Properties jointly cooperate.





By conducting field visits to old communities, the property services business of the Group has obtained more detailed understanding about the current situations of the projects and widely collected opinions from the public. It has put forward the service concept of "Big Operation + Small Property" and promoted the sustainable development of "Management + Operation + Service". Through the integration of "Community Collaboration + Professional Services + Intelligent Platform +Administrative Power", the responsibility of the "City Butler" can be fulfilled with a modularised service division, socialised governance structure and refined governance methods, in order to create a new model of refined urban management under the multiple cooperation among the government, the market and the society.

To realise intensive, mechanised and professional urban environment sanitation services, the property services business has introduced more than 50 sets of mechanised equipment including walk-behind sweepers, electric sweepers, electric inspection vehicles, high-pressure washing vehicles and powerful floor dryers, etc., enhancing the mechanised operation level of the projects and the efficiency of on-site works.

The Group's property services business has improved urban roads, greening, and municipal facilities through a series of standardised management such as the installation of intelligent access control, standardising parking facilities and old communities, and road greening renovations. Meanwhile, more than 200 employment positions have been provided to the local residents and investment in fixed assets of more than HKD10 million has been stimulated, promoting the development of various industries such as eco-friendly construction materials, household renovation, water and gas supply, and underground pipelines, increasing economic vitality and boosting residents' quality of life.

SUPPLY CHAIN MANAGEMENT

The Group actively promotes a green supply chain and green procurement to put sustainable development concepts into practice. In line with its development roadmap, its business units have stipulated the procedures and conditions for selecting suppliers based on their operational conditions, and standardised the procurement procedures to ensure supply chain management, construction equipment and materials are constantly meeting the stringent environmental, quality and safety requirements.

Since 2020, the Group has proactively fostered the standardisation of green and healthy material procurement standards, and developed green standards. The product-level covers green products, green building materials, carbon footprint assessment and 10-ring certification, etc., while the corporate-level standards include green factories, green enterprises and ISO5001 Energy Management System Certification, etc., aiming to establish a sustainable and stable supply chain through green certifications.

To promote the concept of green and low-carbon supply chain management, the Group promotes the green product certification of its partnering supplier and takes the initiative to issue proposals to encourage the existing cooperating suppliers to obtain and provide green product certifications, as well as apply for various types of green certifications. Moreover, to ensure the long-term effectiveness of the green carbon supply chain management mechanism, the Group establish a mechanism for the green carbon supply chain development:

Green carbon supply chain development mechanism:

- Signing the "Commitment to Sustainable Development Management" with all material suppliers, while the suppliers will take the initiative to commit to the construction of a green carbon supply chain.
- 2. Incorporating green carbon supply chain review into the key process of tender review.
- Establishing a green carbon supply chain product database and factory database, and recording the list of factories and products that have attained considerable performance after auditing and certification. The information includes certification number, certification category, certification validity period, etc., which the database will be updated in a timely manner.
- 4. Reviewing information of all material suppliers every year, which ten brands will be selected for publicity and reward, so as to create a green high-end leading brand.

Close Communication to Build a Green Carbon Supply Chain

To promote exchange with suppliers, the Group's property development and operation business holds quarterly supplier bid-winning conferences, mainly focusing on exchanges on cooperation planning, product quality and sustainable development. Additionally, the establishment of a complaint mechanism strengthens long-term strategic partnerships with partners. Besides, to reinforce supplier management, the property development and operation business and supply chain companies jointly organised a green supplier conference to promote and advocate the implementation of a green carbon supply chain.

Cultivating Awareness of Green Carbon Supply Chains

In order to cultivate awareness of green carbon supply chains, the construction and infrastructure investment business of the Group provides sustainable supply chain training and guidance to related suppliers and subcontractors, assisting them in gaining professional knowledge and skills of sustainability and environmental friendly procurement. In addition, the property development and operation business provides training for the top 100 suppliers in terms of purchasing volume to convey its sustainability requirements, so as to advocate the concept of green carbon supply chains.

Moreover, the Group's construction and infrastructure investment business has set up Sunrise Green Technology Limited to purchase green low-carbon materials and equipment, promoting the development of green low-carbon supply chains.

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Building a Happy Life for Customers Leading Quality and Efficient Operation

CORPORATE ETHICS

Integrity and Anti-Corruption

The Group upholds the principles of integrity and anti-corruption, adheres to the spirit of the contract, operational compliance, promise fulfilment, pursues profit-making in transparent operations, integrates business integrity into the entire value chain, and maintains good corporate governance. It does not tolerate any form of corruption, including bribery, extortion, fraud, and money laundering, etc., and advocates the ideological culture of "don't dare to, are unable to and have no desire to commit acts of corruption". To this end, the Group has formulated a series of policies to regulate related work processes, demanding each unit to properly implement relevant requirements. It also provides suppliers with operational integrity guidelines, requesting them to comply with the anti-corruption requirements. Furthermore, all suppliers are required to sign the Integrity Agreement and commit to avoiding any corrupt or bribery practices. They are also subject to annual performance reviews, including integrity reviews.

Warning education



All employees are required to receive integrity education before onboarding, including visiting the integrity education base and watching integrity education videos. In addition, the Group also organises integrity oaths, and employees of key position are required to sign an integrity commitment letter and receive integrity education.

Learning and contests



Employee training are regularly organised to educate relevant laws and regulations of the industry, corporate internal compliance system, etc. Meanwhile, the Group also organises integrity knowledge competitions, calligraphy and painting, poster, and micro-video contests to promote the culture of integrity.

Learning-related training for families



Integrity awareness promotion campaigns are carried out for employees' families, including organising activities such as "Haibao's Speech on Integrity" and "Promoting Integrity in Communities", and holding various anti-corruption education events in its operating communities.

Government-enterprise construction



The Group regularly conducts "Co-Construction of Integrity" activities with local discipline inspection commissions, courts, supervisory commissions, subdistrict offices and other authorities, to maintain communication with regulatory agencies.

Fair Competition

The Group insists on fair competition, opposes monopolistic and malicious competition, and ensures that business activities comply with various anti-unfair competition laws and regulations. The Group is also committed to promoting healthy competition among peers as well as creating a fair competition environment for suppliers. It strictly prohibits suppliers from engaging in collusion, bid-rigging or other improper practices during the bidding process. The list of eligible suppliers is periodically evaluated and updated. All suppliers are also required to confirm in writing that they adhere to business ethics and fair competition.

Customer Privacy

The application of information technology in enterprise operations has thrived, especially with remote work and meetings becoming a daily routine during the pandemic, resulting in an increasing risk of improper information leakage. In accordance with relevant laws and regulations such as the "Cybersecurity Law of the People's Republic of China", the Group has formulated the "Cyber and Information Security Management Measures of COHL" and "Customer Information Security Management Guideline of COHL". In order to protect the privacy of customers, business partners and employees in a more holistic manner, the Group has developed an information security management system, which stipulates the careful collection, processing, storage and use of data. It constantly tests and updates information system infrastructure and security measures, to advance its business development and the application of innovative technologies. Moreover, the Group has established an information security management structure:

Information Security Management Structure

Conduct internal information security audits at least once every six months and external audits once a year

Implement rectification based on the problems reflected in the external audit report and report the results to the Digitalisation and Cybersecurity Taskforce

Digitalisation and Cybersecurity Taskforce

Digital Technology Department

Department

Department

The Group is highly concerned about the work of network and information Governance security, requiring all units to effectively implement cybersecurity work. planning The Group coordinated with its listed companies and set up a unified Coordination command centre, conducting information asset investigation with various mechanism units regularly, and completing tasks such as reduction of cyber exposure, inspection and rectification of security risks, critical target defence, etc. With its continuous improvement in overall technical protection capability and security management level, the Group has consolidated its integrated capability for monitoring and discovery, reporting and early warning, as well as emergency response to security incidents. It has safeguarded the security of its network and information systems, and laid the foundation for its steady and secure operation. Since 2012, the Group has passed the independent third-party ISO27001 System audit Information Security Management System Certification audit every year, and carried out information auditing work for its listed companies on an annual basis. The Group has held the annual Cyber Security Week campaign since Security awareness 2017, continually raising overall cybersecurity awareness and reinforcing the prevention of phishing emails and applications. The Group continuously conducted security risk investigations and System update corrections for various business systems. The Group requires all suppliers who may have access to data to sign Confidentiality the information security confidentiality agreement, strengthening supply requirements chain information security management.

Intellectual Property Rights

The Group attaches great importance to maintaining its own and third-party intellectual property, and strictly complies with laws and regulations such as the "Trademark Law of the People's Republic of China", "Patent Law of the People's Republic of China", "Copyright Law of the People's Republic of China" and "Anti-Unfair Competition Law of the People's Republic of China". Business units of the Group regularly review the registration of intellectual property rights, strengthen the follow-up management of patent applications, and formulate policies to meet its business needs according to the operation situation, in order to demonstrate its respect for intellectual property rights and continuously enhance the protection of intellectual properties.

Al Intellectual Property Rights Management

The property services business of the Group focuses on leading technological capabilities, protecting and maintaining intellectual property rights. As an overall solution company for smart parks with IoT platform, intelligent hardware and AI as the core, its sub-brand Xinghai Wulian has also vigorously invested in technological research and development. The property services business has formulated and strictly implemented the content of the "Intellectual Property Management Manual", and different relevant departments undertake different responsibilities, including application for patent renewal, risk assessment of intellectual properties, identification of the changes in laws, regulations and policies and implementation of preventive and rectification measures, etc., in order to safeguard intellectual property rights management.

Sustainable Development Management

Building a Green and Happy Life Leading an Environmental-friendly and Low-carbon Space COHL attaches great importance to the environmental impact

COHL attaches great importance to the environmental impact of its operational processes, and incorporates the concepts of environmental protection and sustainable development into its daily operations. It strives to minimise the environmental impact of operation through developing green real estate and buildings, adopting energy-saving and emission reduction technologies and practising green office, so as to lead the trend of green building development.





CLIMATE CHANGE

Over the past year, both governments and businesses have taken more progressive actions to address climate change and its impacts. Investors and asset managers have also become aware of the severity of "climate emergency", gradually paying attention to climate-related financial risks that are critical to businesses, and demanding companies strengthen their information disclosure based on the Task Force on Climate-Related Financial Disclosures ("TCFD") recommendations.

The Board and senior management of the Group's subsidiaries have incorporated the oversight of climate issues into the corporate governance and risk management system. The Group has promoted its sustainable development roadmap during the Year, strengthened the disclosure of climate-related information, and discussed the four key areas based on the TCFD recommendations. Each subsidiary has also conducted a climate scenario analysis, helping the Group and its stakeholders to gain a deeper understanding of how each business manages climate-related risks and opportunities, their impact on the business, and the progress of each business in managing these risks.

Mitigation



Implementing various measures to reduce GHG emissions from daily operations and contribute to the mitigation of climate change

Adaptation



Identifying and responding to climate change-related risks and opportunities in a timely manner, and formulating emergency management plans

Resilience



Regularly
evaluating property
projects and
maintaining close
communication
with suppliers
to ensure that
properties and
their supply chain
are capable of
withstanding
extreme weather
events caused by
climate change

Disclosure



Continuously disclosing climate change management information and improving transparency

Continuously Improving Climate Change Governance and Policies

To respond to climate risks, the Group continues to improve its climate change governance and policies. The property development and operation business of the Group has completed the preparation and publication of the "Responding to Climate Change Policy" during the Year and has formulated the policy on "Daily Norms and Contingency Plans on Wind, Flood and Lightning Prevention". The policy requires all properties to pay attention to weather forecasts in a timely manner, and specifies the personnel arrangement and response process in the event of natural disasters, as well as the post-disaster handling work. In terms of disaster prevention, the property development and operation business requires the preparation of rain sandbags, emergency lighting tools and reinforcement materials and the posting of warm tips before the arrival of typhoons and rainstorms, and organises management and security guards to be on duty 24 hours a day to check important parts such as sump pumps, machine rooms, curtain walls and canopy glass to ensure smooth drainage pipes and normal operation of equipment. In response to the approaching typhoon, the property development and operation business will reinforce the exterior windows and marbles of the exterior wall. The business has also purchased property insurance for all its property holdings to reduce the economic loss caused by climate risks.

Meanwhile, the property development and operation business will step up its efforts and incorporate "climate change" risks and opportunities more intensively into its business strategies and planning in the coming year, including the following:

Governance

Report the management results and risk assessment results to the Corporate Governance Committee of the business at least once a year, and incorporate climate-related risks into their meeting mechanism and discussion agenda

Risk management Based on the results of climate change scenario analysis, improve the standards and guidelines for climate risk scoring tools, make the scoring more scientific and systematic, and better integrate climate risk scoring tools with the corporate risk management system and procedures

Strategies

Describe the material climate risks facing the business and their financial impact on business and strategy, and formulate short-, medium- and long-term mitigation and adaptation strategies and measures

Targets and indicators

Continuously track existing targets, review their progress, and update ESG targets due soon/achieved ahead of schedule; in respect of the material climate change risks and/or opportunities identified by the business, sort out relevant quantitative indicators, and set medium- and long-term targets related to decarbonisation and nearly zero emissions in line with China's "carbon neutrality" goal

On the other hand, the Group's property services business has developed a "Climate Change Policy" to contribute to the mitigation of climate change. The Board and its committee have approved the policy and would regularly review and revise the policy and measures to facilitate the transition to low-carbon operations in line with market trends and operational needs. The business has set up the Sustainability Coordination Group, which is responsible for collecting from the Sustainability Working Group the extent of impacts and describing the current responses and responses to different climate risks and opportunities across departments, so as to review the effectiveness of relevant policies and measures in a timely manner.

Short-term strategy

To identify the risks and opportunities arising from climate change and to plan future work on relevant issues of eco-environmental protection

Medium-term strategy

To actively conduct energy conservation and eco-environmental protection assessments and evaluations in order to set and achieve future targets on various environmental indicators

Long-term strategy

To link with financial planning, which includes managing more projects that are certified to green standards in the future, ongoing and proactive retrofit of old communities, and evaluating properties based on climate scenario analysis

Identifying Physical and Transitional Risks

According to the analysis results, the risk of extreme precipitation in 2030 is high in Beijing, Tianjin, Shijiazhuang, Changsha, Nanchang and Wuhan areas, and in the Yangtze River Delta and Pearl River Delta under the RCP8.5 scenario. In 2050, most of the cities will face a high risk of extreme precipitation. Jinan, Chengdu, Guiyang, Kunming, Chongqing, Hainan, and Xinjiang have medium-low risk of extreme precipitation under different scenarios due to the low severity of precipitation. Although Hong Kong and Macau are in the south, the frequency and severity of extreme precipitation hazards in the region are the lowest in China due to their small urban areas and sound drainage systems.

Risk Identification Results of City Group — Extreme Rainfall

				e rainfall	
			30	2050	
Region	City Group	RCP4.5	RCP8.5	RCP4.5	RCP8.5
Northern	Beijing, Tianjin				
Region	Harbin, Shenyang, Changchun				
	Dalian				
	Shijiazhuang				
Eastern	Shanghai, Hangzhou, Suzhou, Ningbo, Nanjing				
Region	Qingdao, Yantai				
	Jinan				
Southern	Shenzhen, Zhuhai				
Region	Guangzhou, Foshan				
	Xiamen, Fuzhou				
	Hainan				
	Changsha, Nanchang				
Central	Chengdu, Guiyang, Kunming, Chongqing				
and Western	Wuhan				
Region	Xi'an, Taiyuan				
	Xinjiang				
	Zhengzhou				
Hong Kong and Macau	Hong Kong, Macau				

For flood risk, the analysis shows that both Dalian and Hainan will face high flood risk in 2030 under both RCP8.5 and RCP4.5 scenarios. Similarly, coastal cities will face high or very high flood risk in 2050 under both scenarios, with the highest risk in Hong Kong and Macau and the southern cities including Shenzhen, Zhuhai, Xiamen, Fuzhou and Hainan, while the flood risk in the central and western regions is very low under all scenarios.

Risk Identification Results of City Group — Flooding

		Flooding (sea level rise) 2030 2050				
Region	City Group	RCP4.5	RCP8.5	RCP4.5	RCP8.5	
Northern	Beijing, Tianjin					
Region	Harbin, Shenyang, Changchun					
	Dalian					
	Shijiazhuang					
Eastern	Shanghai, Hangzhou, Suzhou, Ningbo, Nanjing					
Region	Qingdao, Yantai					
	Jinan					
Southern	Shenzhen, Zhuhai	-	-	-	-	
Region	Guangzhou, Foshan					
	Xiamen, Fuzhou					
	Hainan					
	Changsha, Nanchang					
Central	Chengdu, Guiyang, Kunming, Chongqing					
and Western	Wuhan					
Region	Xi'an, Taiyuan					
	Xinjiang					
	Zhengzhou					
Hong Kong and Macau	Hong Kong, Macau					

According to the analysis of typhoon risk identification, under the two scenarios of RCP8.5 and RCP4.5, Hong Kong and Macau region, Yangtze River Delta region and southern cities except Changsha and Nanchang will face high or very high typhoon risk. In contrast, the typhoon risk in the central and western regions and some inland cities in the northern and eastern regions, such as Shijiazhuang and Jinan, are all very low under different scenarios.

Risk Identification Results of City Group — Typhoon

		Typhoon				
		20	30	20	50	
Region	City Group	RCP4.5	RCP8.5	RCP4.5	RCP8.	
Northern	Beijing, Tianjin					
Region	Harbin, Shenyang, Changchun					
	Dalian					
	Shijiazhuang					
Eastern	Shanghai, Hangzhou, Suzhou, Ningbo, Nanjing					
Region	Qingdao, Yantai					
	Jinan					
Southern	Shenzhen, Zhuhai					
Region	Guangzhou, Foshan					
	Xiamen, Fuzhou					
	Hainan					
	Changsha, Nanchang					
Central	Chengdu, Guiyang, Kunming, Chongqing					
and Western	Wuhan					
Region	Xi'an, Taiyuan					
	Xinjiang					
	Zhengzhou					
Hong Kong and Macau	Hong Kong, Macau					

Meanwhile, the Group's construction and infrastructure investment business has identified physical and transitional risks under the RCP8.5 and RCP4.5 scenarios to assess and develop clear strategies for mitigation and response to climate change, in order to enhance climate resilience. At present, the climate scenario analysis for the Hong Kong region has been completed. According to the assessment results, the physical risks faced by the business's assets and operations in Hong Kong under the two scenarios are low, with the biggest risk factor being coastal flooding that may be caused by extreme precipitation, storms, and increased average precipitation. Other physical risks, such as wildfires and water pressure, are at extremely low levels. The following table provides a detailed description of the two main transitional risks faced by the business:

Description

Transitional Risk

Regulatory Compliance and External Commitments

Risk Type: Policy and Regulation

Timeframe: Medium to Long-term

Likelihood: Possible

Impact level: Medium to High

The business may need to alter its processes, products, and services in order to comply with local, national, or international climate change regulations. The business has already established targets for reducing GHG emissions and achieving other sustainability goals. The failure to meet relevant targets or to reduce business impacts on the environment, or the perception of a failure to take responsible action on climate change, may result in negative publicity and adversely affect its business and reputation. In addition, the business may be subject to liability, fines, or business suspension in the future for failing to comply with or being accused of failing to comply with various laws and regulations, including environmental regulations.

Transitional Risk

Description

Carbon Pricing

Risk Type: Market Timeframe: Medium to

Long-term

Likelihood: Possible

Degree of Impact: Medium to

High

Under the Paris Agreement, governments around the world will take measures to reduce GHG emissions, which is expected to result in an increase in carbon prices related to emissions trading systems, carbon taxes, fuel taxes, and other policies. The business uses enterprise carbon pricing tools of professional institutions to quantify risks and understand the potential future financial impact under high, medium, and low carbon price scenarios from now to 2050. According to the analysis, under the 4°C and 2°C scenarios, unmitigated risks may increase operating expenses and reduce the business's operating profit margin.

Among other methods, the business will minimise these impacts by promoting low-carbon behaviors, developing low-carbon technologies, and procuring green materials.

Each business will continue to strengthen its internal procedures, improve its response capabilities, and regularly assess the impact of climate risks to ensure they are under control.

EMISSION MANAGEMENT

To ensure the implementation of environmental protection in daily operations, the Group continuously integrates and strengthens its management systems and mechanisms. The Group and its subsidiaries have established environmental management departments responsible for environmental management matters of their respective businesses, such as environmental targets planning, environmental compliance management, etc. It continuously reviews the application of systems during operations, updates and improves the environmental management system on an ongoing basis, to strengthen its management foundation.

Adhering to the R&D of zero-carbon technologies and putting zero-carbon projects into practice, the Group leads the industry towards green sustainable development. Currently, the Group has made multiple technical breakthroughs in the field of super low energy consumption buildings. On the basis of the successful project implementation of model clusters of super low energy consumption, the Group is gradually able to carry out the development of super low energy consumption buildings and zero energy consumption buildings, "carbon peaking and carbon neutrality" planning and consultation, R&D and production of green construction materials and equipment, digital twining, intelligent operation and maintenance, etc. throughout the whole industrial chain, provides data, technologies, construction methods, products and other scientific and technical supports to the implementation of the national "carbon peaking and carbon neutrality" strategy in the industry, and delivers professional and comprehensive "zero-carbon" construction development solution for its customers, to proactively build an industry-leading service platform for low-carbon buildings.

Smart Energy and Carbon Asset Management Operation and Maintenance System

To reduce energy consumption and carbon emissions in the process of building operation, the Group's property development and operation business has introduced the Energy and Carbon Asset Management Operation and Maintenance System on the basis of digital twin technologies. The system adopts active carbon reduction technology, and uses active interactive control over intelligent operation and maintenance, which are applied to induction lighting, intelligent air conditioning, healthy environment, intelligent sun shading, low-carbon footprint, etc. By setting the intelligent mode of the equipment to sense the environmental status and human location information, making full use of natural conditions, and matching appropriate lighting, air conditioning, and fresh air, it can achieve the most comfortable environmental experience with minimum energy consumption, achieving the best practice of building decarbonisation through technology.

Ensuring Data Integrity

To assess and disclose GHG emissions, the Group has been recording and monitoring data related to its business activities. Various business units have engaged professional sustainability consultancies to assess GHG emissions and other environmental key performance indicators based on local guidelines and international standards to establish a reliable environmental information management system and comparable environmental targets. To further ensure data integrity, the Group's construction and infrastructure investment business has established a Sustainability Report Editorial Committee to coordinate the reporting works, including continuously improving the digital data collection platform and providing relevant training to responsible staff to address their questions about data collection. During the Year, the Committee commissioned an external consultancy to verify quantified GHG data for 10 projects and factories located in Hong Kong, Macau and Mainland China based on international standards. It is considering gradually expanding the verification scope to other projects in the future to widen the data assurance scope and provide a solid and reliable foundation for developing GHG reduction goals.









Integrating the Concept of Energy Conservation and Emission Reduction Throughout the Entire Value Chain

The property development and operation business of the Group has formulated the "China Overseas Grand Oceans Commercial Green Environment Convention" and the "China Overseas Grand Oceans Business Office Green Environment Convention" specifically for its centralised commercial and office properties. Through the conventions and various green environmental protection activities, it strives to create a green and low-carbon business environment. The conventions serve as supplementary agreements for tenants to voluntarily sign, aimed at guiding contracted tenants to pay closer attention and strengthen management on waste management, energy conservation, water resource management, circular economy practices, and the use of green products and services. Through commercial agreements, it promotes greater environmental awareness among tenants, supporting the low-carbon development of its commercial and office properties, to create a green win-win situation with its tenants.

In addition, the Group's construction and infrastructure investment business considers energy conservation and emission reduction throughout the entire lifecycle of buildings. Its O·PARK2 project has implemented strict measures for energy conservation and emission reduction, including:

Construction Site Electrification



- Install and use CLP Power's Battery Energy Storage System ("BESS") instead of traditional diesel generators to reduce diesel usage, achieving air emissions and GHG reduction
- Purchase four electric vehicles to replace gasoline vehicles on the construction site, reducing GHG emissions and improving roadside air quality

Resource Conservation



- Use BIM technology to optimise anaerobic tank structure and reduce concrete usage by 22.5%
- Use recyclable templates instead of wooden templates to reduce wood usage
- · Digitise the construction site, holding paperless meetings and inspections to reduce paper usage

Energy Conservation



- Use energy-saving equipment and appliances, install automatic sensors and set up energy-saving reminders in the construction office, and install sustainable energy facilities such as solar panels
- Solar panels will be installed upon the completion of the project and an intelligent system will be used to monitor daily electricity usage and generation

RESOURCES OPTIMISATION

Different business units of COHL have actively improved their environmental management systems, and updated and published additional environmental protection policies and measures, integrating environmental protection concepts into every stage of the Group's operations. The Group also actively promotes green office, advocating paperless office to employees by using technologies such as email and network sharing to reduce paper usage, while increasing work efficiency and document security. In addition, it actively encourages its subsidiaries to use network communications to participate in remote meetings, so as to reduce carbon emissions from long-distance travel. The Group also reduces energy wastage by installing energy-saving lighting and automatic power off, adjusting room temperature, etc. It promotes green recycling of used office equipment, sets up office supply recycling stations, repairs and refurbishes office equipment, in order to advocate recycling and create a green office atmosphere.

The Group's construction and infrastructure investment business issued the "Water Resource Management Policy" in 2022, which established several directions to strengthen the protection and management of water resources. It also promotes the assessment of water resource risks to minimise business impact on water resources. Moreover, it revised the "Sustainable Procurement Policy" to strengthen the management and monitoring of the supply chain, avoiding negative environmental impacts of products and services as much as possible. In addition, the business will actively train and publicise sustainable procurement to enhance the environmental awareness of employees and suppliers. The property services business of the Group has begun developing the special initiative of "COPL: Prudent Spending and Frugal Operation", promoting various environmental initiatives and special events to raise the environmental awareness of the entire value chain.

On the other hand, to penetrate low-carbon environmental protection into the communities, the Group's property services business has launched the "Green Future" campaign in collaboration with the Technology Innovation Team of South China University of Technology. The business introduced Al robots, a drone sensing system and other technologies to manage waste, and worked with small owners to develop a waste sorting process game. At the "Green Future", the following series of environmental activities were organised to build a green living circle together:

Low-carbon environmental "Bag" to Home

A tote bag design activity for participants



Build our Green Home in the New Fashion of **Waste Sorting**

A cleaning operation and garbage collection were conducted in the green belts, piled objects and hygiene black spots throughout the community, and game booths were set up in the projects under management with volunteers in charge patiently guiding children to do proper waste sorting



I Grow up with Plants Allowing participants to hang a name tag on the trees they planted and witness the beautiful moment of plant growth



Hall

Waste Sorting Science A hall with three main theme areas, namely "The Spirit of the Times. Environmental Crisis and Tips for Waste Sorting", displaying handicrafts produced by community owners using recyclable waste





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Sustainable Development Management

Building a Happy Life
for Communities

Leading a Harmonious
and Prosperous Society

Believing that communities are the soil for the survival and development of enterprises, COHL endorses the concept of nurturing and contributing to society. By engaging in people's livelihood construction, reinforcing community connections, and actively participating in poverty alleviation and charitable donations, the Group is dedicated to fulfilling its corporate social responsibilities and building a harmonious and prosperous community life.







TARGETED POVERTY ALLEVIATION

The Group actively responds to the national rural revitalisation strategy of targeted poverty alleviation, promoting local industrial development and contributing to talent cultivation through industry support, consumption support, and employment support for rural revitalisation. To foster economic development and social progress in poverty-stricken areas, the Group provides economic assistance and employment opportunities to local communities, in order to improve the quality of life of rural residents and promote the sustainable benefits of local communities. In 2022, the Group accomplished HKD13.7 million1 of consumption support, with a total investment of HKD2.6 million¹.

Industry Support

The Group's property development and operation business has founded the charity brand "Sea of Hope" and continuously carried out various assistance initiatives in impoverished areas since 2018. With the aim of promoting farmers' income and local industrial development for poor areas, "Sea of Hope" creates original brands and promotes sales for local quality agricultural products, forming a "sustainable, replicable and circular" support and aid model. In 2022, "Sea of Hope" focused on assisting Zhuoni County of Gannan Tibetan Autonomous Prefecture in Gansu Province, to create the "Highland barley & grain porridge" brand, in order to promote the development of local special agricultural products and cultivation. Besides, it helped market Kangle County's "Kangle Mushroom" and Zhuoni County's "Vale of Cloud Quinoa" and other agricultural products in Gansu Province launched in 2020 and 2021 to ensure the long-term operation of the marketing model.

Over the past five years, the "Sea of Hope" initiative has benefited nearly 1,000 poor households, encouraging local residents to replicate successful business experience, with a view to laying a more solid and longer-term foundation for poverty alleviation. In 2022, the property development and operation business carried out more than 60 activities of "Sea of Hope, Rural Revitalisation" across the country.



Leveraging its industry advantages, the property services business of the Group has created an e-commerce platform for the sales of agricultural and sideline products, to provide targeted assistance to Kang County, Kangle County and Zhuoni County in Gansu Province and support Changting County in Fujian Province. The business has established the "Haihui Youyou" agricultural shopping mall and the "Zhonghai Youjia" offline physical store to open up both online and offline channels, helping the revitalising county's agricultural products to be sold all over the country. Since 2019, it has developed and launched a total of 62 types of agricultural products, supported 20 local leading enterprises and 45 cooperatives, and provided assistance to more than 5.000 rural households, with an accumulated sale of more than HKD78.3 million1.



Consumption Support

The Group has participated in rural revitalisation through "buy for help" and purchased agricultural products from Fujian Province and Gansu Province, as gifts for customers and property owners, employee benefits and for projects that have canteens. In 2022, it has accumulated HKD870,000¹ in consumption, promoting rural consumption, increasing sales, and expanding the market for agricultural products.

Accumulated

over HKD870,000

in agricultural product consumption in the form of "buy for help"

Employment Support

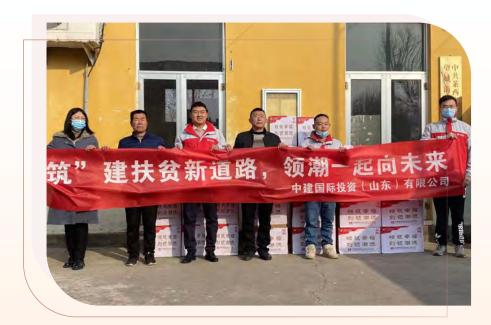
The Group actively provides employment opportunities for local talents and impoverished families and promotes the development of local communities and economies by carrying out and operating regional business and rural revitalisation programs. Since 2018, the Group has visited three counties of Gansu Province to hold special job fairs for assistance. More than 430 applicants have been negotiated, and nearly 20 people have been officially recruited. In addition, the Group has provided more than 200 employment positions to the local residents by conducting comprehensive services such as community management and maintenance, greening management and protection, river management, non-motor vehicle management and intelligent services in Urumqi, Xinjiang, so as to increase economic vitality. In 2022, the "Sea

of Hope" targeted support and aid initiative purchased and promoted the sale of over HKD16.78 million¹ of agricultural products in three counties in Gansu and Tingzhou County in Fujian, benefiting more than 5,000 households and employing hundreds of local workers.



Assisting Disadvantaged Communities

The Group takes the initiative to understand the actual needs of disadvantaged communities and show care for local communities. In 2022, the Group visited and consoled elderly people in need in Liujiacun New Village during the Chinese New Year, sending them New Year's blessings and supplies and encouraging them to face life with an optimistic attitude. The Group also paid visits, carried out investigations and surveys, and visited local families in need, left-behind children and villagers in Wenjiahe Village to express sympathy, and gave out consolation money, donated office supplies, solar street lamps and winter school uniforms, etc. Through charitable support, the Group improved local infrastructure construction and the living environment, enhancing the quality of life and happiness of the local people.



EDUCATION SUPPORT

The Group recognises the importance of quality education as the foundation for improving people's lives and achieving sustainable development. Therefore, it has always adhered to the idea of "poverty alleviation should start by enhancing the skills of the impoverished population" and contributed to universal education. The Group promotes educational support through donations for the construction of schools and continuous provision of education assistance.

Supporting Basic Education

The Group has been devoted to community education starting from 2005, providing financial and resource assistance to teachers and students in impoverished regions. It has donated to build COHL Hope Schools, providing educational opportunities for students in poverty-stricken areas, so as to nurture the next generation of leaders for the society. Since the development of the plan, the Group has donated for the construction of 15 COHL Hope Schools and provided educational opportunities to over 20,000 students, continuously fostering education development in various regions. It visits the teachers and students at the Hope Primary Schools every year with love, organises June 1 Children's Day activities, school opening ceremonies, donates teaching equipment, books and stationery and other supplies, and carries out assistance activities for primary school students who are left behind and have difficulties in their families and sends warmth and care to them.

The Group strives to promote basic education and help solve the problem with education for students in need. Among them, it offers point-to-point help through overall planning, linkage and point-to-point implementation, in which its regional companies established partnerships with Hope Primary Schools across China, including Majin Primary School, Jiangkou Primary School, Jinfeng Primary School, Wenjiahe Primary School to carry out targeted assistance work. In the meantime, it carries out "Build a Dream Together and Manage Happiness" and other series of charity activities, helping students in need to attract social attention and support, so as to deliver charitable help and care to communities.

The Group organised its employees to form the "Dream Building Team" and conducted a public welfare activity called "Building Dreams and Happiness, Delivering Warmth" for left-behind children at Longquan Mingri Experimental Primary School in Jingyang County, Shaanxi Province. During the activity, members of the "Dream Building Team" taught the children about the origin of the Dragon Boat Festival, as well as the patriotic love and childlike innocence of Qu Yuan. They also taught the children to sing and make handicrafts, bringing love and warmth to the left-behind children. The Group was awarded the "Love Enterprise" plaque by the representatives from Mingri Experimental Primary School, recognising its efforts and contributions in caring for the education and growth of left-behind children.



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Building a Happy Life for Communities Leading a Harmonious and Prosperous Society

Normalisation of Educational Assistance

The Group established COHL Education to continue and deepen its education work through its independently operated education business. COHL Education has been using its practical experience, resources and capacity developed in the advanced education areas of the Greater Bay Area to conduct in-depth research on the actual situation of targeted poverty alleviation regions in Gansu, formulating and implementing specific initiatives for education support. At present, COHL Education runs 11 educational projects, with nearly 1,000 academic staff and more than 10,000 students.

COHL Education continues to carry out the "Spring Bud Action" series of educational support to Zhuoni, Kangle and Kang counties in Gansu Province. Based on the actual educational needs of the three counties in Gansu Province, it has used the "5G" future education as the basis for strategic planning and formed a continuous and regular education support strategy. The "Spring Bud Action" focuses on teacher system building, student training and special curriculum creation, etc., and adopts the approach of "inviting in and going out" to make targeted support plans. Since the project started in 2019, the total investment cost has exceeded HKD1.68 million¹, and more than 150 lectures and courses were delivered to the three counties, helping a total of 11,500 teachers and students.

Introducing Future Education Curriculum

Promoting the integration of the curriculum system of rural schools with the internationalised future education curriculum is an important way to improve rural education and achieve educational equality. COHL Education has built an "Al science and technology classroom" in Wenjiahe Hope Primary School in Kangle County, Changba Town Central Primary School in Kang County, and Liulin No. 2 Primary School in Zhuoni County, respectively. It has introduced Al courses covering the 6 grades of primary school. COHL Education has arranged professional trainers to carry out teaching training for school teachers, establishing long-term communication channels to ensure the efficient implementation of the courses.

In 2020, COHL Education co-established the "Future Education Experimental Class" with the three counties in Gansu, providing students with 6 years of science courses. Subsequently, in 2021, in collaboration with Shenzhen ME College, related projects were set up at Xinzhi Street Primary School in Kangle County, Tibetan Primary School in Zhuoni County and Chengguan No. 1 Primary School in Kang County respectively, to systematically introduce advanced future international science education from first-tier cities.

Focusing on Teacher Team Training

To enhance the effectiveness of educational assistance, COHL Education improves the quality of teacher teams and professional knowledge through diversified training activities. In 2022, the Group held a week-long "Spring Bud Action" training event for teachers in the Greater Bay Area at its Nankai School in Dongguan, organising training and exchanges with representatives of teachers from three counties in Gansu, Tingzhou County in Fujian and different Hope Primary Schools, benefiting a total of 1,200 people. With the theme of "Future and Hope", the event covered topics from campus culture features, teacher team building, classroom culture building to the PBL education model and theme-based education, allowing the participating teachers to have a more comprehensive understanding of how to combine future education and implement planning in conjunction with the actual conditions of the school. The event explained the future development of school branding strategy and improvement plan, primary education and teaching planning and practice, moral education planning and innovation of primary school, and covered the insights of building Chinese, Mathematics and English subjects, curriculum development and classroom practice activities.



FIGHTING THE VIRUS TOGETHER

In 2022, the Group has continued to assist communities across the country in fighting the epidemic and established a regular epidemic prevention and control mechanism. The Group kept abreast of and followed the latest regulations and requirements of the government to monitor epidemic developments and main symptoms. It also promptly disseminated relevant knowledge and information on epidemic prevention and control to all parties to raise awareness of epidemic prevention and protect the health and safety of communities. In addition, the Group has shouldered its corporate social responsibility for epidemic prevention and control and actively supported the front line of epidemic prevention in the communities, so as to mitigate the impact of the epidemic.

Supporting Anti-epidemic Facilities

In the face of the epidemic outbreak, the Group has taken practical actions to undertake the responsibility of epidemic prevention. In 2022, Hong Kong's epidemic prevention work faced severe challenges due to the fifth wave of outbreaks. It urgently constructed 8 medical facility projects, providing approximately 40,000 isolation beds. The first 6 community isolation facilities were completed within 29 days, and the Tsing Yi community isolation facility was built in just 7 days, creating a "Hong Kong construction miracle". The Penny's Bay and Kai Tak community isolation facilities were built using MiC and were delivered within 122 days. Additionally, the Penny's Bay and Kai Tak community isolation facilities were designed to accommodate their use during and following the epidemic period, thereby solving the housing problem for approximately 20,000 individuals by converting them into transitional housing for society with a few modifications on-site or after relocation in the future. Meanwhile, the property services business of the Group has gathered 600 people in 18 hours, and assembled 8,400 people to work for 100 consecutive days, operating and maintaining 8 community isolation facilities with high quality to swiftly relieve the pressure on the front line of epidemic prevention.

Supporting Epidemic Prevention and Relief

The fifth wave of the epidemic outbreak in Hong Kong was urgent and severe, with tight supplies of epidemic prevention materials and daily necessities. The Group organised a donation campaign with employees in Hong Kong and Mainland China, raised funds from numerous parties to purchase epidemic prevention supplies, and donated anti-epidemic materials and daily necessities to multiple non-profit organisations and public welfare groups, including masks, protective clothing, rapid test kits, disinfectants, and food, to help grassroots residents and the elderly in need to fight the epidemic.





In the meantime, the China Overseas Charity Fund of the Group jointly launched the "Unemployment Mutual Aid and Assistance Programme", with the non-profit organisation I M Possible, to provide short-term food and anti-epidemic material support for individuals and families who have lost their jobs or are experiencing financial difficulties due to the epidemic, spreading the belief of mutual assistance and love, which has benefitted over 500 families and 2,000 people.

Moreover, the volunteer teams of the Group's property services business carried out 45 care actions in 26 housing estates within just two months, distributing anti-epidemic materials with limited supply such as disinfectant sprays, rapid test kits to more than 30,000 families in need, covering more than 70,000 people of underprivileged groups.







Fostering Economic Recovery

As the COVID-19 situation stabilised and improved in 2022, various industries resumed work and production. To accelerate economic recovery, the Group's property development and operation business responded to the government's call and launched a number of initiatives to relieve the pandemic and resume work and production. The Group implemented the policies on rental abatement and support for small and micro enterprises and individual businesses during the pandemic, and reduced the rentals by approximately HKD23.63 million¹ in 20 projects covering 12 regions in China during the Year, lifting the burden on the small and micro enterprises and individual business in the places of its projects under operation. Meanwhile, the time of resumption of work and production coincided with the graduation and job-seeking season. COLI Long-term Leased Apartments launched the "Sailing Plan 2.0" in stores nationwide, providing fresh graduates with exclusive discounts, worry-free trial stays, same-city moves and other rental benefits to create a secure and safe living space for young people starting out in society.

Reduce the rentals for

20 projects

covering 12 regions in China throughout the Year

The amount reduced is approximately

HKD 23.63 million 1

CARING FOR COMMUNITY

The Group is committed to fulfilling its corporate social responsibility and giving back to society, it actively devotes itself to social charity. The Group interacts with communities and pays attention to the needs of the communities where it operates, providing charitable support to meet their actual demand, in order to contribute to a harmonious society.

Caring for the Elderly

The Group deeply cares about the needs and well-being of the elderly. At the Dragon Boat Festival, the Group organised the "Respect for the Elderly and Send Warmth to the Community at the Dragon Boat Festival" event through its established China Overseas Charity Fund, distributing dumplings and anti-epidemic supplies to 1,600 grassroots, allowing them to feel the warmth and care of society during the festival.



In 2022, in response to the impact of the epidemic on the physical and mental health of

the elderly, the Group's construction and infrastructure investment business led the volunteer team to hold the "Autumn Warmth — Caring for the Elderly in the Community" event, joining more than 160 elderly people to do hand exercises to stretch their muscles. To further assist elderly people who live alone or elderly couples who lack family care, the business carried out multiple "Community Care and Harmony with Love, and Barrier-free Housing for 100



Households" activities, organising volunteers to visit and comfort the elderly living alone, and utilising their professional skills to conduct indoor repairs and improve the living conditions of the elderly.

The property services business of the Group actively carried out elderly services in the community, sending warmth to hundreds of elderly, including conducting home visits, expressing sympathy and providing financial support to the elderly and persons with disabilities in different festivals such as Mid-Autumn Festival and Dragon Boat Festival; organising more than 10 activities of "Caring for Our Elderly Friends of the Community" to celebrate elderlies' birthdays; carrying out elderly care practices such as providing community cleaning, home cleaning and arrangement of free inspection of household installation and facilities.

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Building a Happy Life for Communities Leading a Harmonious and Prosperous Society

Engaging in Community Services

In 2022, the Group's property development and operation business held a "Convenient Service Day" to provide the owners with various repair service activities, including the maintenance of aluminium doors and windows, filter mesh cleaning for taps, kitchen knife sharpening, carpet cleaning, shoe repairing, and so on, which were demanded in a high frequency by the owners. A "face-to-face" owner communication station was set up at the activity site to accept the consultation of the owners and listen to their suggestions, providing more convenient and caring services and living assistance to the owners. In addition, the property services business of the Group connects with the community and has carried out community services to promote community development, including co-organising children's theatre through cooperation with social welfare organisations; actively helping ethnic minorities overcome difficulties in life; making festival props, playing games, and enjoying food with community residents during festivals.

Advocating Inclusiveness and Exercise for All

In celebration of the 73rd anniversary of the founding of the People's Republic of China and the 25th anniversary of Hong Kong's return to China, the Group, through its established China Overseas Charity Fund and its subsidiaries, held the "Celebrating the 25th Anniversary of Hong Kong's Return with the Legendary COHL Curling Exhibition" event in response to the "Sport For All Day 2022". Floor curling is suitable for everyone to participate in easily, realising the harmony and inclusion for the elderly, the young, the injured, and the disabled, which is in line with the concept of harmonious and inclusive development advocated by the China Overseas Charity Fund. The event received support from multiple organisations, with more than 200 citizens participating in the floor curling experience. In order to promote floor curling to the community, the Group recruited about 40 volunteers to participate in multiple professional trainings, becoming "Floor Curling Ambassadors" to promote universal exercise, physical and mental health, creating a happy community with harmony and inclusion.







In addition, the Group's property development and operation business planned the first "China Overseas Cup" Dragon Boat Race inviting 40 Hong Kong youths and over 100 corporate volunteers to participate in a series of activities such as onshore dragon boat experience, dragon boat training and dragon boat competitions with a view to strengthening social inclusion and supporting youth development.





About This Report

The Group understands the importance of sustainable development and is committed to implementing the concept of sustainability in its daily operations. The Group has been communicating with stakeholders from diverse backgrounds, and publishes the Sustainability Report every year to disclose its progress and related performance. The 2022 Sustainability Report outlines the management approaches, policies and measures of the Group in the three aspects of economy, environment and society, as well as its devotion and achievements in the United Nations SDGs.

Unless otherwise specified, this Report covers the reporting period from 1 January 2022 to 31 December 2022 (the "Year"), consistent with the financial year of the Group. The reporting scope covers the Group's operation regarding three business areas in Mainland China, Hong Kong and Macau, and the environmental and social data are indicated according to the Group's office operations and the three business areas. The above businesses are held by five Hong Kong-listed companies under the Group. Stakeholders can also refer to their annual sustainability reports for an in-depth understanding of the economic, environmental and social performance of each business.

Property development and operation business	
China Overseas Land & Investment Ltd.	www.coli.com.hk
China Overseas Grand Oceans Group Ltd.	www.cogogl.com.hk
Construction and infrastructure investment business	
China State Construction International Holdings Limited	www.csci.com.hk
China State Construction Development Holdings Limited	www.cscd.com.hk
Property services business	
China Overseas Property Holdings Limited	www.copl.com.hk

ENVIRONMENTAL KEY PERFORMANCE INDICATORS²

	The Group's headquarters		Property development and operation business ³		Construction and infrastructure investment business ⁴		Property services business	
Aspect	Quantity	Unit	Quantity	Unit	Quantity	Unit	Quantity	Unit
Air Emissions ⁵								
Nitrogen oxides (NOx)	7.60	kg	210.02	kg	489,489	kg	15,181	kg
Sulphur oxides (SOx)	0.08	kg	3.38	kg	152,500	kg	1,221	kg
Respiratory suspended particles (RSP)	0.43	kg	16.45	kg	28,197	kg	210	kg
Greenhouse Gas (GI	HG) Emissions							
Scope 1	14.52	tonne of CO ₂ -e	26,621.54	tonne of CO ₂ -e	825,768	tonne of CO ₂ -e	40,236	tonne of CO ₂ -e
Scope 2	150.21	tonne of CO ₂ -e	388,382.82	tonne of CO ₂ -e	105,641	tonne of CO ₂ -e	487,487	tonne of CO ₂ -e
GHG emissions in total (Scope 1 and 2)	164.73	tonne of CO ₂ -e	415,004.36	tonne of CO ₂ -e	931,409	tonne of CO ₂ -e	527,723	tonne of CO ₂ -e
Scope 3	13.80	tonne of CO2-e	729.83	tonne of CO2-e	84,957	tonne of CO ₂ -e	249	tonne of CO2-e
GHG emissions in total (Scope 1, 2 and 3)	178.53	tonne of CO ₂ -e	415,734.19	tonne of CO ₂ -e	1,016,366	tonne of CO ₂ -e	527,972	tonne of CO ₂ -e

² For detailed key performance indicators and statistical methods of the Group's subsidiaries, please refer to the subsidiary's 2022 ESG report.

Unless otherwise specified, the data covers China Overseas Land & Investment Ltd. (Stock code: 00688.HK) and China Overseas Grand Oceans Group Ltd. (Stock code: 00081.HK) under the Group.

The data covers the business of China State Construction International Holdings Limited (Stock code: 03311.HK) under the Group in Mainland China, Hong Kong and Macau, and includes performance data for China State Construction Development Holdings Limited (Stock code: 00830.HK).

Data of the property development and operation business only includes China Overseas Grand Oceans Group Ltd. (Stock code: 00081.HK).

The Group's headquarters		Property development and operation business ³		Construction and infrastructure investment business ⁴		Property services business		
Aspect	Quantity	Unit	Quantity	Unit	Quantity	Unit	Quantity	Unit
Energy Consumption								
Petrol	49.50	MWh	8,606.47	MWh	8,611	MWh	2,001	MWh
Diesel	3.46	MWh	10,369.39	MWh	28,824	MWh	1,194	MWh
Natural gas	/	/	70,254.36	MWh	6,265	MWh	179,027	MWh
Liquefied petroleum gas	/	/	847.03	MWh	1,211	MWh	1,184	MWh
Liquefied natural gas	/	/	/	/	19	MWh	525	MWh
Pipeline gas	/	/	/	/	390	MWh	/	/
Acetylene	/	/	/	/	336	MWh	/	/
Methanol	/	/	/	/	215	MWh	/	/
Lignite	/	/	/	/	2,041,357	MWh	/	/
Purchased electricity	220.90	MWh	561,558.11	MWh	177,638	MWh	842,127	MWh
Purchased heat (including hot water and steam)	/	/	117,107.62	MWh	14,671	MWh	/	/
Sold electricity	/	/	/	/	79,546	MWh	/	/
Sold heat	/	/	/	/	1,645,134	MWh	/	/
Renewable energy	/	/	/	/	45	MWh	/	/
Total energy consumption	273.86	MWh	768,742.98	MWh	554,857	MWh	1,026,058	MWh

	The Group's headquarters		Property development and operation business ³		Construction and infrastructure investment business ⁴		Property services business	
Aspect	Quantity	Unit	Quantity	Unit	Quantity	Unit	Quantity	Unit
Water Consumption	on							
Total water consumption	There is no relevant statistical data as the water supply is controlled by the property management office and no		15,700,935.44	m³	8,075,644	m³	19,018,099	m³
Paper Consumption	on							
Total paper consumption	1.24	tonne	/	/	2,812	tonne	/	/
Waste Production								
Total non-hazardous waste	3.24	tonne	18,075,857.37	tonne	685,699,223	tonne	154,879	tonne
Total hazardous waste	/	/	63.74	tonne	151.19	tonne	196.80	tonne

SOCIAL KEY PERFORMANCE INDICATORS²

	The Group's headquarters		Property development and operation business ⁶		Construction and infrastructure investment business ⁷		Property s	ervices business
Aspect	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Workforce								
Total number of employees	88	/	7,412	/	13,534	/	57,425	/
By gender								
Male	66	75.00%	5,000	67.46%	11,268	83.26%	36,745	63.99%
Female	22	25.00%	2,412	32.54%	2,266	16.74%	20,680	36.01%
By geographic loca	ition							
Mainland China	9	10.23%	7,267	98.04%	7,976	58.93%	46,095	80.27%
Hong Kong	79	89.77%			4,500	33.25%	10,906	18.99%
Macau	0	0%	145	1.96%	766	5.66%	424	0.74%
Overseas	0	0%			292	2.16%	0	0%
By age								
30 years old or below	8	9.09%	1,766	23.83%	4,276	31.59%	14,474	25.21%
31-40 years old	40	45.46%	E 4479	70.400/	5,051	37.32%	00.4100	FO 070/
41-50 years old	21	23.86%	5,4478	73.49%	2,556	18.89%	30,419°	52.97%
51 years old or above	19	21.59%	199	2.68%	1,651	12.20%	12,532	21.82%

Unless otherwise specified, the data covers China Overseas Land & Investment Ltd. (Stock code: 00688.HK) and China Overseas Grand Oceans Group Ltd. (Stock code: 00081.HK) under the Group.

The data covers the business of China State Construction International Holdings Limited (Stock code: 03311.HK) under the Group in Mainland China, Hong Kong and Macau, and includes performance data for China State Construction Development Holdings Limited (Stock code: 00830.HK). Data related to the number of employees, new hires, employee turnover, and training is applicable to monthly-paid employees. For data of other workers, please refer to the company's 2022 ESG report.

Bata for employees aged 30 from China Overseas Land & Investment Ltd. (Stock code: 00688.HK) and China Overseas Grand Oceans Group Ltd. (Stock code: 00081.HK) are included in the category of "31-40 years old".

Data for employees aged 30 from China Overseas Property Holdings Limited (Stock code: 02669.HK) is included in the category of "31-40 years old".

	The Group's headquarters		Property development and operation business ⁶		Construction and infrastructure investment business ⁷		Property services business	
Aspect	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
By grade								
Senior management	5	5.68%	87	1.17%	45	0.33%	38	0.07%
Middle management	28	31.82%	370	4.99%	407	3.01%	143	0.25%
Executive	41	46.59%	0.05510	93.84%	2,655	19.62%	1,972	3.43%
General staff	14	15.91%	6,95510	93.04%	10,427	77.04%	55,272	96.25%
By contract type								
Permanent	88	100%	/	/	/	/	19,143	33.34%
Contract	0	0%	/	/	/	/	38,282	66.66%
By employment type								
Full-time	88	100%	7,412	100%	/	/	56,768	98.86%
Part-time	0	0%	0	0%	/	/	657	1.14%
New Hires ^{11, 12}								
Total number of new hires	8	9.09%	318	7.30%	3,950	29.00%	20,74013	36.10%
By gender (rate acco	ording to the re	elevant category)						
Male	4	6.06%	216	6.80%	3,298	27.00%	12,870	35.00%
Female	4	18.18%	102	8.50%	652	22.00%	7,870	38.10%

The data covers entry-level employees and general employees of China Overseas Land & Investment Ltd. (Stock code: 00688.HK) and general staff of China Overseas Grand Oceans Group Ltd. (Stock code: 00081.HK).

Data of the property development and operation business only covers China Overseas Land & Investment Ltd. (Stock code: 00688.HK), and China Overseas Grand Oceans Group Ltd. (Stock code: 00081.HK) has no relevant data disclosure.

For the Group and the property development and operation business, percentage of new hires= (number of new hires in the specified category/total number of employees in the specified category) × 100%.

The number of newly recruited employees for property services business in 2022 does not include the additional temporary workers hired to work in Hong Kong's community isolation facilities due to the epidemic, of which the number is 11,980.

	The Group's headquarters		Property development and operation business ⁶		Construction and infrastructure investment business ⁷		Property services business	
Aspect	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
By geographic loca	ation (rate accor	ding to the relevant	category)					
Mainland China	0	0%	297	7.00%			13,638	29.60%
Hong Kong	8	10.13%			No statistics by	No statistics by	6,943	63.70%
Macau	0	0%	21	0.50%	location	location	159	37.50%
Overseas	0	0%					0	0%
By age (rate accord	ding to the relev	ant category)						
30 years old or below	1	12.50%	114	15.00%	1,990	45.00%	7,249	50.10%
31-40 years old	5	12.50%	0008	F 000/	1,352	25.00%	7.4059	0.4.400/
41-50 years old	2	9.52%	203 ⁸	5.90%	468	16.00%	7,425 ⁹	24.40%
51 years old or above	0	0%	1	0.70%	140	5.00%	6,066	48.40%
Employee Turnover	-14							
Total number of turnovers	1	1.14%	1,479	19.95%	3,091	23.00%	17,773 ¹⁵	30.90%
By gender (rate acc	cording to the r	elevant category)						
Male	0	0%	969	19.38%	2,646	23.00%	11,042	30.10%
Female	1	4.55%	510	21.14%	445	20.00%	6,731	32.50%

For the Group and the property development and operation business, percentage of employee turnover= (number of employee turnover in the specified category/total number of employees in the specified category) × 100%.

The number of resigned employees for property services business in 2022 does not include the additional temporary workers hired to work in Hong Kong's community isolation facilities due to the epidemic, of which the number is 5,741.

	The Group's headquarters		Property development and operation business ⁶		Construction and infrastructure investment business ⁷		Property services business	
Aspect	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
By geographic loca	ition (rate accor	ding to the relevant	category)					
Mainland China	0	0%	1,455	20.02%	1,769	22.00%	12,449	27.00%
Hong Kong	1	1.27%			1,149	26.00%	5,205	47.70%
Macau	0	0%	24	16.55%	86	11.00%	119	28.10%
Overseas	0	0%			87	29.79%	0	0%
By age (rate accord	ding to the relev	vant category)						
30 years old or below	0	0%	465	26.33%	1,393	33.00%	5,542	38.30%
31-40 years old	1	2.50%	0608	17.000/	1,070	21.00%	7.0069	06.100/
41-50 years old	0	0%	9638	17.68%	394	15.00%	7,926 ⁹	26.10%
51 years old or above	0	0%	29	14.57%	234	14.00%	4,305	34.40%
Average Training H	ours ^{16, 17}							
Average training hours	90.00	/	64.15	/	24.80	/	29.80	/
By gender								
Male	90.00	/	67.51	/	24.90	/	32.30	/
Female	90.00	/	57.65	/	24.40	/	25.40	/

Data of construction and infrastructure investment business covers data of employee turnover from China State Construction International Holdings Limited (Stock code: 03311.HK) who has received training during the Year.

For the Group and the property development and operation business, average training hours=Total training hours of employees in the specified category/Total number of employees in the specified category.

	The Group's headquarters		Property development and operation business ⁶		Construction and infrastructure investment business ⁷		Property services business	
Aspect	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
By grade								
Senior management	120.00	/	82.80	/	50.50	/	81.80	/
Middle management	90.00	/	67.42	/	25.30	/	98.30	/
Executive	90.00	/	60,0010	1	16.40	/	24.70	/
General staff	79.29	/	63.8210	/	26.90	/	29.80	/
Employee Trained ^{16, 1}	8							
Total number of employees trained	88	100%	7,705	103.95%	/	95.00%	57,411	99.98%
By gender								
Male	66	100%	5,241	104.82%	/	95.00%	36,731	99.96%
Female	22	100%	2,464	102.16%	/	95.00%	20,680	100%
By grade								
Senior management	5	100%	87	100%	/	100%	34	89.50%
Middle management	28	100%	370	100%	/	71.00%	137	95.80%
Executive	41	100%	7.04010		/	89.00%	1,972	100%
General staff	14	100%	7,248 ¹⁰	104.21%	/	98.00%	55,268	99.99%

For the Group and the property development and operation business, training percentage=(total number of employee trained in the specified category/total number of employees in the specified category)× 100%.

	The Group's headquarters		Property development and operation business ⁶		Construction and infrastructure investment business ⁷		Property services business	
Aspect	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Occupational Health	and Safety							
Work-related injuries	0	/	0	/	16	0.1019	152	0.33 ²⁰
Work-related fatalities	0	/	0	/	1	0.01 ²¹	7	0.01
Lost days due to work-related	0	/	0	/	916	/	5,472	/
injury or disease								

Work-related injury rate = (Number of recordable injuries/Original number of total working hours) × 200,000.

Work-related injury rate = (Number of injuries/Original number of total working hours) × 200,000. Total number of working hours is estimated based on 8 hours per working day.

Work related fatality rate = (Number of work-related causality/Original number of total working hours) \times 200,000.