



Analogue Holdings Limited  
安樂工程集團有限公司

(Incorporated in Bermuda with limited liability)  
(Stock Code: 1977)

2023

Environmental,  
Social and Governance Report



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## FOUNDER'S STATEMENT



*In a spirit of craftsmanship and professionalism, we work to co-create higher quality built environments and a more sustainable future.*

In today's complex and dynamic business landscape, we are firmly committed to our vision, mission, and core values. Sustainability has always been a fundamental principle in the way we conduct business.

Sustainability has been ingrained in our Group's DNA, guiding our decision-making processes, strategies, and everyday operations. Our Corporate Sustainability Strategy covers our targets and specific actions that guide us in achieving our sustainability goals. It aims to enhance our endeavours in embedding sustainability in all aspects of our business and operations.

We believe that sustainability has synergies with innovation, and one can lead to the other. Leveraging our technological capabilities to drive innovation, we optimise the positive impacts of our solutions, such as Design for Manufacture and Assembly ("DfMA") - Multi-Trade Integrated Mechanical, Electrical and Plumbing ("MiMEP") and Digital Twin. These are intended to create a ripple effect that not only helps businesses achieve their sustainability objectives, but also benefits wider communities and the environment.

Sustainability is a shared journey that includes everyone. It demands the collaboration of all key stakeholders, with employees, customers, subcontractors, suppliers and local communities. We remain committed to engaging with our stakeholders across the value chain and encouraging them to join us in a shared endeavour to create a more sustainable future.

Our motto is: "We Commit. We Perform. We Deliver". With our expertise, we strive to put this vision into practice, aiming to make a positive impact on the world around us.

**Dr. Poon Lok To, Otto**  
Founder

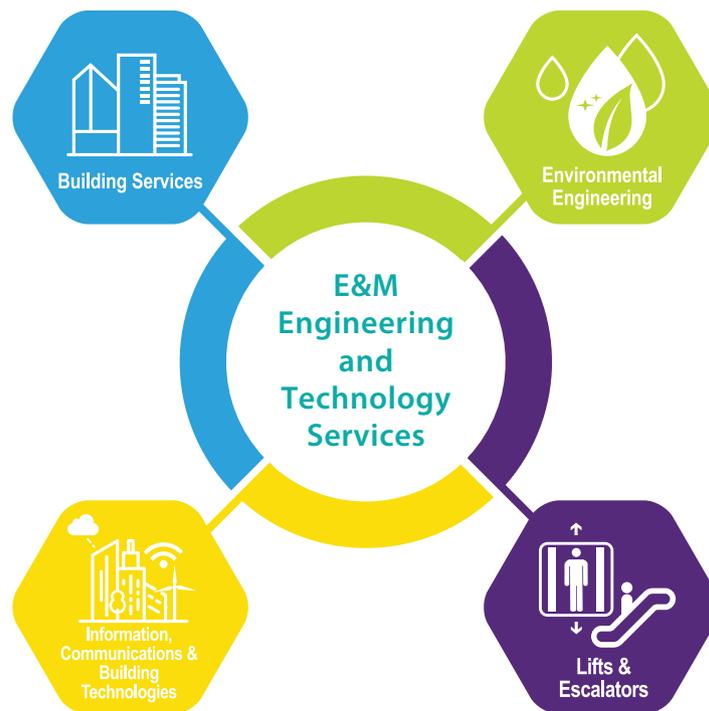
Hong Kong, 25 March 2024



# ABOUT ANALOGUE HOLDINGS LIMITED

Established in 1977, Analogue Holdings Limited (the “Company”, together with its subsidiaries, collectively the “Group”) (stock code: 1977) is a leading electrical and mechanical (“E&M”) engineering and technology service provider, with headquarters in Hong Kong and operations in Macau, Mainland China, the United States and the United Kingdom. Serving a wide spectrum of customers from public and private sectors, the Group provides multidisciplinary and comprehensive E&M engineering and technology services in four major segments, including Building Services, Environmental Engineering, Information, Communications and Building Technologies (“ICBT”) and Lifts & Escalators.

The Group also manufactures and sells Anlev lifts and escalators internationally and has entered into an alliance with Transel Elevator & Electric Inc., one of the largest independent lifts and escalators companies in New York, the United States. The Group’s associate partner, Nanjing Canatal Data Centre Environmental Tech Company Limited (603912.SS), specialises in manufacturing of precision air conditioners.



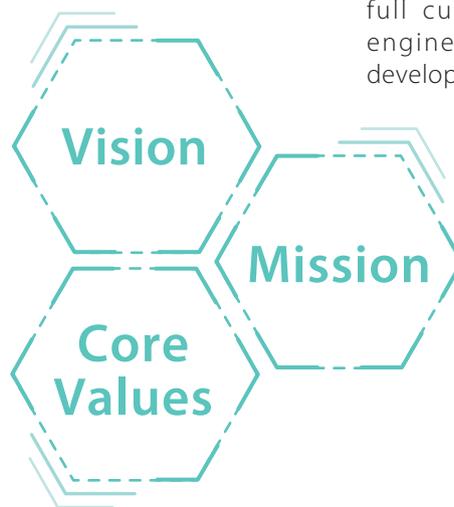


## Our Vision, Mission and Core Values

Our Vision, Mission and Core Values shape our culture and promises to our stakeholders. They drive a commitment to excellence and innovation to achieve our goals.

- To be an innovative, leading and sustainable multi-disciplinary E&M engineering and ICT\* service Group

- To create shared value and attain full customer satisfaction through engineering excellence and talent development



### ● Trust

We build trust and respect between our internal and external stakeholders through fulfilling our commitment to staff and customers.

### ● Integrity

We uphold integrity, fair play, and business ethics in everything we do.

### ● Innovation

We encourage innovative ideas to pioneer new approaches to achieve breakthroughs.

### ● Customer Focus

We respond to the needs of our customers to attain full customer satisfaction and long-term goodwill.

### ● Drive for Results

We strive for long-term growth by working collaboratively with our stakeholders to create shared value.

### ● Safety

We put the health and safety of our staff and workers as our priority through providing a safe working environment.

### ● Sustainability

We conduct our business in an environmentally and socially responsible manner whilst intensifying our support to customers on transitioning to a smart and low-carbon future.

\* ICT is defined as Information and Communications Technology



# 2023 AT A GLANCE

## Performance Highlights in 2023

### Sustainability Governance



Developed **action plans and targets** to facilitate our progress in the 4 pillars of our Corporate Sustainability Strategy



Strengthened the **Tender and Project Risk Management System** to cover risks of additional specific sustainability-related topics



Adopted a refined materiality assessment approach that incorporates the **double materiality** concept

### Decarbonising Our Operations



Aligned our approach to **climate-related management and disclosures** with the international climate-related disclosure standards



Formulated **SMART carbon reduction targets**<sup>1</sup> and strategies to drive decarbonisation journey



Obtained the **Provisional Platinum rating under BEAM Plus New Buildings (V2.0)** with our new green headquarters — **ATAL TOWER**



Launched the first-ever **“ATAL Green Month”** campaign to raise environmental awareness

### Co-creating A Sustainable Value Chain



Achieved **average scores between “good” and “excellent”** in the customer satisfaction surveys



Organised a series of training workshops on **customer relationship management**



**Over 50%** of our building services projects adopted **advanced construction technologies** to improve project efficiency and quality



Organised the **“ATAL Quality, Safety, Environment & Sustainability Forum”** to engage our subcontractors

<sup>1</sup> Refer to carbon reduction targets that are Specific, Measurable, Attainable, Relevant, and Time bound



### Driving Smart City Development



Provided **ESG-centric digital twin solution** for smart building management and water and sewage treatment processes



Adopted **artificial intelligence (“AI”)** to enable automatic detection and diagnosis of faults in building systems



Promoted smart city development through **industry exchange initiatives**

### Championing Our People



Became a charter signatory to the **“Racial Diversity & Inclusion Charter for Employers”** issued by the Equal Opportunities Commission



**~90%** of permanent employees received training



Since 1984, have fostered **1,100+ Graduate Trainees and Technician Trainees**



**0** work-related fatalities, including employees and subcontractors’ workers



**Very low** industrial accident rate<sup>2</sup> at **1.5** per 1,000 employees and subcontractors’ workers

### Reinforcing Business Ethics and Integrity



Implemented a **group-wide tailored compliance programme**



Conducted a series of **mandatory business ethics training** workshops



Enriched our **Whistle-blowing Policy**

<sup>2</sup> A reportable industrial accident is defined as an incident resulting in 3 days or more of sick leave. Industrial accident rate per 1,000 employees and subcontractors’ workers = (Number of reportable industrial accidents sustained by an employee or a subcontractor’s worker/Average number of employees and subcontractor’s workers in the Reporting Period) x 1,000



## Major Awards and Recognitions



### IESGB ESG Achievement Award 2022/2023

Institute of ESG & Benchmark (IESGB)

- Outstanding ESG Awards (Listed Company) – Platinum
- Criteria set by Funds Manager – Distinguished ESG Company – Merit
- ESG Innovative Project Award – Merit

### Hong Kong Green and Sustainability Contribution Awards 2023

Hong Kong Quality Assurance Agency (HKQAA)

- Outstanding Award for Excellent Contribution to Livable City Construction (Subcontractor) – Promote MiC Adoption
- Outstanding Award for Excellent Contribution to Livable City Construction (Subcontractor) – Promote Eco-friendly Construction
- Outstanding Award for Excellent Contribution to Livable City Construction (Subcontractor) – Promote Safe Construction
- Gold Seals for Livable City Construction



### Hong Kong Sustainability Awards 2023

Hong Kong Management Association (HKMA)

- Certificate of Excellence (Large Organization Category)

### ListCo Excellence Award 2023

am730 and Phoenix New Media

- ListCo Excellence Award



### Listed Company Awards of Excellence 2023

Hong Kong Economic Journal (HKEJ)

- Listed Company Award of Excellence (Main Board)

### Outstanding Listed Companies Award 2023

Hong Kong Institute of Financial Analysts and Professional Commentators Limited (IFAPC) and Metro Finance

- Outstanding Listed Companies Award



### 2023 Hong Kong Sustainable Development Innovation and Technology Award

World Institute of Sustainable Development Planners

- Certificate – Congratulations of Jury



## OUR APPROACH TO SUSTAINABILITY

We view sustainability as the heart of the value we bring to our stakeholders. We embed sustainability in every facet of our business and work closely with our stakeholders to shape a smarter, more connected and sustainable future.

➤ *Sustainability is placed at the heart of our mission.*

### In this Chapter

- Corporate Sustainability Strategy
- Sustainability Governance
- Business Innovation
- Stakeholder Engagement
- Materiality Assessment

# OUR APPROACH TO SUSTAINABILITY

## Corporate Sustainability Strategy

***Sustainability is a comprehensive concept that touches every aspect of our business.***

Our Corporate Sustainability Strategy ensures that every part of our operations contributes to a sustainable future. We are focused on areas where we can create the greatest impact. Our strategy is built on four pillars that align the Group's strategy and actions with our fundamental commitment to sustainability. These guide our decision making and help us make progress on material issues.



We are committed to supporting the United Nations Sustainable Development Goals (“SDGs”). These goals serve as a universal call to action to end poverty, protect the planet, and ensure peace and prosperity for all by 2030. We believe that the following SDGs are closely related to our business operations and Corporate Sustainability Strategy. Our contributions to these SDGs and progress made against the pillars during the Year can be found in the corresponding chapters of this Environmental, Social and Governance (“ESG”) Report.



**SDG 3**  
**Good Health and Well-being**

Ensure healthy lives and promote well-being for all at all ages



**SDG 4**  
**Quality Education**

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



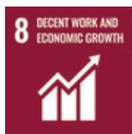
**SDG 6**  
**Clean Water and Sanitation**

Ensure availability and sustainable management of water and sanitation for all



**SDG 7**  
**Affordable and Clean Energy**

Ensure access to affordable, reliable, sustainable and modern energy for all



**SDG 8**  
**Decent Work and Economic Growth**

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



**SDG 9**  
**Industry, Innovation and Infrastructure**

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation



**SDG 11**  
**Sustainable Cities and Communities**

Make cities and human settlements inclusive, safe, resilient and sustainable



**SDG 12**  
**Responsible Consumption and Production**

Ensure sustainable consumption and production patterns



**SDG 13**  
**Climate Action**

Take urgent action to combat climate change and its impacts

Minimise the environmental impact of our operations through decarbonisation and responsible consumption of resources



- Low-Carbon Operations**  
To reduce our carbon footprint through operations that support the transition to a low-carbon future.
- Resource Optimisation**  
To ensure effective use of resources to reduce the environmental impact of our operations, and to enhance operational efficiency and productivity.
- Climate Risk Management**  
To identify and respond to climate-related risks across our operations and enhance our adaptability and resilience to climate change.



**Key Action**

- Reduce carbon emissions and energy consumption
- Increase environmental awareness within the organisation
- Promote the adoption of low-carbon and environment-friendly technologies and equipment

Attain customer satisfaction by embedding sustainability principles along the value chain, leveraging engineering excellence, professionalism, and quality services in close collaboration with key stakeholders



- Customers**  
To deliver quality, reliable and excellent products and services, while protecting the rights and interests of our customers.
- Subcontractors and Suppliers**  
To manage and develop collaborative working relationships with our subcontractors and our wider supply chain partners to ensure project quality, manage supply chain risks and improve project efficiency.
- Community**  
To make a difference to the long-term development of communities through corporate social responsibility programmes and philanthropy.



**Key Action**

- Attach importance to product and service quality and customer satisfaction
- Implement responsible supply chain management and encourage suppliers and subcontractors to adopt sustainable practices
- Provide support to the communities

Improve the quality of life and make cities smarter and greener

- Smart and Healthy Living**  
To promote smart, healthy and livable cities using innovative applications to connect and improve people's living environment.
- Climate Solutions**  
To optimise buildings and infrastructure to achieve energy conservation and carbon reduction.
- Clean Water and Sanitation**  
To apply advanced technology for potable water and wastewater treatment to enhance water quality and resilience.



**Key Action**

- Promote smart, low-carbon and environment-friendly products and services
- Focus on investment in research and development to foster innovation

Advance organisational capacity by creating an inclusive, people-centric workplace, promoting health and well-being, and fostering a culture of continuous learning and innovation

- People-Centric Workplace**  
To foster a people-centric culture and develop a healthy, supportive, and productive workplace where our employees can take pride in their work.
- Nurturing Our People**  
To cultivate a culture of continuous learning and professionalism among our people at all levels to support their careers and personal development. We aim to nurture a pipeline of engineering professionals and leaders that can adapt to and succeed in a rapidly changing environment.
- Health and Safety**  
To safeguard the health and safety of employees and all interested parties and provide a safe and healthy workplace

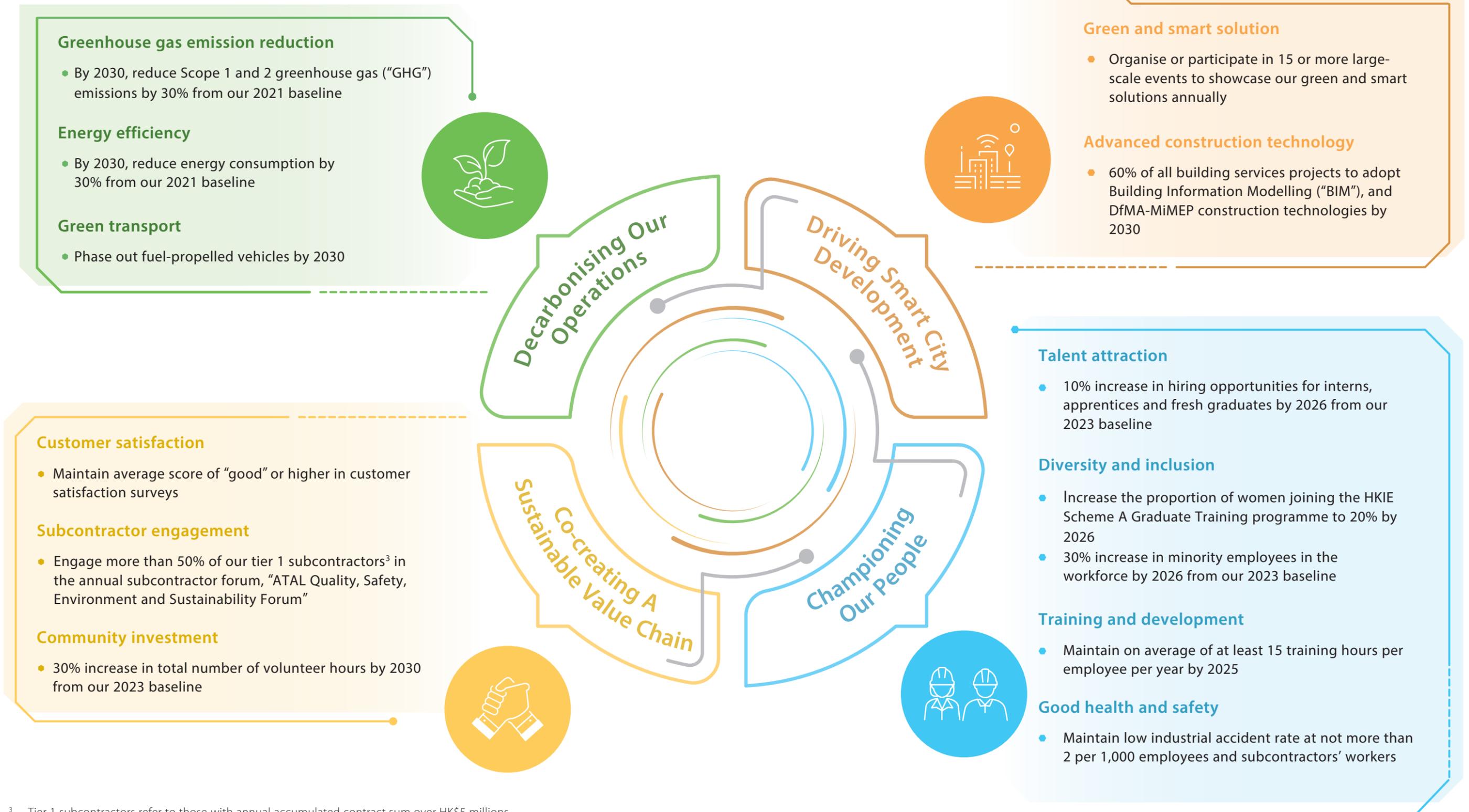


**Key Action**

- Focus on talent acquisition and succession planning, diversity and inclusion, employee engagement, and training and development
- Maintain robust occupational health and safety standards

## Sustainability Targets

Following the launch of the Corporate Sustainability Strategy, we developed action plans and targets, to optimise performance in each of our four pillars. The sustainability targets for each pillar are described below.



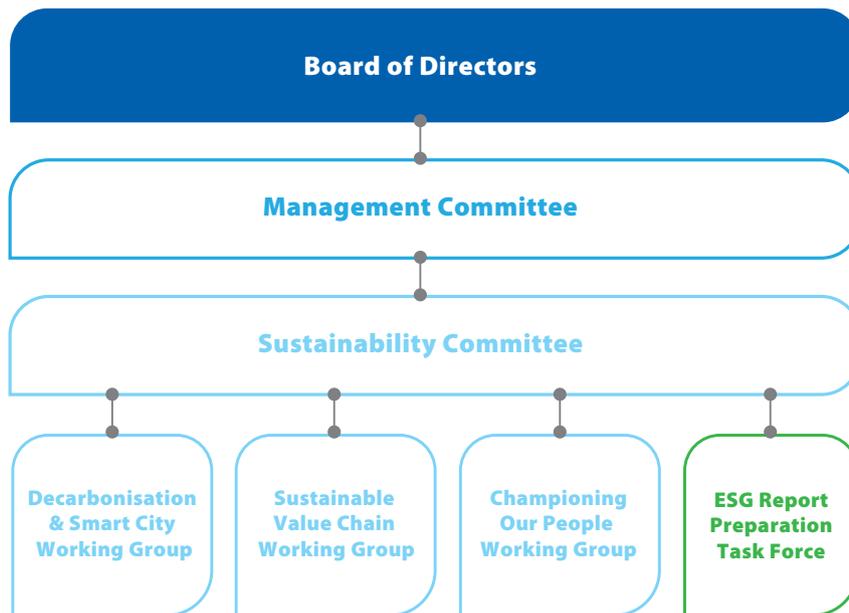
<sup>3</sup> Tier 1 subcontractors refer to those with annual accumulated contract sum over HK\$5 millions

## Sustainability Governance

**Managing sustainability is built on robust corporate governance and organisation-wide participation.**

We have adopted a two-pronged approach, both top-down and bottom-up, to anchor sustainability management at all levels of business operations leading the way in sustainability. This approach enables participation across the Group in developing action plans collaboratively and achieving our sustainability goals.

### Governance Structure



#### Board of Directors

Our sustainability governance begins with the Board, which has ultimate responsibility and accountability for sustainability, including climate-related matters. The Board oversees the Group’s major decisions around sustainability, including overall direction, strategy, and performance. With the support of the Sustainability Committee, the Board oversees implementation of our sustainability strategy and regularly reviews sustainability performance to ensure material sustainability considerations are holistically integrated into the Group’s strategic processes and the agreed goals and targets are met.

### *Sustainability Committee*

The Sustainability Committee is established by the Board and is chaired by a Board member. The committee comprises an Executive Director, management staff from various business and corporate units who contribute their expertise from their respective fields. Under the guidance of the Board, the Sustainability Committee is responsible for managing, implementing, and monitoring our sustainability strategy, targets, performance, action plans, and reporting.

### *Sustainability Working Groups*

Under the Sustainability Committee, there are three Sustainability Working Groups dedicated to overseeing and supporting our Corporate Sustainability Strategy's four key pillars. These include the Decarbonisation and Smart City Working Group, the Sustainable Value Chain Working Group, and the Championing Our People Working Group. The members consist of representatives from various business and corporate units. They apply their professional skills, industry insights, and understanding of operations to develop practical and effective sustainability initiatives. Key responsibilities include planning and implementing policies and initiatives, tracking progress and impact, and providing regular reports to the Sustainability Committee. This process ensures that the sustainability targets and action plans we have adopted remain relevant, practical, and impactful.

During the Year, the Sustainability Committee and Sustainability Working Groups are focused on reviewing sustainability performance and development of targets for the four pillars of our Corporate Sustainability Strategy.

### Sustainability Policies

***Group policies serve as a clear framework for consistent decision-making and operations.***

Our sustainability-related policies support our mission, values, and goals. These policies outline our commitment and general principle of operating responsibly. They direct our sustainability actions and go beyond regulatory obligations. We regularly communicate these policies to our employees and expect every employee to be familiar with and comply with all policies and guidelines. Our policies can be found in the following chapters of the Report.

## Sustainability Awareness

***We are engaging all along the value chain for a greater impact.***

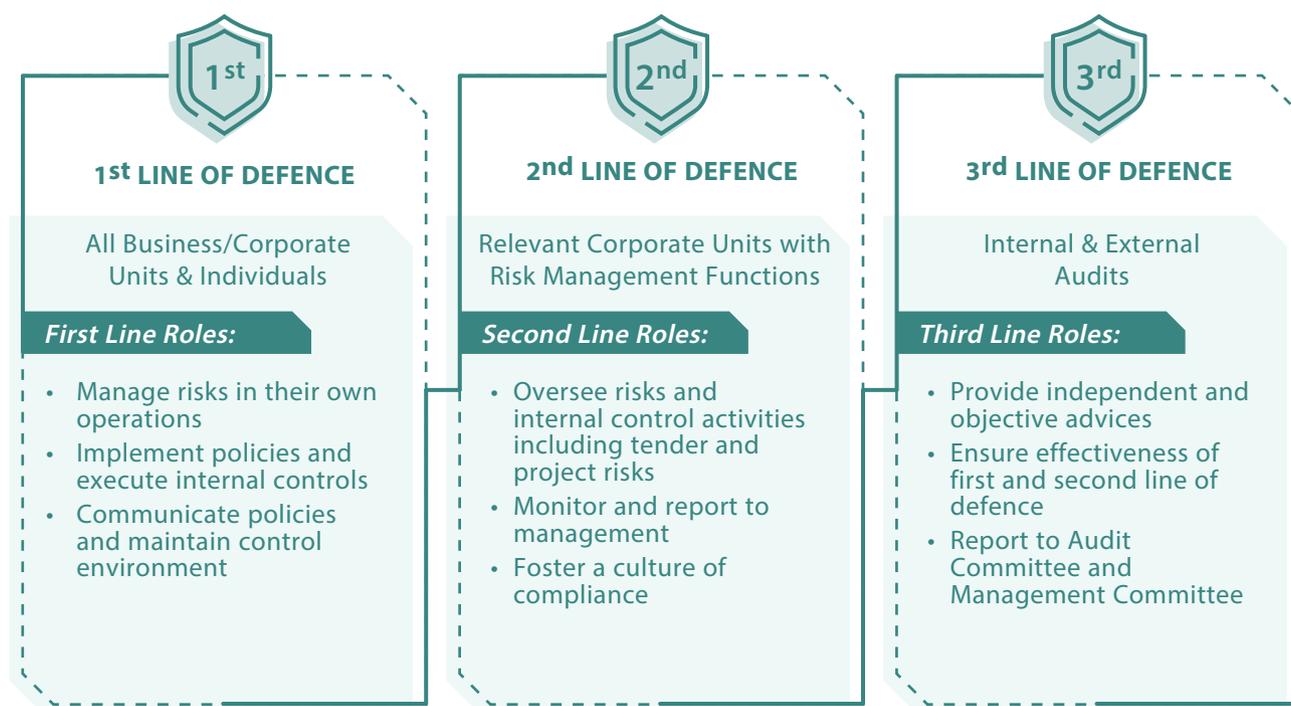
We believe that collaborating with customers, suppliers, and other stakeholders can increase the impact of our sustainability policies. To implement our strategy and achieve our goals, we initiate actions across the value chain. We have introduced training and engagement activities for different target groups of our stakeholders to foster a sense of responsibility and build capacity for sustainability.



Theme	Relevant Section of the ESG Report
Environmental Sustainability	Decarbonising Our Operations – Climate Change and Resilience, Environmental Awareness
Supply Chain Sustainability	Co-creating a Sustainable Value Chain – Subcontractors and Suppliers
Community Sharing	Co-creating a Sustainable Value Chain – Community
Diversity and Inclusion	Championing Our People – Diversity, Equity and Inclusion
Safety	Championing Our People – Occupational Health and Safety
Business Ethics	Reinforcing Business Ethics and Integrity – Business Ethics and Integrity

## Sustainability Risk Management

Risk management is a shared responsibility within the business. It is an ongoing process that involves all levels and functions, ranging from the Board members to individual employees. The Board supervises the identification and analysis of major risk exposures, including risk management and evaluation. We have incorporated risk management training into staff orientation and onboarding to integrate risk awareness into our organisational culture.



## Enterprise Risk Management

In line with internationally recognised frameworks for enterprise risk management, the Group has an Enterprise Risk Management System to identify, assess, mitigate, and monitor principal risks. The system is overseen by the Board, through its Risk Management Committee.

The Group's Enterprise Risk Management system covers strategic risks, financial risks, operational risks, compliance risk, and sustainability-related risks. Depending on their potential impact and likelihood of occurrence, we devise action plans to control and mitigate risks. During the Year, the Risk Management Committee reviewed risk levels, giving particular focus to climate-related physical and transition risks, as well as risks within our supply chain.

For more details, please refer to the section of "Risk Management and Internal Controls" in our Annual Report.

### Tender and Project Risk Management

At the tender and project level, our Tender and Project Risk Management System identifies and evaluates a range of risks, including sustainability-related risks, for current and prospective projects. The Tender and Project Management System helps in developing appropriate mitigation measures.

During the Year, we updated the risk register to cover risks of more specific topics, including the following sustainability-related risks:



Risk	Description
Climate Change	Any acute and chronic physical risk that may have financial implications for the Group, including direct impacts such as damage to construction sites and assets and indirect impacts from supply chain disruption. These should be addressed by exploring adaptation and resilience measures to reduce the impact on our business operations.
Environmental Impact	Any impact or potential impact to the environment throughout the project life cycle. Adverse environmental impacts include depletion of natural resources, noise pollution or other environmental pollution, and ecological impacts.
Technology	Risks from cyber attacks, data privacy, vulnerability to potential data breaches, or prolonged IT interruptions or system reliability issues.

### Crisis Management

We have implemented a Crisis Management Plan at the corporate level as well as Project Continuity Plans to ensure seamless operation of our business and respond to emergencies. These plans provide a framework for managing crisis situations and ensuring the safety and well-being of our employees and stakeholders.

To ensure the smooth execution of these plans, a dedicated Crisis Steering Team oversees and coordinates all aspects of crisis management, including internal and external communications. In the event of a crisis, a specialised Crisis Communication Team will be formed. It will be responsible for addressing all issues related to the crisis, including preparation and execution of crisis action plans, information dissemination, media relations, stakeholder communication, and post-event reviews. The primary objective of the Crisis Communication Team will be to keep all relevant parties informed and to provide timely updates to the Crisis Steering Team.

In the event of a disaster or other circumstances requiring contingency operations at the project level, the project's regular structure will transition to a contingency structure. The main responsibilities of the contingency structure are to safeguard employees and information assets, establish an effective response capability, oversee all response and recovery efforts, engage and inform stakeholders, efficiently resume critical business operations, meet regulatory obligations, and streamline progress reporting.

## Business Innovation

*Innovation is in our DNA.*

We believe that innovation is the bedrock of sustainability and are dedicated to nurturing a culture within our organisation that thrives on innovation, recognising its crucial role in paving the way for a sustainable future. This commitment is evident through our investments in research and development (“R&D”) and innovation technologies. These technologies include advanced building technologies, new environmental engineering technologies, ICBT, AI, robotic solutions, energy optimisation, energy storage, renewable energy, digitalisation and environmental protection solutions.

We empower our employees through capacity building to contribute to innovation in our products and services, process improvements and business concepts. In addition, we continuously explore new opportunities and seek collaborations with research institutions and experts around cutting-edge technologies that can be integrated into our business operations.

Our solutions incorporate innovative and modern technologies that have a transformational potential for the design of systems for driving smart city development. These solutions are not just for our current customers, but aim at creating a ripple effect, benefiting broader communities and the environment. Ultimately, we strive to contribute to a smart and sustainable future both globally and locally.



## Research and Development

Our in-house R&D team, consisting of highly skilled professionals, is constantly working in close collaboration with renowned hardware and software partners, as well as leading universities and research institutes. This collaborative approach allows us to not only gain access to the best industry practices but to stay at the forefront of innovation in the industry.

We have recently established a new business unit, Smart Data Automation (“SDA”), aiming at capitalising on the growing demand for automated data solutions. SDA applies AI and machine learning to utilise big data from industrial or infrastructure E&M systems to achieve smart system operations.

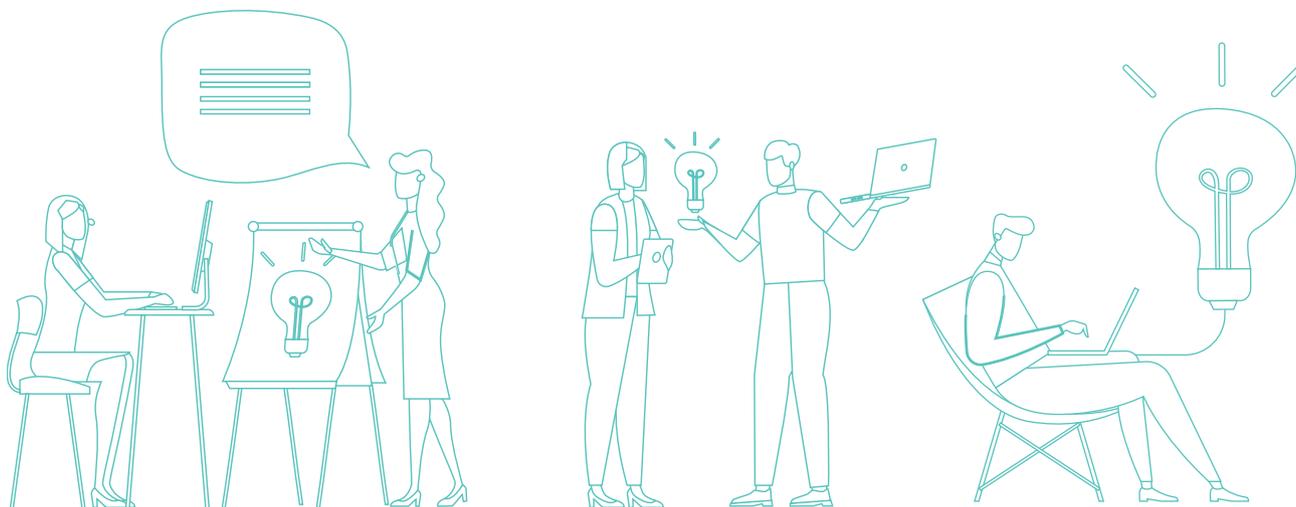
Leveraging partnerships, R&D, and our new business unit, we are able to strength our capacity for innovation and meet the evolving needs of customers.

## Capacity Building

The Group is an industry pioneer in the use of advanced construction technologies. Over 50% of its building services projects utilise BIM and DfMA-MiMEP. The adoption of these technologies has improved the effectiveness of project management and helped the construction industry transition into the digital age.

To improve and expand the Group’s overall BIM capability, we have established and maintained appropriate BIM environments, methodologies, and facilities, and invested in training, coaching, and mentoring programmes to upskill and empower our employees.

During the Year, we invested in professional development, with over 500 employees actively participating in more than 8,000 hours of internal training on BIM theory, software, and management. Additionally, our engineering and frontline staff were required to complete external BIM training. Our goal is to ensure that 70% of our engineering and frontline staff are BIM-certified by mid-2025.



### Innovative Culture

When our people have an idea, we help them take it beyond the drawing board. We have established the Chairman’s Innovation Award, a programme aiming at fostering a culture of innovation that takes place every two years. This competition encourages and empowers talented employees to think outside the box. By recognising and rewarding their efforts, we hope to produce a wave of creativity and drive positive change throughout our organisation.

#### Awardees of the Chairman’s Innovation Award 2023



**Gold**

**ESG Centric Digital Twin**

**Application and Impact**

Please refer to “Driving Smart City Development – Smart and Healthy Living”



**Silver**

**Smart Safety Harness for Working at Height**

**Application and Impact**

Please refer to “Championing Our People – Occupational Health and Safety”



**Bronze**

**Smart Chemical Dosing – ATAL Multi-stages Flocculation Sedimentation III (AMSFS III) x AlgoWater**

**Application and Impact**

Please refer to “Driving Smart City Development – Clean Water and Sanitation”



## Stakeholder Engagement

*We maintain open, transparent, and timely communication with our stakeholders.*

Engaging stakeholders involved in our value chain helps build trust and promotes collaboration as we strive for best practice in our operations and sustainability efforts. Regular interaction with our stakeholders gives us insight into their perspectives and expectations. We value their input, which helps to guide our business strategies and generate lasting value for all stakeholders.

### Stakeholder Engagement Process





**Employees:**

- Sustainability surveys
- Employee engagement surveys
- Focus group discussion (e.g., sustainability focus group discussion)
- Internal publications (e.g., *The Bridge*)
- Internal feedback channels (e.g., "Echo" Aerogram)
- Human Resources ("HR") visits and top management communication sessions
- Performance appraisals
- Regular meetings, training programmes, seminars and workshops
- Employee activities
- Internal emails and Intranet
- Corporate website
- Social media platforms (e.g., LinkedIn, WeChat)

**Investors and shareholders:**

- Sustainability surveys
- Annual general meetings
- Financial reports
- ESG reports
- Announcements and circulars
- Investor conferences
- Investor e-newsletters
- Investor Relations section on Corporate website
- Investor email alerts
- Press releases and public publications
- Social media platforms (e.g., LinkedIn, WeChat)
- Investor enquiry email address

**Customers:**

- Sustainability surveys
- Customer satisfaction surveys
- External newsletter *Voice of ATAL*
- Corporate website
- Public forums and seminars
- Social media platforms (e.g., LinkedIn, WeChat)
- Enquiry hotline and email address

**Suppliers and subcontractors:**

- Sustainability surveys
- Focus group discussion (e.g., sustainability focus group discussion)
- Regular meetings and performance assessment
- Workshops
- Inspections and visits
- External newsletter *Voice of ATAL*
- Corporate website
- Forums and seminars (e.g., annual subcontractor forum)
- Social media platforms (e.g., LinkedIn, WeChat)

**Communities, non-governmental organisations and the media:**

- Sustainability surveys
- Community activities and investment programmes
- Press releases and public publications
- External newsletter *Voice of ATAL*
- Corporate website
- Enquiry hotline and email address
- Public forums and seminars
- Social media platforms (e.g., LinkedIn, WeChat)

**Government and regulatory authorities:**

- Sustainability surveys
- Regular meetings and performance evaluation
- On-site inspections
- External newsletter *Voice of ATAL*
- Corporate website
- Public forums and seminars
- Social media platforms (e.g., LinkedIn, WeChat)



## Materiality Assessment

*We regard material sustainability issues as a guiding principle.*

We regularly review and assess sustainability based on materiality. In 2023, we conducted a materiality assessment with reference to Global Reporting Initiative (GRI) Standards and other international sustainability disclosure standards, to ensure our reporting aligned with global best practices. The assessment incorporated the double materiality concept, taking into account both financial materiality and impact materiality.

The assessment helped us identify and evaluate the sustainability issues most relevant to our business and stakeholders. This supports the development and refinement of our approach to sustainability and daily practices, ensuring that we consider the material risks and opportunities that lie ahead.



We have a three-step process of identification, prioritisation and validation for materiality assessment, which was facilitated by an external consultancy.



### 1. Identification

A list of sustainability issues relevant to the Group was developed with reference to the GRI Standards, Stock Exchange of Hong Kong ("HKEX") ESG Reporting Guide and other international sustainability disclosure standards and sustainability ratings.



### 2. Prioritisation

Internal and external stakeholders were invited to respond to an online survey to gather their opinions on the identified sustainability issues.

#### Financial Materiality

Internal stakeholders, including the Board and members of management, were engaged to evaluate the impact of each issue on the Group's enterprise value.

#### Impact Materiality

Our internal stakeholders, including employees, and external stakeholders, including investors and shareholders, suppliers, subcontractors, business partners, customers, non-governmental organisations, professional bodies, government and statutory bodies, and academia and schools, were invited to evaluate the Group's impacts on the economy, environment and society for each issue.

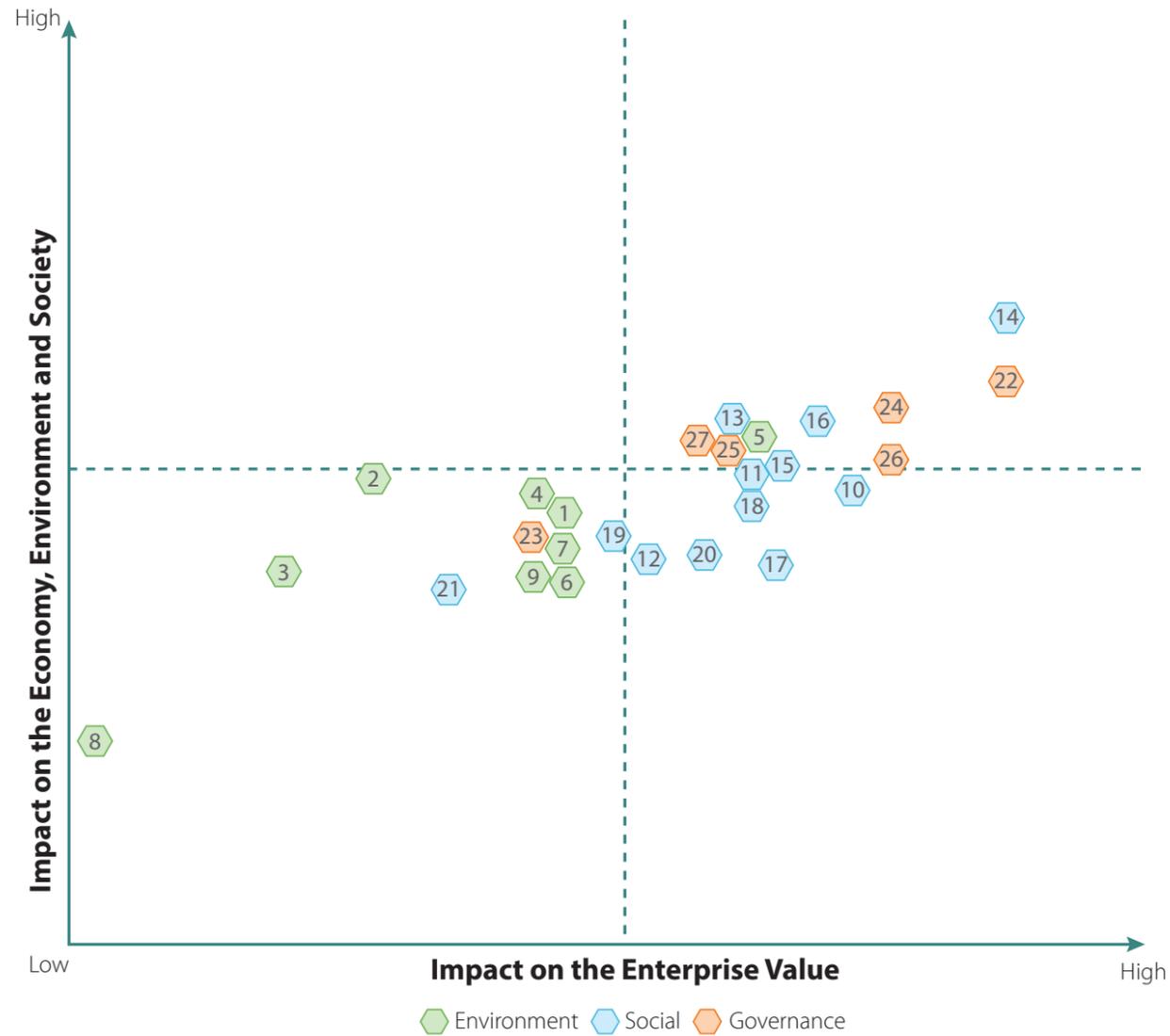
Views on both perspectives were assessed to determine the overall materiality level of each issue. A materiality matrix and a prioritised list of issues were developed.



### 3. Validation

The results of materiality assessment were presented to the Sustainability Committee for further evaluation, taking into account not only stakeholders' feedback but also the potential risks and opportunities associated with sustainability megatrends and the relationship with the Group's business objectives and priorities. The Sustainability Committee proposed upgrading the level of materiality of the "Climate Change and Resilience" and "Employee Engagement" topics to "Very Important". The final assessment results were subsequently validated and confirmed by the Management Committee and Board of Directors.

### Materiality Matrix



We identified 12 “very important” issues through the materiality assessment. The Report covers these issues as shown below:

Level of Materiality: Very Important	Relevant Chapters of the ESG Report
14 Occupational Health, Safety and Well-being	Championing Our People
22 Business Ethics and Integrity	Reinforcing Business Ethics and Integrity
24 Compliance Management	Reinforcing Business Ethics and Integrity
26 Risk Management	Our Approach to Sustainability
16 Product and Service Quality and Safety	Co-creating A Sustainable Value Chain
5 Energy	Decarbonising Our Operations
13 Training and Development	Championing Our People
15 Labour Standards	Championing Our People
25 Innovation and Technology	Our Approach to Sustainability; Driving Smart City Development
27 Contingency Planning	Our Approach to Sustainability
11 Employee Engagement^	Championing Our People
1 Climate Change and Resilience^	Decarbonising Our Operations

Level of Materiality: Important	Level of Materiality: Moderately important
10 Employment Practices	19 Responsible Marketing and Labelling
18 Privacy and Data Security	4 Waste
17 Customer Engagement	7 Materials
20 Responsible Supply Chain Management	23 Human Rights
12 Diversity and Equal Opportunity	6 Water
	9 Project Life Cycle Management
	2 Greenhouse Gas Emissions
	21 Community Engagement and Investment
	3 Air Emissions
	8 Biodiversity

^Upgraded the level of materiality to “Very Important” based on the considerations mentioned above.



## DECARBONISING OUR OPERATIONS

We are dedicated to managing our carbon footprint and reducing environmental impact responsibly. By decarbonising our business operations and managing climate-related risks and opportunities, we aim to strengthen our climate resilience. This is part of our contribution to the global and local effort to combat climate change.



### In this Chapter

- Climate Change and Resilience
- Resource Management
- Environmental Awareness



# DECARBONISING OUR OPERATIONS

## Climate Change and Resilience

Communities worldwide are increasingly experiencing the effects of climate change. To mitigate the most severe impacts of these changes, we must take actions to limit the global temperature rise and support the transition to a low carbon economy.

As a multi-disciplinary E&M engineering group committed to sustainability, we are concerned about climate change and have taken steps to reduce its impact on our business as well as any negative effect our business has on the changing climate.

Guided by our Climate Change Policy, we are dedicated to addressing climate change by identifying and responding to climate-related risks and opportunities within our operations. We strive to align our strategies with both local and international best practices, with the aim of mitigating the impacts of climate change and increasing our adaptability and resilience.

We align our approach to climate-related management and disclosures with the Task Force on Climate-related Financial Disclosure (“TCFD”) recommendations. These encompass four core elements: Governance, Strategy, Risk Management, and Metrics and Targets. Going forward, we are committed to refining our management strategies and practices and climate-related disclosures referencing the IFRS Sustainability Disclosure Standards, which are built on the TCFD recommendations and incorporated industry-based disclosure requirements, to align our performance more accurately with stakeholder expectations.

## Governance

The Board holds the ultimate responsibility and accountability for climate-related matters. The Sustainability Committee, chaired by a Board member, reports to the Board. It manages, implements, and monitors our sustainability strategy, targets, performance, action plans, and reporting. A new working group will be established under the Sustainability Committee to help manage climate-related risks and opportunities. During the Year, the Board received climate-related training, enhancing their ability to oversee climate matters.

For more details, please refer to “Our Approach to Sustainability – Sustainability Governance”.





## Strategy

The Group believes that climate mitigation and adaptation are crucial for the long-term sustainability of its business. We identify climate risks and opportunities in compiling a climate risk register among other efforts. We have already conducted a literature review to understand the potential climate risks and opportunities within our industry, across our various business segments, and within different categories of business operations. Moving forward, we plan to conduct peer reviews and stakeholder interviews or workshops to further refine our understanding and enhance our climate risk register.

We plan to conduct a climate scenario analysis to evaluate both physical and transition risks, the findings of which will be added to our climate risk register. Additionally, a financial evaluation will be carried out to assess how climate risks and opportunities, along with subsequent actions, might affect our operating costs, revenues, capital expenditure and allocation, acquisitions and divestments, and access to capital. Ultimately, we will develop a comprehensive corporate climate strategy and transition plan to strengthen our resilience to climate change.

## Risk Management

The Board takes responsibility for maintaining an appropriate and effective risk management system and internal controls, essential for the ongoing operations of the Group. The Board, through its Audit Committee and Risk Management Committee, oversees the Group's enterprise risk management system. Climate risk management has already been integrated into the overall risk management process. In 2023, the Risk Management Committee conducted a review, paying special attention to climate-related physical and transition risks. At the tender and project level, "Climate Change" was newly added as one of the risk dimensions of the Tender and Project Risk Management System.

## Metrics and Targets

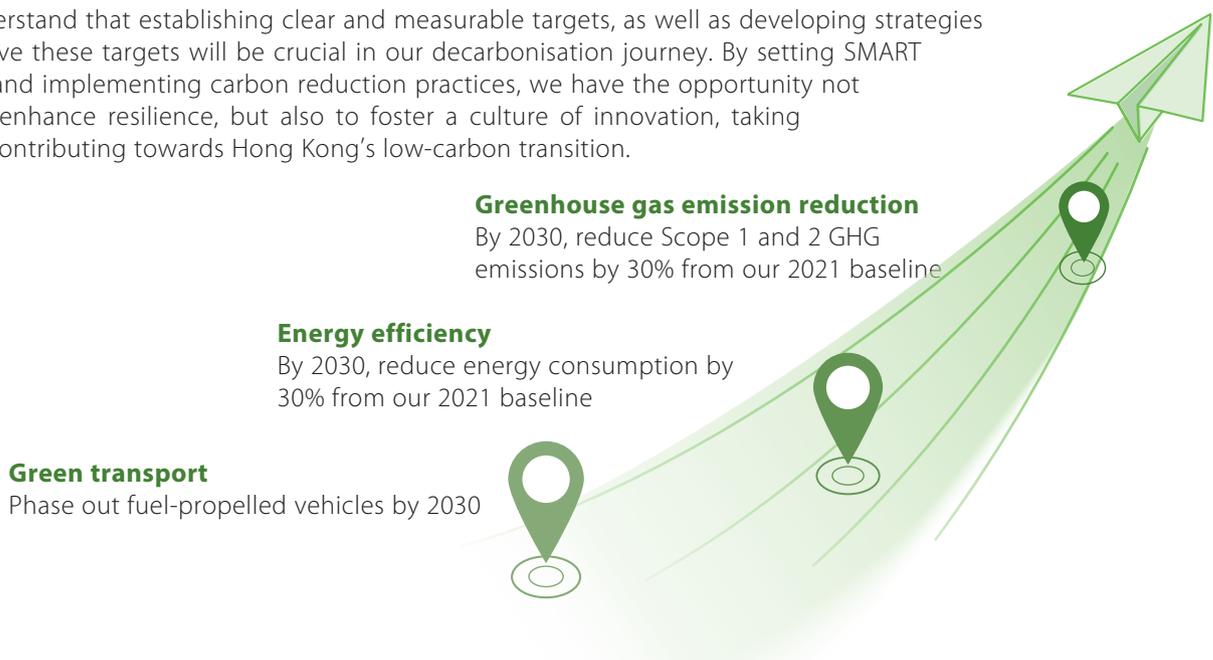
Our primary climate-related metrics consist of Scope 1 and 2 GHG emissions, as well as our carbon reduction goal and strategies. As we move forward, we aim to strengthen our data collection capabilities and are conducting screening for our Scope 3 GHG emissions. This will allow us to better understand the emissions along our value chain, and present a more comprehensive view of our GHG emissions to stakeholders. We will disclose this information in the ESG Report once it becomes available.

For more details of our carbon reduction goals and strategies and environmental KPIs, please refer to the next section "Carbon and Energy Reduction" and "Key Statistics – Environmental Key Performance Indicators" respectively.



### Decarbonisation Goal

We understand that establishing clear and measurable targets, as well as developing strategies to achieve these targets will be crucial in our decarbonisation journey. By setting SMART targets and implementing carbon reduction practices, we have the opportunity not only to enhance resilience, but also to foster a culture of innovation, taking part in contributing towards Hong Kong’s low-carbon transition.



### Carbon and Energy Reduction

In our commitment to transition to a sustainable future with our stakeholders, we have prioritised efforts to reduce carbon emissions and optimise resource consumption in our operations. Our Environmental, Health, and Safety (“EHS”) Policy encourages reducing our impact on the environment and human health. It also supports efficient use of energy, water, and other natural resources to protect the environment. Our Quality, Safety, and Environment (“QSE”) Manual describes procedures and provides work instructions that foster our environmental goals of carbon reduction and resource optimisation.

Our Corporate EHS Committee oversees our integrated environmental management system (“EMS”), which is established in line with the ISO 14001:2015 standard, to support our environmental strategies and expedites the achievement of our environmental goals. The EMS is implemented across our operations in Hong Kong, Macau, Mainland China, and the United Kingdom, providing a solid legal and regulatory framework for environmental management. It also provides guidance for developing preventive and mitigation measures to address potential environmental risks.

We have expanded our EMS based on EHS trends, best practice, and both local and international standards through rigorous internal and external auditing.

We undertake regular reviews and detailed analysis of our environmental performance. This allows us to identify and understand the activities within our business operations that are carbon-intensive. The Decarbonisation and Smart City Working Group, in collaboration with employees from various corporate and business units, continues to identify a range of carbon reduction and resource-saving opportunities to make progress towards carbon reduction goals.



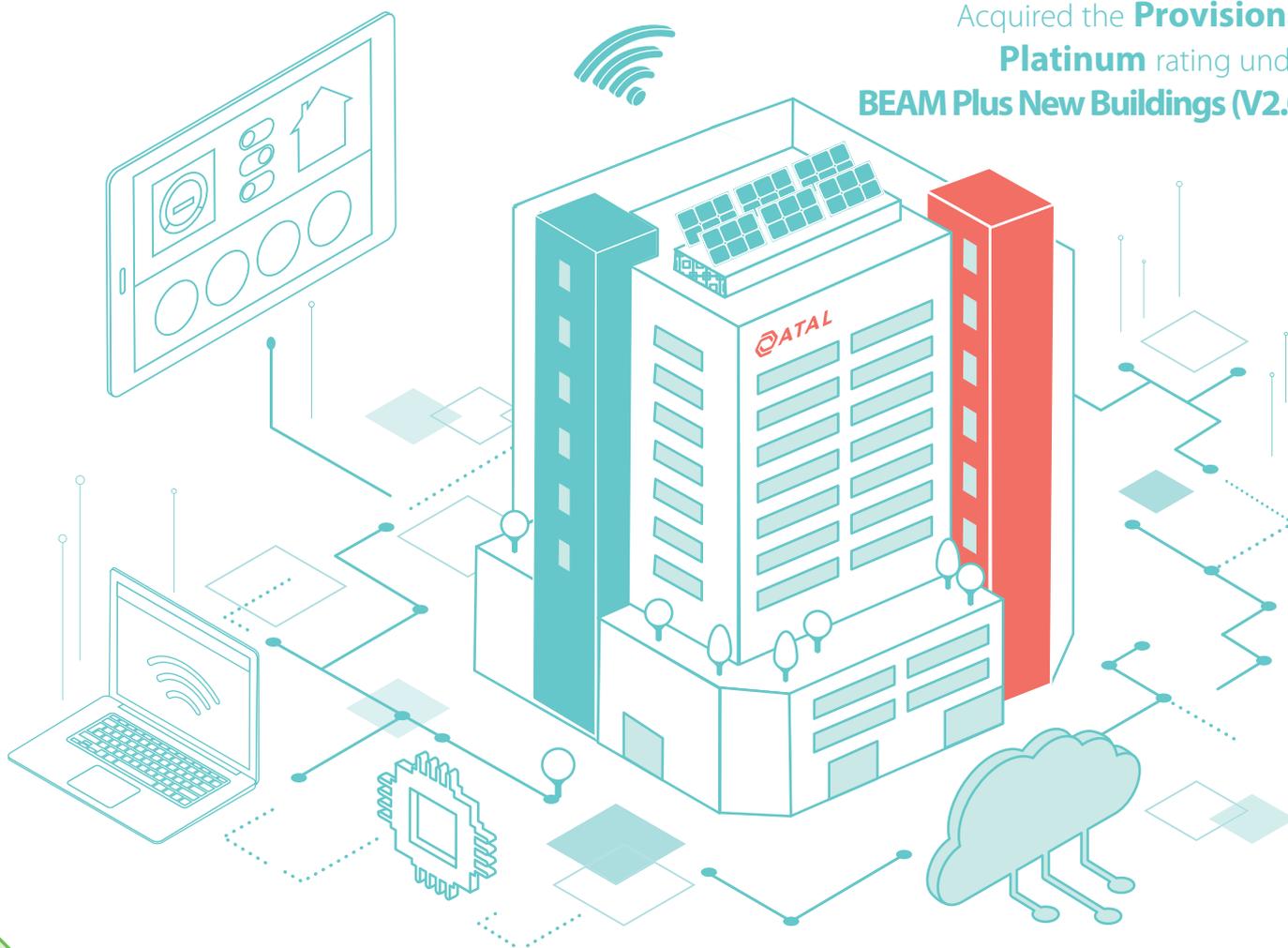
## Case study: Our New Green Headquarters – ATAL Tower

The Group has been revitalising an existing industrial building in Kwai Chung as a green office building, which will be served as the Group's new headquarters. The office building will be known as ATAL Tower. It will be equipped with a wide range of green and intelligent building technologies to improve energy efficiency.

The AI-enabled smart energy management system, together with the Indoor Environmental Quality ("IEQ") sensor networks, helps us monitor the office environment. It enables automatic and precise control of the heating, ventilation, and air conditioning ("HVAC") and lighting systems, which reduces unnecessary energy consumption and improves operational efficiency. Other smart building initiatives, such as installing smart washrooms, charging facilities for electric vehicles, and a renewable energy system with solar PV panels will also be implemented.

Such efforts have allowed ATAL Tower to acquire the Provisional Platinum rating under BEAM Plus New Buildings (V2.0).

Acquired the **Provisional Platinum** rating under **BEAM Plus New Buildings (V2.0)**





## Resource Management

### Waste

The Group is dedicated to promoting and advancing sustainable waste management at its offices and construction sites. When developing waste management strategies, we adhere to the “4Rs” (Reduce, Reuse, Recycle, Replace) waste hierarchy principles, with the goal of promoting resource reuse and recycling, and reducing waste.

The Group has established waste management policies to guide the proper handling of hazardous, general, and construction waste. We engage licensed waste contractors to collect and process hazardous waste, such as fluorescent light tubes, waste cartridges, waste toner bottles, and batteries. When dealing with non-hazardous waste, we categorise waste items, collect non-recyclable waste for landfill disposal, and separate recyclables for reuse, recycling, or donation to charities.



#### Offices

- Set up recycling corners for collecting recyclables, such as paper, metal, plastics, and encourage employees to actively participate in recycling efforts



#### Manufacturing Plant and Construction Sites

- Reuse cold plates and stainless steel pallets used in production at our manufacturing plant

### Materials

We strive to enhance material efficiency through digital transformation, sustainable procurement, and adoption of advanced construction technologies.



#### Offices

- Implement electronic communication platforms and improve workflow digitalisation to foster a paperless workplace
- Undertake a significant upgrade to our Human Resources Information System, redesigned with new features and improved functionality, to streamline processes and automate routine tasks



#### Manufacturing Plant and Construction Sites

- Adopt a new packaging method designed to use our packaging materials more efficiently at our lifts and escalators manufacturing plant
- Improve the design of sheet metal parts for production of lifts and escalators to reduce raw material usage at our manufacturing plant
- Deploy advanced construction technologies, such as BIM, Modular Integrated Construction (“MiC”), DfMA-MiMEP, AI and Big Data Analytics, in over 50% of our building services projects to optimise material consumption

For more details on our use of advanced construction technologies, please refer to “Co-creating A Sustainable Value Chain – Customers”.



## Water

To reduce water consumption and promote responsible water use, the Group has implemented water-saving strategies and consistently monitors its water management practices. We also perform water consumption analysis to identify water-consuming operations and explore ways to improve water use efficiency.



### Offices

- Install water-saving devices to limit water flow and conserve water



### Manufacturing Plant and Construction Sites

- Reuse greywater for the production process at our manufacturing plant
- Perform water consumption analysis for our manufacturing plant to identify points of water leakage and arrange repair works where appropriate
- Use robot vacuum to enhance cleaning and water consumption efficiency at our manufacturing plant

## Environmental Awareness

We continue to engage our employees and other stakeholders, raising environmental awareness through a series of sustainability initiatives.

### “Road to Sustainability” Newsletter

Raise employees’ awareness of sustainability topics through regular newsletters

### ATAL Green Month

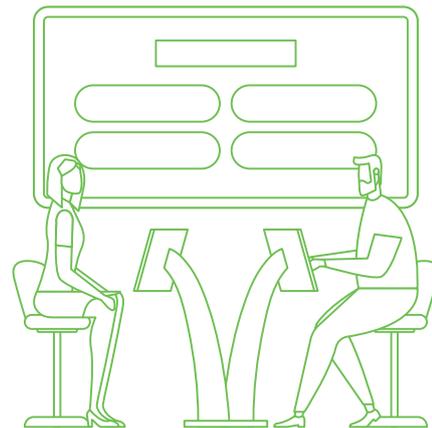
Make sustainability more visible and actionable through a series of workshops, competitions, site visits, and volunteer activities

### Sustainability Master Challenge

Deepen employees’ understanding of various sustainability topics through a series of quizzes with incentives

### Seminars

Share industry updates and best practices for sustainability and environmental protection





# ATAL Green Month

This month-long campaign is jointly organised by the Corporate QSE Unit, Corporate HR Unit and the ATAL Recreational and Welfare Affairs Club ("ARWA Club") to raise management and employee awareness about the importance of environmental protection and to motivate employees to adopt a more sustainable lifestyle.

The theme in 2023 was "Resource Optimisation and Waste Reduction", aimed at promoting resource optimisation, waste reduction at source, and effective recycling. The campaign included a total of 6 activities, all of which received enthusiastic responses.

### Lunch & Learn Workshop

- Employees were given helpful tips on waste reduction and recycling, both at home and at work, while enjoying delicious, low-carbon and healthy food for lunch



### Solar-Powered Night Lights Upcycling Workshop

- Employees and their children created unique mosaic-style night lights using recycled glass bottles and solar-powered bottle caps, as a learning exercise in repurposing materials and applying renewable energy in daily life



### Factory Visit and Paper Making Workshop

- Participants visited a local pulp mill and education centre that recycles beverage cartons to provide an example of waste recycling and inspire them to put recycling into action



### Pop-up Recycling Stations

- "Pop-up Recycling Stations" were set up, providing our staff with a detailed list of instructions on the common types of recyclables and how to clean them properly before recycling

### Volunteer Day with Food Angel

- Staff volunteers packed nutritious meal boxes cooked with fresh ingredients from the catering industry to serve our community and learned about the importance of appreciating the food we eat



### Green Action Photo Competition

- Our colleagues were encouraged to submit photos recording sustainable actions related to "Resource Optimisation and Waste Reduction" during the ATAL Green Month



## DRIVING SMART CITY DEVELOPMENT

We harness the power of cutting-edge technological advances to shape the future of urban development and lead the way to smart and sustainable cities. In line with the Smart City vision of the HKSAR Government, our passion is to empower our city to grow by embracing innovation and technology in the built environment.



### In this Chapter

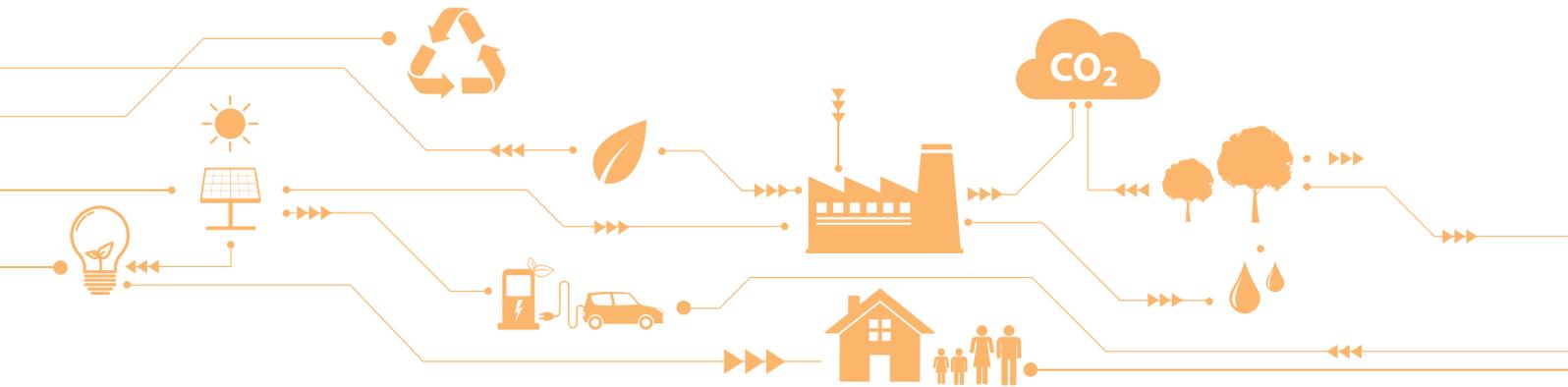
- Smart and Healthy Living
- Climate Solutions
- Clean Water and Sanitation
- Industry Exchange



# DRIVING SMART CITY DEVELOPMENT

## Smart and Healthy Living

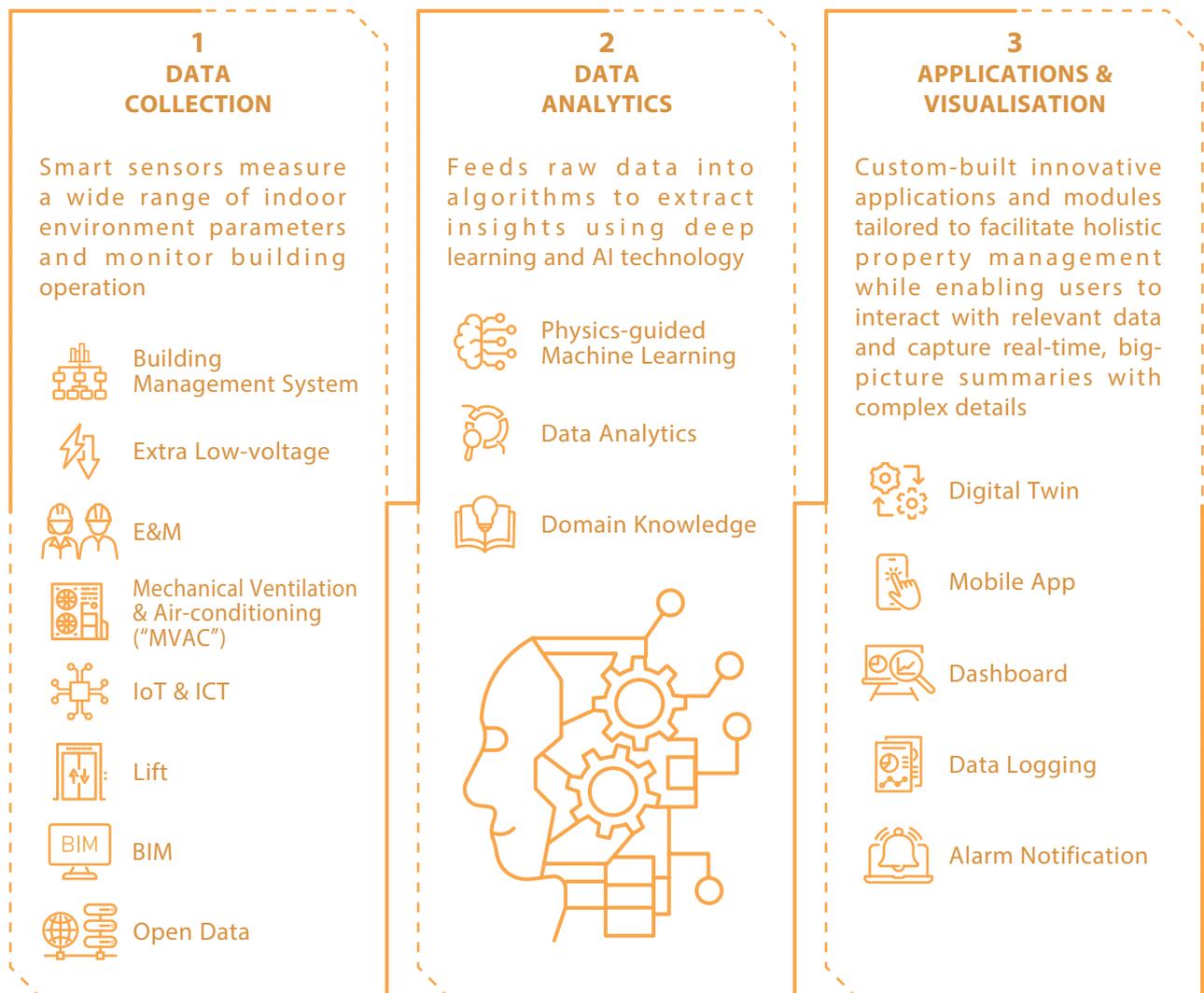
The Group drives innovation for smart and healthy living by Internet of Things (“IoT”) solutions, Information and Communications Technology (“ICT”) system, intelligent systems and building technology systems. We design, install, and service a variety of systems, which serve as the technology backbone for developing smart city infrastructure such as smart transportation, as well as healthcare, energy and utility programmes. They also enable seamless and smart connectivity, help automate building functions with intelligent control for simplified management and improve convenience and efficiency. Optimising indoor environments for comfort and health, our creative solutions ensure safety throughout the premises and the quality of living.





### Smart Building Solutions

Rapid technological advance is propelling us towards a new era of building management. Our Smart Building Platform, developed in-house, creates people-centric environments, powered by advanced technologies. By combining domain knowledge and AI technologies, we integrate all building systems and IoT-enabled devices in a centralised cloud-based platform to provide superior building performance, streamline facility management, and enhance building occupant experience.





The Smart Building Platform optimises building functionalities holistically to address the real-time challenges facing property owners, facility managers and building occupants.



Property Owners

- Improved Asset Performance
- Effective Risk Management
- Increased Property Value



Facility Managers

- Proactive Maintenance
- Streamlined Operation
- Reduced Manual Work



Building Occupants

- Optimal Comfort
- Improved Well-being
- Personalised Services

Video Analytics

Applications provide analysis, enhanced crowd security and operational efficiency, covering crime prevention, accident management, and capture of customer demographics and shopping behaviour

Energy Optimisation

An all-in-one intelligent system leveraging big data analytics and machine learning to achieve building energy efficiency

Smart Washroom

Integrates IoT network and devices to facilitate real-time management of manpower, air quality and cleanliness, consumables and washroom usage, improving overall user experience

Visitor Management

Streamlines visitor check-in process through ID scanning, visitor pre-registration and easy authentication, heightening security with effortless user experience



Real-time Location Tracking System

Enables universal tracking across premises to provide instant visibility for operational processes and handling capacity. Reduces search time, provides more efficient tracking, and optimises utilisation rates

Automatic Fault Detection & Diagnosis ("FDD")

A model-based algorithm for automatic detection and diagnostic system developed to identify faults in real time and provide of actionable intelligence

Indoor Environmental Quality Monitoring

Provides insights into level and performance of indoor environmental quality across premises, ensuring the comfort of build

Lift Monitoring

Keeps real-time tracking of equipment status to provide a holistic view of operational performance, supporting predictive maintenance



## ESG-Centric Digital Twin

The ESG-centric digital twin solution is the essence of our Smart Building Platform, providing insights into a building’s impact on the environment and opportunities for improved ESG performance using AI technologies. By incorporating a variety of data sources, including equipment and facility data, as well as feedback from occupants and satisfaction metrics, our digital twin provides a dynamic and interactive interface for exploring trends and patterns in building performance. The interactive visualisation feature of our digital twin solution enables users to gain a holistic view of building operations and analyse building performance across multiple dimensions for more efficient and effective decision-making related to building maintenance, energy management, and building occupant experience.

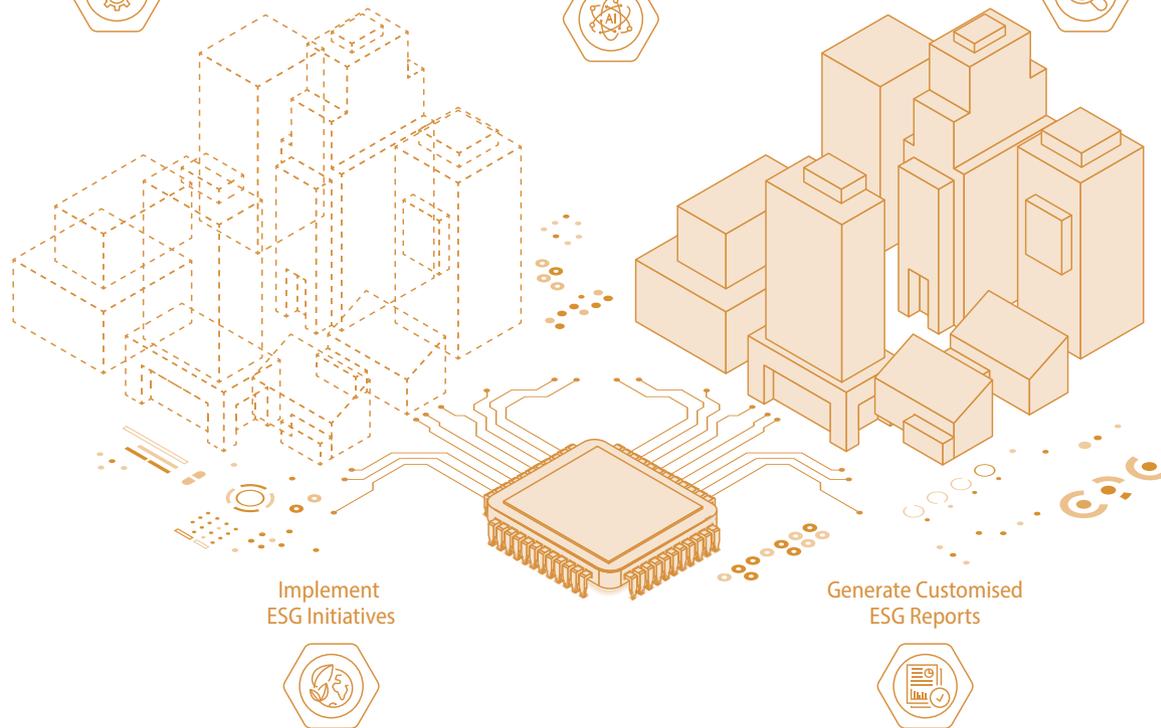
Define ESG Metrics and Integrate Data Sources



Analyse ESG Data with AI Models



Identify and Prioritise ESG Opportunities





## Case study: Comprehensive Smart Building Management

Located at the heart of Hong Kong's Central Business District, The Henderson is a 36-storey Grade A office tower, featuring five basement floors and a gross floor area of 43,200 square metres. We served as a trusted partner in providing cutting-edge ICBT solutions to achieve smart building objectives.

### AI Energy Management Platform

- Improved building energy efficiency

### Fault Detection and Diagnostic System

- Effective predictive maintenance

### AI Video Analytic Solution and top-grade Surveillance System

- Effective and efficient real-time monitoring and threat detection

### Digital Twin solution

- Complete operational overview with three-dimensional navigation

### IoT-enhanced facilities

Water Quality Monitoring System, Smart Washrooms, and an Indoor Environmental Quality Monitoring System

- Enhanced well-being and comfort of building occupants and visitors

### Walkable photovoltaic ("PV") pavement units with full utilisation of the rooftop space

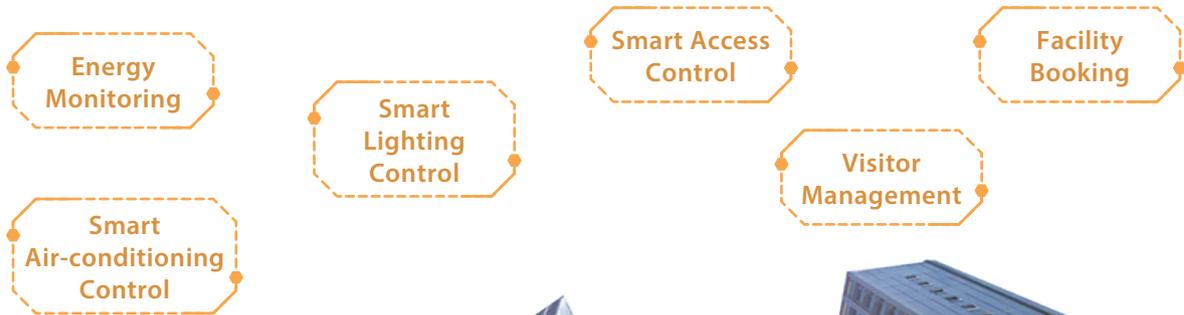
- Solar energy generation



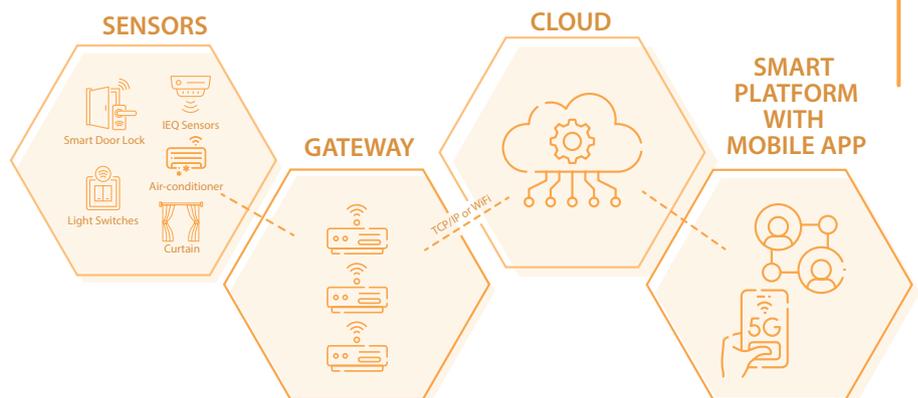


## Case study: Smart Hostel Solution

The Group has been engaged to install smart facility management systems with mobile applications incorporating IoT and smart features for student residences with over 1,000 rooms at a prestigious local university.



- Support effective ESG management
- Support real-time monitoring of facility status and sustainability-related performance
- Enable remote control of hostel facilities
- Include a notice feature in different categories and push notifications for urgent messages targeting hostel residents
- Include sharing functions





### Smart Garment Management

The Group has been engaged to design, supply and install equipment to upgrade the existing garment transportation system of several Hong Kong public hospitals to incorporate automatic closed loop garment sorting railings and a Garment Management System.

#### Extension of mechanical, electrical and software for the management system

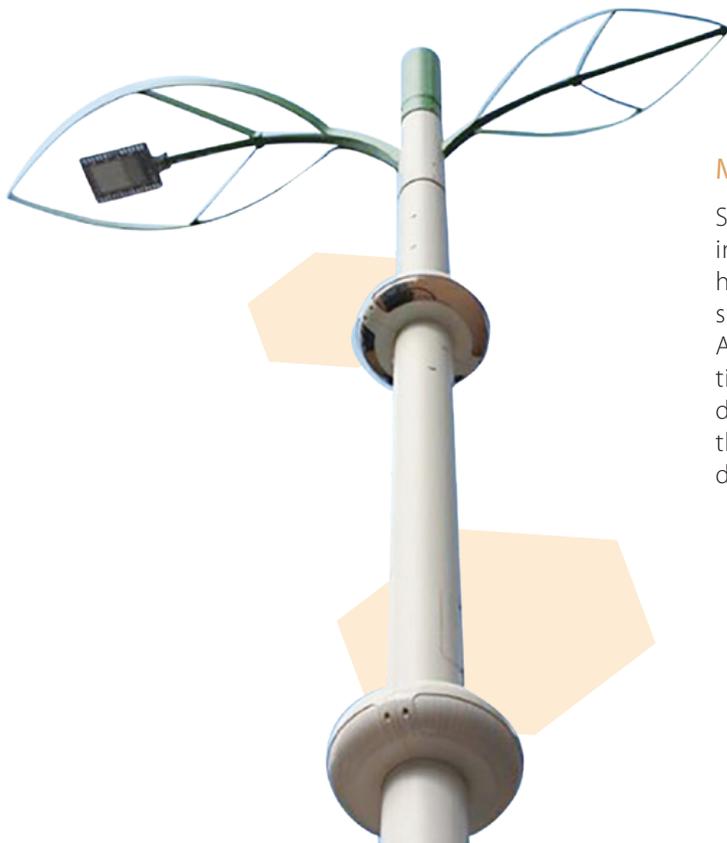
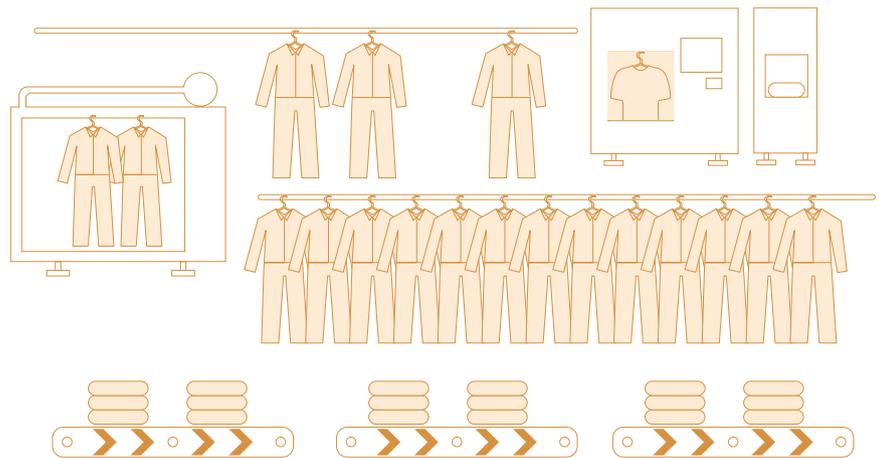
- Reduce costs, raw materials consumption and disposable waste

#### Adoption of radio-frequency identification tags at loading stations for automatic sorting of garments based on type and size

- Enhance the efficiency and accuracy of sorting and inventory management with reusable radio-frequency identification tags

#### Provision of monitoring system for ordering new items by counting the number of washes

- Support procurement scheduling, cost controls and reduction of raw materials consumption



### Multi-Functional Smart Lampposts

Smart lampposts are an important part of the infrastructure network for 5G in Hong Kong. The Group has been engaged to supply and install devices in smart lampposts, as well as the IoT Long-Range Wide Area network. The smart lampposts also collect real-time urban data including meteorological data, traffic data and air quality data. The data will be released to the public on an open platform to support data-driven decision-making.



## Climate Solutions

An important part of the Group’s mission is to reduce carbon emissions, contributing both globally and locally to the fight against climate change for a sustainable future. Our high-tech, innovative solutions for energy management and renewable energy serve as catalysts to reduce the carbon footprints of our customers.

### Energy Optimisation

We offer comprehensive energy-saving solutions, ranging from AI-driven energy analytics and retro-commissioning (“RCx”) to energy audits. Our in-house R&D teams and green building experts design customised systems for energy optimisation. These systems support our clients in achieving their energy-saving goals.

#### Energy Analytics Module and AI-driven FDD

In energy management, accuracy is the key to maximising energy savings. Advanced analytics and data cleansing are necessary to eliminate inaccurate, incomplete, and repetitive data, and avoid misleading conclusions.

Our award-winning Energy Analytics module on the Smart Building Platform is an all-in-one intelligent system. It leverages big data analytics and physics-guided machine learning to improve energy efficiency in buildings. Our AI-driven FDD solution is a model-based algorithm developed in-house for automatic detection and diagnosis of faults in building systems in real-time. Together, the Energy Analytics module and FDD solution can achieve energy savings up to 30% per year in HVAC systems, depending on building type and current energy performance. The Group applies its energy analytics expertise consistently across sectors. Our latest achievement is in the field of data centres.

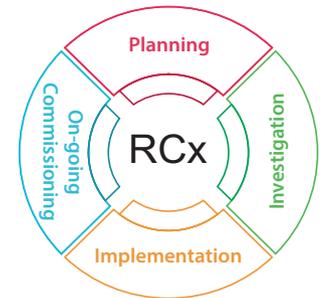
Application:	Office buildings, shopping malls and data centres
Feature:	<ul style="list-style-type: none"> <li>● Determine optimal control setting</li> <li>● Real-time monitoring of data quality, fault detection and diagnostics, energy performance, control stability, and building occupant comfort</li> <li>● Maximise energy savings through advanced modelling and optimisation strategies</li> <li>● Identify faults, including abnormal plant operation, equipment deterioration, and temperature and flow sensor faults. Investigate root causes, address errors and provide actionable intelligence to achieve optimal system performance</li> </ul>



### RCx and Energy Audits

RCx identifies errors or inefficiencies in existing building services systems and uses technological solutions to make necessary upgrades or repairs, systematically reviewing the efficiency of a building services system. RCx optimises efficiency, reduces operational costs and supports creation of a comfortable environment for building occupants.

We have provided consulting services for RCx and energy audits to identify potential energy savings and improve the energy performance of buildings and infrastructure, including swimming pools, wet markets, libraries and offices.



Application:	Government, institutional, and commercial buildings and infrastructure
Features:	<ul style="list-style-type: none"> <li>● Use data analytics and scenario diagnostics on building services systems to identify operational and maintenance gaps that lead to inefficient energy use and unsatisfactory indoor environments</li> <li>● Develop an RCx plan that includes operational and maintenance improvements to improve building energy savings, reliability, and thermal comfort performance</li> <li>● Offer training and instruction to building users and provide ongoing commissioning services to maintain optimal energy efficiency</li> </ul>





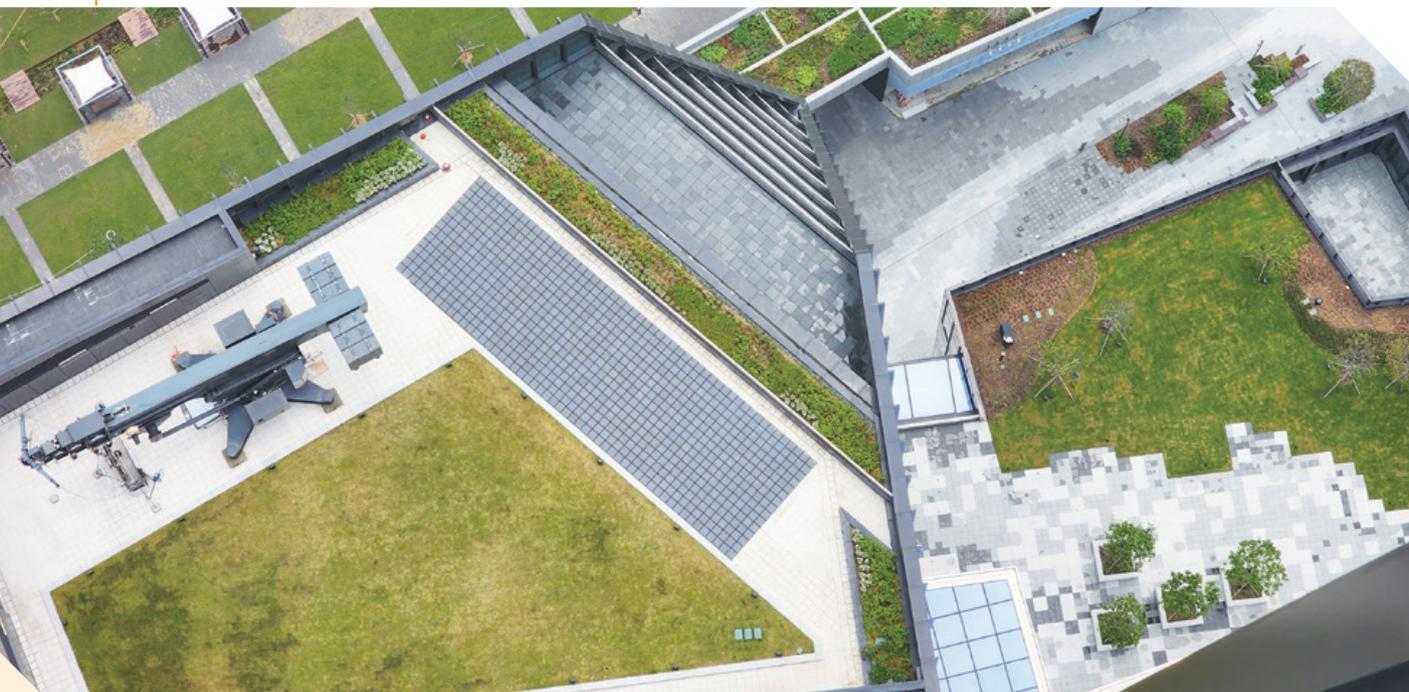
## Renewable Energy

We design custom-made renewable energy solutions to help our clients minimise both electricity usage and costs. These include solar PV systems, building-integrated PV systems, solar thermal systems, renewable energy supply for lamp posts, solar pavement units, solar cooling systems, and wind turbine systems.

### Solar Pavement System

Our Solar Pavement System is a PV-integrated flooring solution that integrates solar energy generation into buildings and turns wasted energy into usable electricity. Its design supports foot traffic. During the Year, the Group has participated in the installation of solar paving systems in Nina Park in Tsuen Wan; Airside, a mix-used commercial development area in Kai Tak; and Lee Garden Three, a grade A office building in Causeway Bay.

- Generate electricity as much as a high efficiency PV Panel
- Operate on extra low voltage with anti-slip surfaces, which is safe for pedestrians
- Replace traditional floor tiles and fits naturally into all kinds of architecture with an aesthetically attractive design
- Integrate discreetly into the built environment without taking up valuable space
- Composed of recycled plastic material, reusing 400 PET bottles per square metre





## Clean Water and Sanitation

### Sustainable Water Management

Given the rise in population globally and severe water pollution issues, the need for clean water is growing. Indeed, access to clean and safe water is vital both for human health and environmental sustainability. Growing demand for clean and safe water has fuelled a greater demand for better water and wastewater treatment. We employ an innovative approach to high-quality water and wastewater treatment services that incorporates state-of-the-art technologies, contributing to economic growth, environmental protection, and improved quality of life.

#### ATAL Multi-stages Flocculation Sedimentation III (AMSFS III) x AlgoWater

This innovative, mobile, all-in-one water and wastewater treatment system was developed in-house

Applications:	Polluted rivers, landscape water, industrial water, and municipal wastewater
Features:	<ul style="list-style-type: none"> <li>● Incorporate diverse water and wastewater treatment processes including coagulation, magnetic media mixing, flocculation and sedimentation</li> <li>● Require a small footprint with its compact design</li> <li>● Adopt physics-guided machine learning model to predict effluent quality and optimise chemical volume to deliver higher quality effluent, reducing chemicals thereby lowering chemical costs up to 47%</li> <li>● Adopt Computational Fluid Dynamics simulation in the hydraulic design</li> <li>● Adopt advanced construction technologies to carry out construction processes in a controlled factory environment, reducing negative impact on the surrounding environment and safety risks associated with on-site work</li> <li>● Allow easy transportation, relocation, and reinstallation with its modular structure, offering high flexibility in applications</li> </ul>
Recognition:	<ul style="list-style-type: none"> <li>● 2023 Hong Kong Sustainable Development Innovation &amp; Technology Award by the World Institute of Sustainable Development Planners               <ul style="list-style-type: none"> <li>– “Resource Recycling Innovation and Technology – Outstanding Award”</li> <li>– “Ecological Conservation Innovation and Technology – Outstanding Award”</li> </ul> </li> <li>● ESG Achievement Awards 2022/2023 by the Institute of ESG &amp; Benchmark               <ul style="list-style-type: none"> <li>– “ESG Innovative Project Award – Merit Award”</li> </ul> </li> </ul>





### Aerobic Granular Sludge (AGS) Treatment Process

A process that provides advanced wastewater treatment in an energy-efficient and space-saving manner

Applications:	Effluent polishing plants
Features:	<ul style="list-style-type: none"> <li>● Utilise compact and cost-effective biofilm technology to remove contaminants including carbon, nitrogen, and phosphorous from wastewater</li> <li>● Require smaller footprint than conventional treatments, contributing to energy reduction during its operation</li> </ul>

### ATAL High Power Ultra-Sonic (AHPUS)

An innovative technique for pre-treating wastewater in an efficient and eco-friendly manner

Applications:	Sewage treatment plants
Features:	<ul style="list-style-type: none"> <li>● Leverage ultrasound to promote anaerobic sludge digestion and sewage denitrification treatment</li> <li>● Effectively prevent sludge expansion and foam generation in the sewage treatment process</li> <li>● Reduce the amount of sludge yield and disposal compared to conventional practices</li> <li>● Give rise to biogas production for power generation</li> <li>● Provide effective disinfection of very turbid and high concentration wastewater</li> </ul>





## Case study: Optimising the Capacity of Water Treatment Works

### *Background*

The Group has been engaged in the design, construction, testing and commissioning of all E&M works for the on-site re-provisioning of the water treatment works and ancillary facilities in Sha Tin.

### *Highlights*

The new treatment facilities use advanced technologies including two-stage ozonation, inclined plate settlers for sedimentation, two-stage filters, and ultra-violet disinfection. These technologies improve performance of treatment and disinfection as well as reliability of water supply.

We have implemented BIM in the design and construction process throughout the project's life cycle. By using BIM, we were able to visualise the integration of existing and new elements, design changes, construction sequences, site logistics, and future project deliverables. This approach enables close collaboration across multiple disciplines, ensuring precise and timely project completion.

To enhance the accuracy and effectiveness of the pump control at the water treatment works, we developed a reduced scale model for hydraulic analysis. The model provides valuable insights into system behaviour and supports optimal pump control strategies. Additionally, it identifies potential issues and needed improvements to ensure the smooth operation of the water treatment works.





## Waste Management

The Group invests on a long-term basis in developing waste management infrastructure. Our expertise lies in designing and installing solid waste treatment and handling systems for diverse applications. In collaboration with engineers and manufacturers, we design applications using state-of-the-art waste reduction technologies such as recycling, anaerobic digestion, incineration, and pelletising.

### Case study: Food Waste/Sewage Sludge Anaerobic Co-digestion

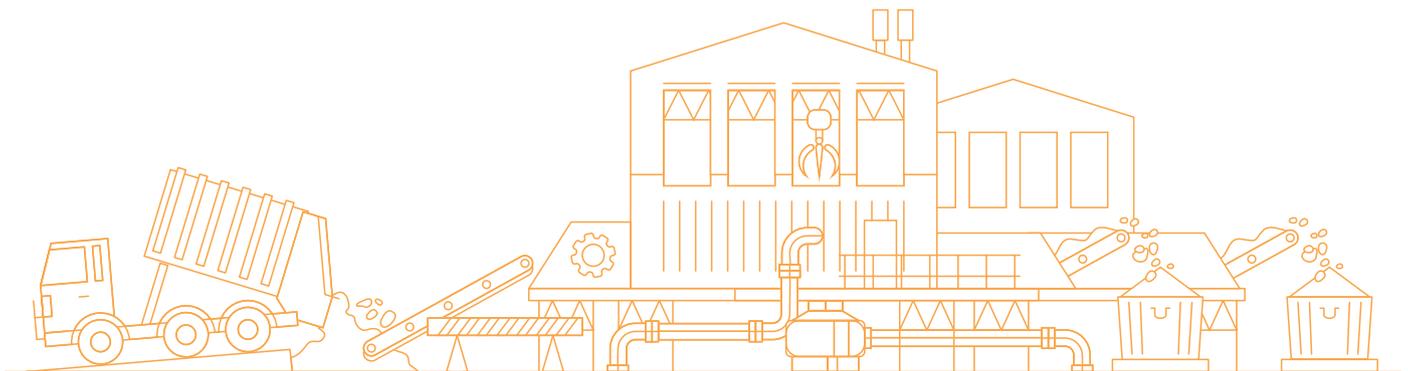
#### *Background*

The sewage treatment works in Sha Tin includes Food Waste Pre-treatment Facilities ("FWPF"). The Group is responsible for handling civil, structural, E&M design and works, as well as operation and maintenance. The overall process supports ongoing review of performance of food waste and sewage sludge anaerobic co-digestion and challenges in the treatment process.

#### *Highlights*

The new FWPF is designed to process 50 tonnes of food waste per day. It is the first in Hong Kong to adopt the Hammer Mill pre-treatment technology. The Hammer Mill crushes large food waste into smaller pieces, which facilitates biochemical reaction during anaerobic co-digestion with sewage sludge. Biogas is also produced in the process for power generation.

The team has adopted BIM technology to assist in design and construction. The new FWPF consists of two major process blocks to house the main food waste process chain and pre-treatment equipment. The deodorisation system extracts and treats the odour generated by the treatment process to an acceptable level before releasing it into the atmosphere. The two process blocks minimise environmental nuisances such as noisy operations, odour and wastewater.





## Industry Exchange

Building a smart and sustainable city requires collaborative effort and engagement from all parties. Acknowledging the importance of a collective impact, we encourage our partners to join us in promoting innovation and sustainability through industry symposiums, seminars, and workshops.



### “Symposium on Energy Use – LNG, H2 & Waste Recycle Energy”

Organised by the Institution of Mechanical Engineers Hong Kong Branch

We introduced our experience with applications and benefits of Combined Heat and Power for long-term emission reduction.



### “Integrate 2023 Facility Management Conference”

Organised by the Hong Kong Chapter of the International Facility Management Association

We illustrated how AI-powered Digital Twin technology can improve the ESG performance of smart buildings.

### “Hong Kong Green Building Council Retrofitting Guidebook Launching Ceremony”

Organised by the Hong Kong Green Building Council

We demonstrated how Physics-Guided Machine Learning is applied in our Dynamic Chiller Plant Optimisation Platform to achieve energy efficiency.

### “Tech to Connect 4.0: Technical Enhancement Workshop”

Organised by the Hong Kong Wireless Technology Industry Association

We shared how Digital Twin modules can be adopted for anomaly detection, scenario simulation, efficiency, energy optimisation, predictive maintenance, demand prediction and visualisation.

### “IFMA Industrial Spotlight: PropTech Webinar”

Organised by the Hong Kong Chapter of International Facility Management Association

We shared case studies on practical applications of smart building technologies for energy optimisation. The adoption of big data and machine learning with our Smart Building Platform developed in-house has helped reduce energy consumption by over 10% in a Grade-A office building.



## CO-CREATING A SUSTAINABLE VALUE CHAIN

We are committed to fostering close and beneficial relationships with key stakeholders. We have incorporated sustainability principles into our value chain through our engineering excellence, professionalism, and quality of service. Our dedication to customer satisfaction and long-term community development helps us work towards a better future.



### In this Chapter

- Customers
- Subcontractors and Suppliers
- Community





# CO-CREATING A SUSTAINABLE VALUE CHAIN

## Customers

### Delivering Excellence in Product and Service

The Group prioritises our customers' needs, offering customised and innovative solutions for customer satisfaction. We deliver world-class quality and reliability, aiming always for excellence through our products and services. Robust management and monitoring of our quality assurance process also safeguards our customers' rights and interests.

We have adopted the ISO 9001:2015 Quality Management System standard, applying it across all our core operations. This system manages our products and services and is aimed at achieving full customer satisfaction as detailed in our Quality Policy and elaborated in our quality plans and procedures.

We carry out cross-business unit inspections at our construction sites to encourage exchange of best practices and elevate standards of workmanship, product quality and safety. We also conduct regular internal and external audits to ensure compliance and ongoing improvement.

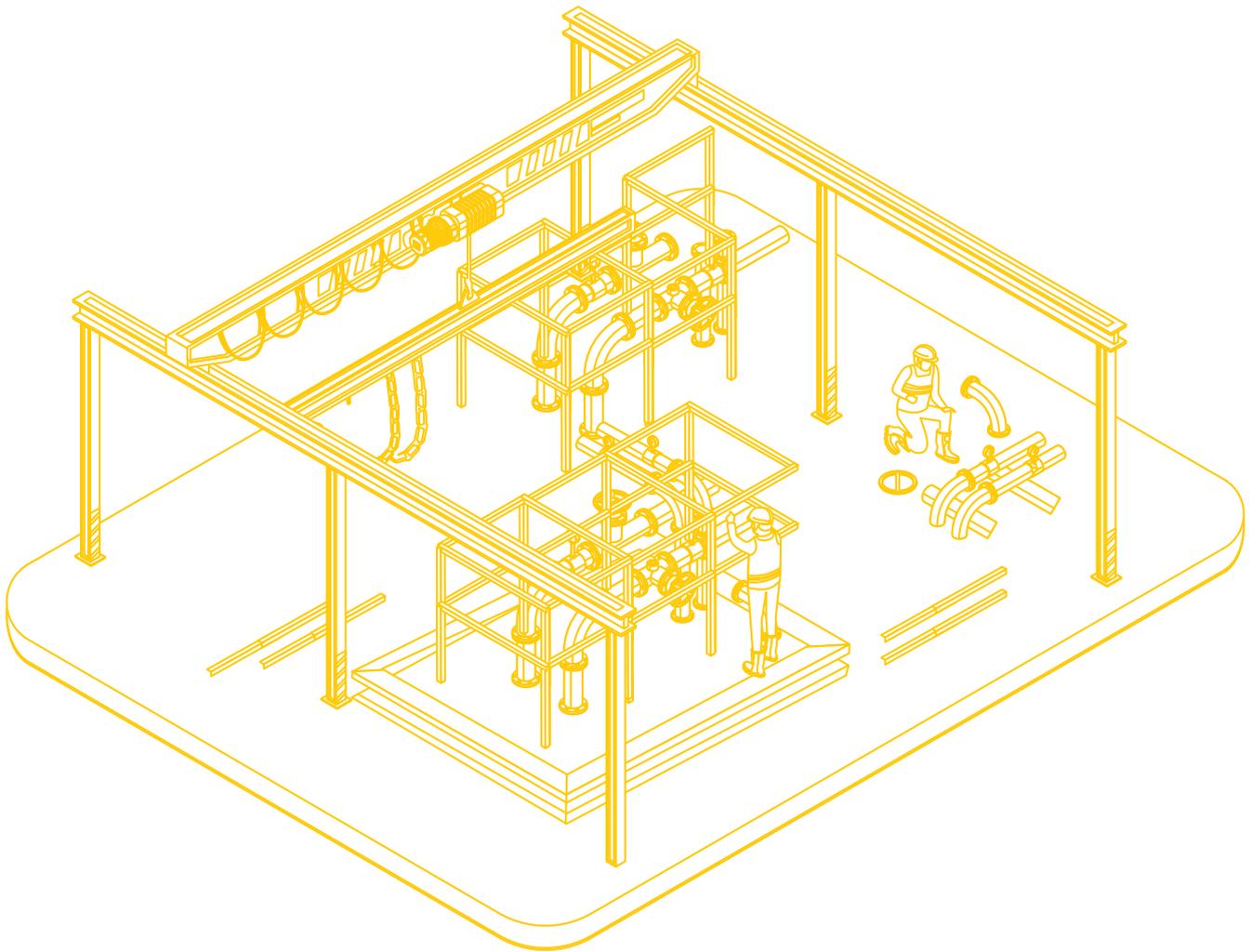
We have established systematic procedures for dealing with product quality issues. These include product recalls and quality tracking to identify the root causes of any nonconformity and prevent future quality deviations.





### *Harnessing Advanced Construction Technologies*

“New Technology” is one of our business strategies. We embrace cutting-edge construction technologies to enhance the overall quality and efficiency of our projects. These support our E&M performance in building services by boosting productivity, improving cost control, and improving quality and safety. We have implemented advanced construction technologies in more than 50% of our building services projects, incorporating DfMA – MiMEP systems, BIM, AI, and Big Data Analytics.





### ATAL DfMA – MiMEP Systems



DfMA-MiMEP enables the offsite manufacturing of mechanical, electrical, and plumbing components. These modules can then be delivered to construction sites for assembly or installation, final testing and commissioning.





## Case study: Delivering High-quality Works for Racehorses Training Facility

### *Background*

Located in rural district in Guangzhou, the project is a modern and high-tech world-class facility for the training of thoroughbred racehorses. Following our completion of Phase I of the development, we continued as the E&M subcontractor to deliver high-quality works for the Phase II project.

### *Challenges and Solutions*

One of the challenges was the works covering outdoor pressurised pipelines. As many completed pipelines from Phase I were located in Phase II work areas, our team used special reinforcements such as steel piling beams during excavation to prevent slope collapse. We employed experienced building subcontractors and maintained close communications with all stakeholders to monitor work progress and quality.

Another challenge arose from the unusually heavy rainfall in Guangzhou during the project period. This required the team to pump out large volumes of rainwater before resuming pipe foundation work. Phase I facilities imposed strict limits on our work schedules. By adopting advanced technologies, the project team managed to complete the project ahead of schedule and achieve customer satisfaction.





## Case study: Kai Tak Commercial Development Area

### *Background*

The Group has contributed to the development of “a distinguished, vibrant, attractive and people-oriented community by the Victoria Harbour” by participating in several projects in the Kai Tak Commercial Development Area. Our involvement includes HVAC, electrical, fire services, plumbing and drainage, extra low-voltage systems, and building management system installation in buildings and infrastructure in the development area.

### *Challenges and Solutions*

Labour shortage, supply chain issues, safety consideration and physical constraints posed numerous challenges for project management. To ensure smooth execution of the projects and prevent potential disruption, project contingency plans were developed to ensure crisis preparedness.

We adopted BIM in construction throughout the project life cycle. We were able to coordinate with all construction partners based on a BIM-enabled virtual environment. The use of a virtual environment was instrumental to identify and resolve all critical issues well before beginning parts fabrication. The project team was able to prevent potential setbacks as well as ensuring that the construction process was efficient and streamlined. The projects have been awarded the highest level of green-building accreditations. Their success is a testimony to our expertise in adopting an innovative and environmentally friendly approach to delivering a high-quality and an effective and sustainable infrastructure project.

- Full-scale deployment of BIM for construction process
- Application of DfMA off-site fabrication in plant rooms and electrical rooms





### ***Embracing Industry Trends and Enhancing Awareness***

We provide diverse and comprehensive learning opportunities to keep our management and engineering professionals up to date with the latest advancements in technology. For instance, in 2023, we organised a series of four half-day BIM workshops, which equipped participants with the latest market practices, contract requirements, and effective use of BIM to enhance project efficiency.

We regularly publish a newsletter, *Quality Tips*, to share information and best practices in the industry to improve workmanship and quality in construction processes. Apart from sharing up-to-date information on quality issues in a timely manner, we also organise customised training for project staff on customer relationship management, effective communication with customers and complaint handling.

### **Elevating Customer Satisfaction**

To deliver excellence in customer service, we work closely with all stakeholders. Our goal is to understand and analyse their needs and improve our products and services accordingly. By offering innovative solutions and adding value, we aim to exceed customer expectations. We regularly collect customer feedback for response and development.

We conduct customer satisfaction surveys to measure satisfaction level once a contract is completed and for projects with lengthy construction periods, on an interim basis. In 2023, the average score of the customer satisfaction surveys was in the range of “good” to “excellent”, reflecting that our customers are generally satisfied with our products and services.

We promptly address customers’ complaints or negative feedback and handle them properly through classification, acknowledgement, investigation, improvement actions, follow-up, and analysis to retain customers and enhance customer satisfaction. We have made improvement to our complaint handling procedures as outlined in the QSE Manual, and organised training workshops during the Year to equip staff members with necessary skills for effective implementation.





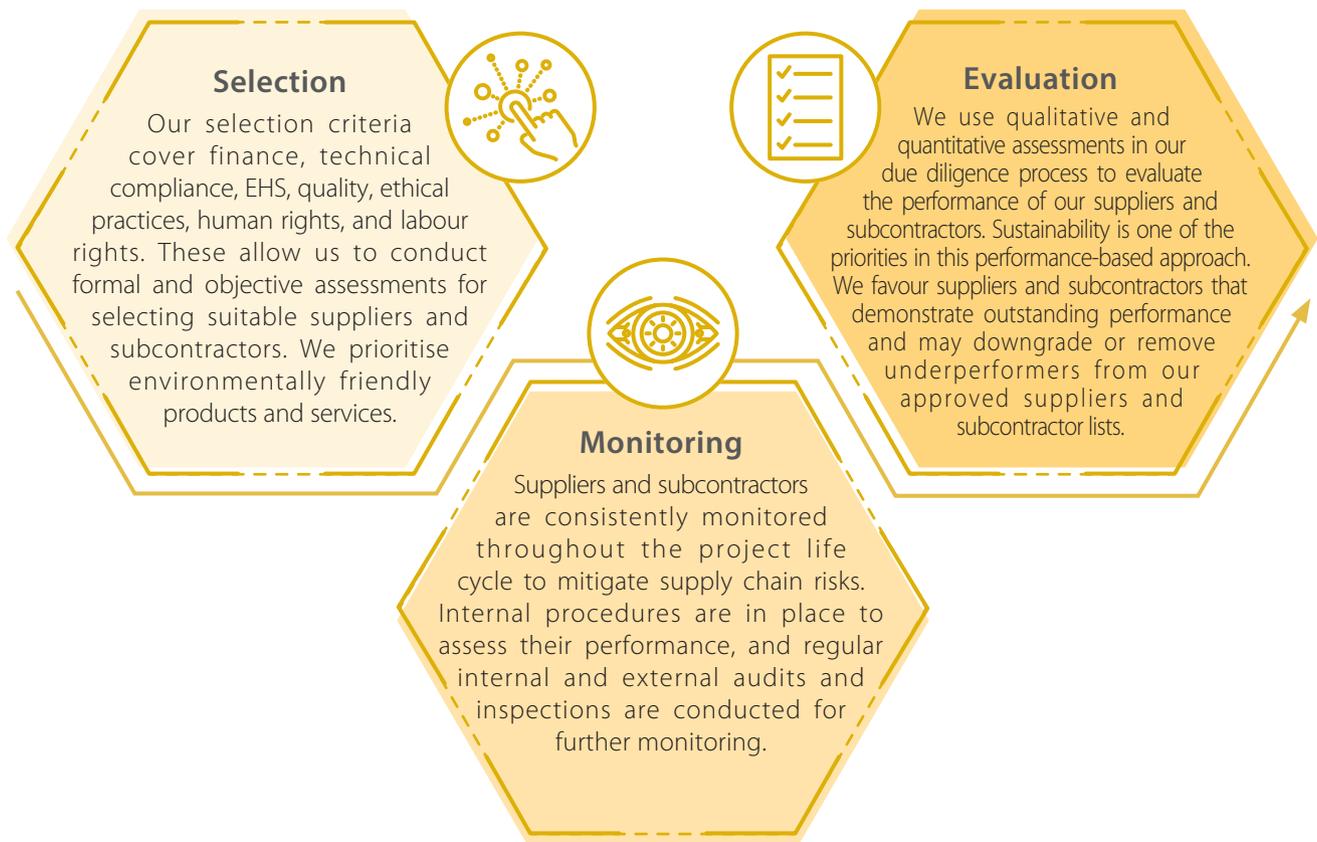
## Subcontractors and Suppliers

We form lasting relationships with our partners, subcontractors and suppliers to foster mutual growth. Our commercial engagements are grounded in best practices, vital for a robust supply chain. We engage with our suppliers, aiming at a responsible, forward-thinking partnership. Together, we seek to build a more sustainable future for all stakeholders and the wider community.

### Supplier and Subcontractor Management

Our procurement process is guided by the Code of Conduct and reflects the highest ethical standards. To maintain fairness and prevent potential conflicts of interest, we segregate procurement duties and provide the same guidance on procurement requirements and specifications to all potential suppliers and subcontractors. This includes technical clarifications. We also implement a two-layer declaration system. In addition to a self-declaration of interest, employees, suppliers, and subcontractors must sign a declaration confirming their compliance with business ethics, anti-collusion, and confidentiality.

All staff involved in the procurement process must adhere to the QSE Manual and the Code of Conduct, in conjunction with internal procurement policies. Our QSE Manual provides detailed procedures for supply chain management. It guides our purchasing and subcontracting processes, from selection to performance evaluation.





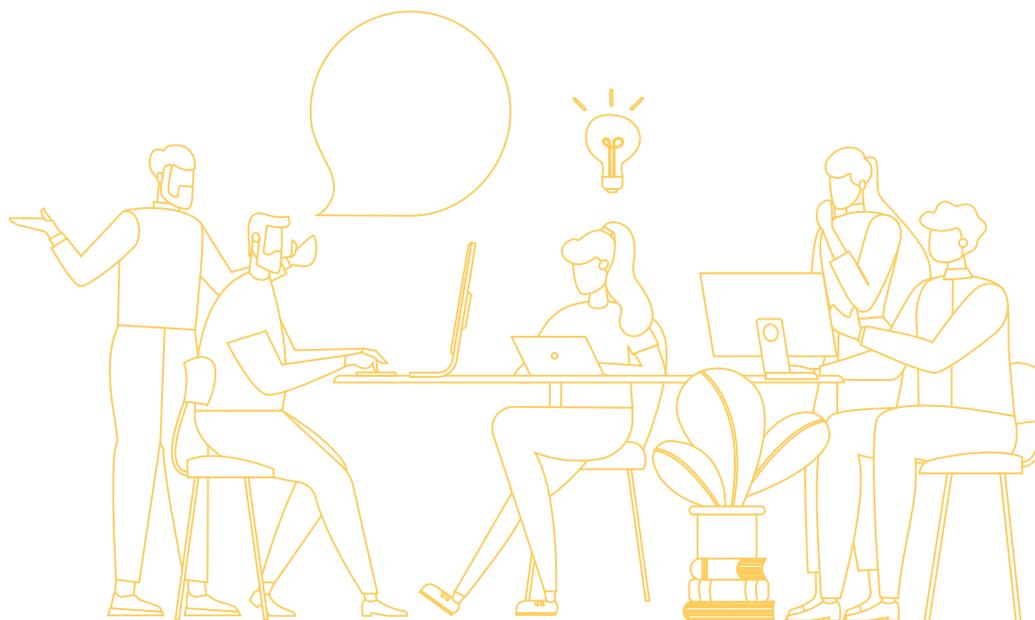
Our Code of Conduct for Suppliers and Subcontractors spells out our expectations for the way they conduct business. It mandates regulatory compliance, prohibits forced or child labour, and outlines our requirements for ethical conduct, health and safety, working hours, compensation, human rights, and environmental conservation. Suppliers and subcontractors are required to inform their employees about this code, outlining their rights and responsibilities.

To mitigate the health and safety and environmental risks associated with construction activities, we have incorporated and implemented strict conditions in our subcontractor contracts. These stipulate safety and environmental protection rules, management system protocols, and green building requirements.

### Task Force on Enhancing Subcontractor Management and Procurement

A dedicated Task Force on Enhancing Subcontractor Management and Procurement was established in 2023. It was tasked with improving the existing mechanism for selecting, engaging, monitoring, and evaluating subcontractors for construction works. The task force is charged with review of procedures related to subcontractor management and procurement. Its key responsibilities include:

- Classifying and scrutinising subcontractor applications for including in our lists
- Selecting suitable subcontractors for the contracts
- Monitoring subcontractor risk
- Evaluating and following up subcontractor performance





### Supplier and Subcontractor Engagement

To co-create a sustainable value chain, we actively engage and communicate with our suppliers and subcontractors to strengthen supply chain management. We hold regular meetings and workshops, which serve as platforms for dialogue, learning, and growth.

### ATAL Quality, Safety, Environment & Sustainability Forum

The "ATAL Quality, Safety, Environment & Sustainability Forum" took place in September 2023. This event brought together senior management, project teams, and subcontractors to encourage collaboration, exchange ideas, share good practices, and looked at innovative technologies that enhance QSE and sustainability efforts.

The forum included a variety of discussions and presentations on topics related to engineering quality, workplace safety, environmental protection, and sustainability. Through video sharing and presentations, attendees gained insight into on-site implementation practices.



The "Outstanding Subcontractor Award" honours the collective efforts of subcontractors in QSE performance. Nine subcontractors were nominated and received awards for their exceptional commitment to QSE practices over the past year. The award serves as a powerful reminder of the importance of prioritising QSE and the positive impact that responsible practices can have on the broader community.





## Community

The Group prioritises social responsibility, and firmly believes in its fundamental role in promoting positive change and fostering long-term development within the local communities we serve. We strive to understand community needs and customise our initiatives for a range of social groups and organisations. We actively involve ourselves in community activities, volunteer services and charitable endeavours. This allows us to give back to the communities that have supported us and contribute to the betterment of society.



Awarded the **“15 Years Plus Caring Company Logo”**  
in the Caring Company Scheme by the Hong Kong Council of Social Service

In 2023, our community initiatives covered a range of societal needs with different thematic focuses, including joining hands to build a sustainable city, supporting the next generation of talent, and serving the community.





### Joining Hands to Build a Sustainable City

#### *Our Volunteers Share Renewable Energy Concepts with Students at “Green Day in Ma Wan”*

The Group once again partnered with the non-profit organisation Rainbow Foundation to co-organise “Green Day in Ma Wan”. The event aims to develop a sustainability-oriented mindset in the younger generation and encourage them to go from theory to practice in green living through experience sharing and STREAM (Science, Technology, Robotics, Engineering, Art, and Mathematics) workshops. More than 30 secondary school students and 10 of our volunteers joined the workshop, providing the students with valuable knowledge about how to contribute to a sustainable future through engagement sessions and workshops.

The programme took place at the Solar Tower in Noah’s Ark, where the students participated in an informational session led by our staff volunteers. They learned about the global goal of carbon neutrality, renewable energy, its global significance, and its role in environmental protection.





### *Volunteers Share Love for Our Planet on “Clean Shorelines Day”*

Marine refuse often accumulates in areas such as mangroves, mudflats, beaches, rocky shores, and coastal waters, adversely impacting marine ecology. We organised a “Clean Shorelines Day” at Lung Ha Wan in Sai Kung to demonstrate our care and commitment to environmental protection. A total of 22 staff volunteers, together with their family members, participated in this meaningful event advocating for environmental conservation in our everyday lives.

Participants were passionate about contributing to the cleanliness of shorelines, collecting four large bags of rubbish. Besides understanding the importance of marine conservation, our staff and their children also had a wonderful bonding experience.





### Supporting the Next Generation of Talent

The Group offers various scholarships to develop talent in our community, focusing on those who have achieved academic excellence. We sponsored the “12<sup>th</sup> Scholarship for Family Members of Registered Construction Workers,” organised by the Construction Industry Council. This scholarship recognises family members of construction workers who achieved exceptional results in the 2022 Hong Kong Diploma of Secondary Education Examination.

The scholarship acknowledges the academic achievements of registered construction workers’ immediate family members and recognises workers who have contributed to a sustainable Hong Kong while fostering the next generation of talent. We expect the scholarship recipients to continue their studies, seize opportunities, and contribute to Hong Kong upon graduation.

### Serving the Community

The Group conducted “Volunteer Day at Lamma Island” with a total of 33 participants, including 12 staff volunteers and 11 families from the Neighbourhood Advice-Action Council (NAAC). Participants had to complete specific tasks in different locations on Lamma Island in their groups. This event was designed as a memorable experience of teamwork, exploration, and community service, as well as a day out. Our staff volunteers shared that they got to know more about their colleagues from different departments and valued the opportunity to serve the community.





## CHAMPIONING OUR PEOPLE

Our employees are the foundation of our business success and essential to sustainable growth. We foster a people-centric, inclusive, and healthy workplace and a culture of continuous learning, innovation and development of human talent.



### In this Chapter

- Talent Management
- Talent Development
- Occupational Health and Safety



# CHAMPIONING OUR PEOPLE

## Talent Management

Our goal is to create and maintain an effective workforce management system that attracts, motivates, and retains professional talent at all levels. Our Human Resources (“HR”) policies, guidelines and practices encompass all aspects of the business and employment lifecycle. These include manpower planning, talent acquisition, compensation, benefits, welfare, staff relations, work arrangements, training and development, staff benefit change and movement. They are communicated to all employees through channels such as the corporate intranet, Employee Handbook and employment contracts.

## Talent Attraction and Retention

We offer competitive remuneration packages and employee benefits, including medical, life and personal accident insurance. Remuneration is set based on duties and responsibilities, individual and business segment performance, and market conditions. To improve our incentive structure and provide motivation, we regularly conduct market reviews, which help us improve our remuneration packages and employee benefits.

We believe in acknowledging and inspiring our team members as a part of our corporate brand’s ethos of “supportive and caring”. We use rewards and positive reinforcement to recognise the efforts of both individuals and teams. Each year, we roll out award and recognition programmes as a token of gratitude for the dedication shown by our employees.

## Case study: ATAL Scholarship Programme for Employees’ Children

Launched in 2021, this programme is designed to reward outstanding academic achievements of the children of our employees by subsidising their education. In 2023, 23 children were awarded scholarships.



We dedicate considerable effort to attracting promising individuals by expanding our recruitment scope and reaching out to students who are still deciding their career path. This includes exploring job boards, participating in career fairs, developing an active Employee Referral Programme, connecting previous employees through ATAL Alumni, partnering with minority associations in Hong Kong, social media presence, and partnering with universities and colleges for campus recruitment.



## Employee Relations and Engagement

### *Employee Communications*

We foster two-way communication and cultivate a supportive corporate culture to engage our employees and promote a sense of connection. Internal communication channels include our “Echo” Aerogram for attracting employee ideas and opinions, our quarterly corporate magazines and newsletters for business updates, regular HR visits, employee engagement surveys, focus group discussions, and top management communication sessions to address workplace concerns. We take all feedback seriously and respond with appropriate follow-up actions.

Our Corporate HR Unit collaborates with all business and corporate units to implement a people-centric approach. It conducts roadshows and site visits to better understand the challenges our employees face at work. We value their input on areas needing improvement, as part of our commitment to developing a “supportive and caring” work environment. Employees are encouraged to reach out to their respective HR personnel with any thoughts, questions, or support they might need.

### *Employee Well-being*

We promote both the mental and physical health of our employees and their families. We encourage our employees and their family members to make the most of their leisure time, out of a belief that they give their best performance when they are in their best health, both mentally and physically. We establish policies, programmes and initiatives reflecting the diverse needs of our employees. Welfare programmes, including comprehensive health insurance, are designed to support our employees in their times of need.

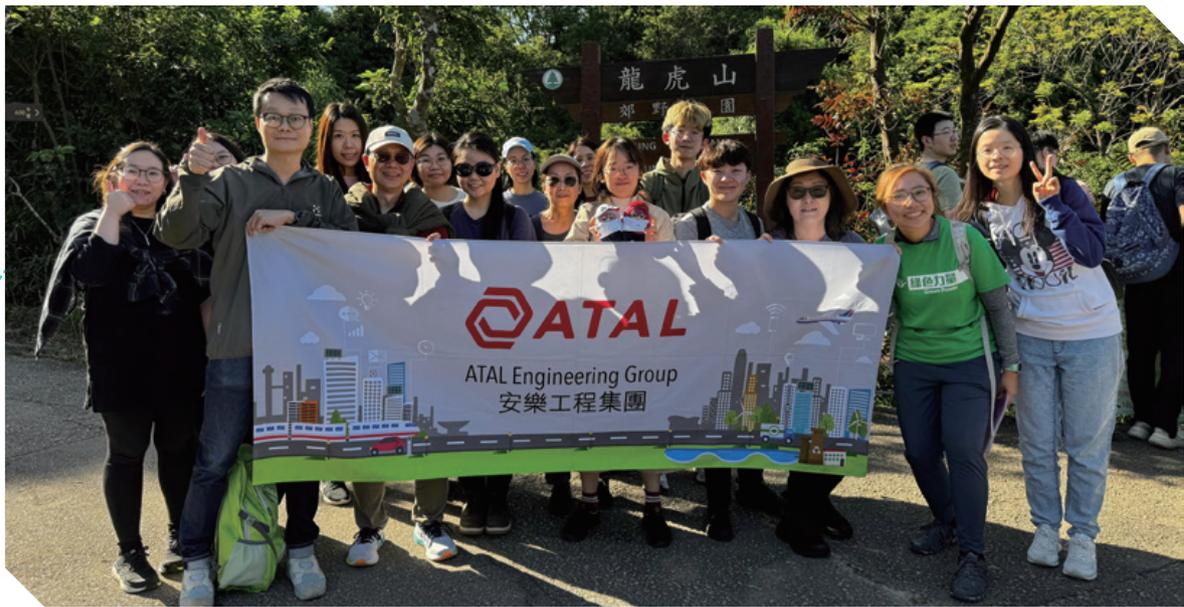
To support a healthy work-life balance, we have implemented family-friendly policies and initiatives, including flexible working arrangements and parental leave. Understanding that a healthy lifestyle extends beyond the workplace, we encourage employees to participate in our activities along with their families. We have established several sports teams to organise gatherings, friendly matches, and training sessions. We organise activities, such as movie days and barbeque party, that welcome families.





The ARWA Club is crucial for team building and fostering a positive and healthy workplace. During 2023, the ARWA Club organised entertainment and welfare activities as well as voluntary services. These events served as platforms for fostering employee engagement, well-being and community contribution.

Ceramic Wheel Throwing Trial Class



Discovery Tour: Lung Fu Shan



## Human Rights and Labour Standards

We uphold human rights in our workplace and throughout our business activities. We have zero tolerance for all forms of unethical employment practices, including child labour, illegal or forced labour, and human trafficking. This applies to all our operations and extends to our supply chain.

To safeguard against unethical practices, we have set clear internal policies and operating procedures. Our employees are required to adhere to the relevant HR policies and the Code of Conduct. The recruitment process includes due diligence on the identity and employment eligibility of all applicants. Different types of work patterns, rest days, holidays, leave, and termination procedures are clearly defined and outlined to protect employee rights. A Grievance Handling Policy is in place to address any potential violations.

## Diversity, Equity and Inclusion

Valuing diversity and inclusion is key to our success. An inclusive culture where everyone is respected strengthens our ability to attract and retain talent, encourage new ideas, and boost performance. We cultivate diversity and inclusion by fostering an open, positive work setting. We are committed to treating all employees fairly, irrespective of their race, colour, ethnicity, national origin, sex, age, marital status, sexual orientation, or religious and political beliefs. We have zero tolerance for any form of discrimination, harassment, or unjust treatment. Internal policies and operating procedures are established to prevent any form of discrimination within our organisation.

We all have a responsibility to uphold the legal requirements for equal opportunity. This applies to men and women, individuals with and without disabilities, regardless of family status or race, both within the Group and in society at large. All employees are required to attend webinar training on anti-discrimination. A representative from the Equal Opportunities Commission is invited to share on key topics: rationale and key concepts of the anti-discrimination laws in HK; liabilities of individuals and organisations in this area; and how to avoid committing discrimination in the workplace.

### *Multi-generational Workforce*

Creating a workplace with employees of varying ages helps to leverage the diverse skill sets and perspectives brought by different generations. We offer opportunities for retirees or aging workers to continue contributing their skills and knowledge even after reaching retirement age.



### *Ethnic Inclusion*

We support a workplace where individuals from all ethnic and cultural backgrounds are respected. We were among the charter signatories to the “Racial Diversity & Inclusion Charter for Employers” launched by the Equal Opportunities Commission in Hong Kong. Going beyond the charter, we continue to partner with minority organisations in Hong Kong to create employment opportunities.

A weekly language exchange session is available for new joiners from ethnic minority backgrounds. This helps them learn Cantonese, aiding both in their daily lives and work. The ARWA Club welcomes all eligible staff to participate in its activities. Given our increasingly diverse talent pool, the Group has developed bilingual versions of its promotional materials, email messages, and event highlights, ensuring greater understanding and participation by non-Chinese speaking staff.





## Talent Development

We foster a professional team at the forefront of the E&M industry, by supporting top-notch work and innovative thinking. The growth and career advancement of our people is a central element of our HR approach, which is outlined in our policies on staff training and development (“T&D”) and the relevant operation manuals. We also support a talent pool for the E&M industry at large.

### Investing in Youth

To nurture the future of the E&M Industry, we make an ongoing investment in the acquisition and development of young talent. This strategy not only helps us maintain a dynamic workforce, but also ensures that the industry continues to thrive and evolve, driven by fresh ideas and perspectives. We also provide career talks, summer internships and on-site industrial attachment opportunities.

Our ATAL Training Centre (“ATC”) regularly hosts visits from local colleges and universities. These visits brought together our senior management, project teams, graduate trainees, and our colleague “Robot of ATAL Training Centre” to provide an opportunity for students to gain insight into the E&M engineering industry. The goal is to support youth career planning, establish a talent pipeline of future engineers, and promote the industry to the younger generation.

We make scholarship grants to help the younger generation pursue their studies and career development in the E&M field. In 2023, the Group awarded a total of HK\$90,000 to 15 students across five of the local tertiary education institutions.

The Group and the Technological and Higher Education Institute of Hong Kong (THEi) have signed a Memorandum of Understanding to nurture E&M engineering talents and promote industry development. Through this collaboration, we will provide internship and job opportunities to the students, facilitate knowledge exchange, and prepare future industry leaders to deliver high-quality engineering services to our society.





## Case study: “Business-School Partnership Programme”

Anlev Elevator Group, our global brand of lifts, escalators and moving walkways, has taken part in the “Business-School Partnership Programme (BSPP)” organised by the Education Bureau of HKSAR Government. The 3-day work experience workshop introduced students from 6 secondary schools to the E&M engineering industry, allowing them to learn about lift operations from Anlev's experienced lift and escalator professionals and experience roles of different duties.



### Nurturing Our Talents

Our T&D team plays a crucial role in fostering a culture of continuous learning and professionalism within the Group. Based on our T&D framework, T&D System, and T&D Advisory Committee, the team systematically implements training strategies and development programmes. These programmes are aimed at different roles and levels of employees and align with our business goals. The broad range of professional development and training programmes are also tailored to job requirements and career growth plans. ATC supports our employees by providing advanced equipment and innovative technologies to the training programmes.

### ATALent: Our Online Training Information System

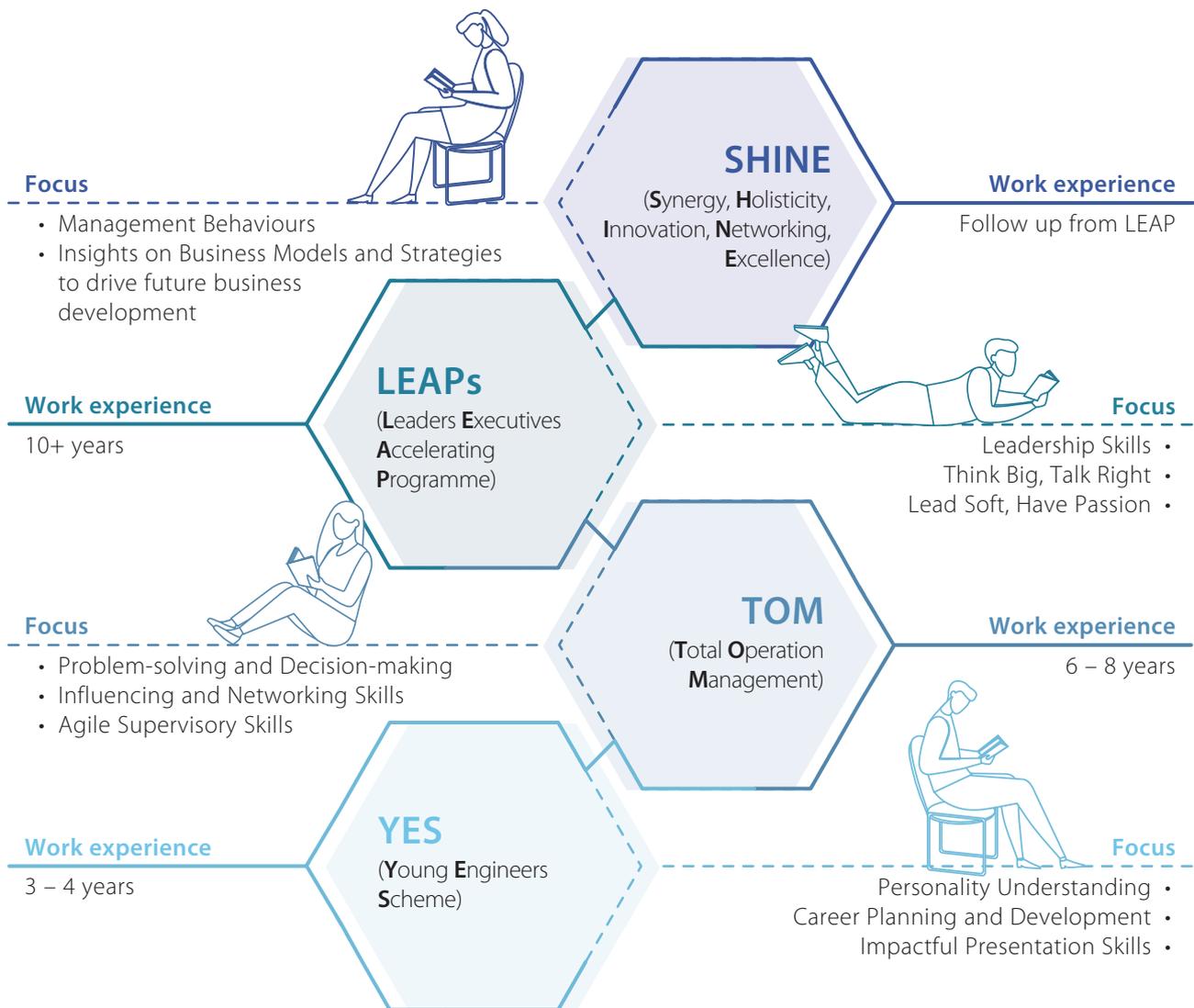
Our online training information system *ATALent* is an intuitive and user-friendly platform designed to provide our employees with an accessible source of up-to-date training information and a rich array of course materials. It serves as a digital hub for learning and professional development, promoting a culture of self-improvement and continuous learning in our workforce. By leveraging this platform, our employees can take control of their own growth and career development, accessing the resources they need to improve their skills and knowledge at their own pace.



In addition, we offer tailored support for the career growth of our potential employees. We regularly meet with different business units and department leaders to identify high-potential individuals. This involves asking managers to start career conversations and providing career coaching to targeted employees, to help them move forward in their careers. After identifying their development needs, we devise management training plans. These plans include coaching, job rotation, external networking exposure, and more, which help them gain essential skills and experience. Eligible employees are also entitled to sponsorship for part-time degree programmes, company sponsored training, and overseas training.

**Tailored Development Programmes**

We offer tailor-made training programmes for young engineers at different levels of professional experience and needs to assist their career advancement.





### Structured Training Programmes

We provide comprehensive training programmes to meet employee needs and boost talent development. These provides robust support to improve their skills and foster professional growth.



#### HKIE Scheme "A" Graduate Training Programme Target : Graduate Trainees

To equip graduate trainees with the necessary technical and managerial knowledge and skills to be professional engineers

Our two-year programme offers diverse training activities and mentorship, providing a strong foundation for an engineering career and enhancing skills for further advancement.



#### Vocational Training Council Apprenticeship Programme Target : Apprentices

To develop professional and multi-skilled technicians through on-the-job training and mentorship

Through 2-to-4-year training programme, apprentices receive substantial educational support, including training subsidies, and diverse training opportunities, including on-the-job training.

#### 12 Training Series Target : All Employees



To provide the entire workforce with comprehensive job-related knowledge and skills

The well-defined classification of the training series simplifies the establishment of learning objectives. The T&D Advisory Committee reviews the topics covered in these series during their quarterly meetings, ensuring they stay updated with industry knowledge and market trends.

Technical Skills	Project Management	Compliance
ATAL Familiarisation	Building Information Modeling	Management Sharing
People Management	Contract Management	Quality, Safety, Environment and Sustainability
Corporate Functions	Soft Skills	Enterprise Resources Planning, Information Technology



### Joint Training Programmes

Joint Training Programmes include a specific set of training curricula that are custom-made, developed jointly by the T&D team and various business units. The goal is to meet specific needs, ensuring a fit-for-purpose approach to professional development.



### ANLEV Training Initiative for Generic Engineering Normal Programme

Target : Engineers for lifts and escalators

Programme duration : 1 year

Focus : QSE, project management, collaboration, customer services and people management

Objective : To understand the quality system, transparent communication for project coordination, up-to-date customer service norms, and to adapt to future changes in the lift and escalator industry



### Building Services Skill Enhancement Scheme for Technicians

Target : Technicians for building services

Programme duration : 2 year

Focus : Fire services, MVAC, electrical services, and plumbing and drainage for operations and maintenance of building services

Objective : To refine technical skills, knowledge, and capabilities of technicians in the building services industry



### Building Services Technical Training Scheme for Talent

Target : Building services engineering staff

Programme duration : 2 year

Focus : HVAC, electrical service, plumbing and drainage, fire services & contract management

Objective : To develop our engineering staff as all-round engineers with vital building services knowledge for their job requirements

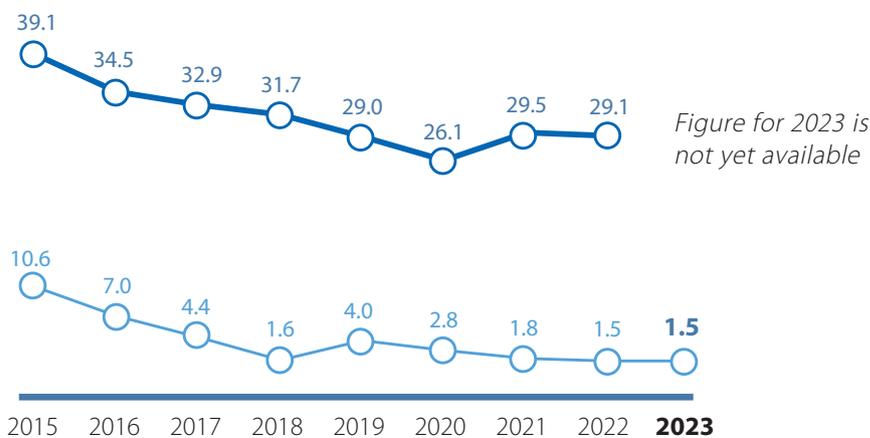


## Occupational Health and Safety

The Group promotes a culture of health and safety that prioritises the well-being of all employees and our subcontractors' workers. Our EHS Policy commits us to minimising potential hazards and ensuring a safe and healthy workplace. Our Crisis Management Plan addresses potential crises, including occupational health and safety issues, to mitigate risks, protect our employees and stakeholders, and maintain the continuity of our organisation.

We also place great emphasis on subcontractor safety within our supply chain management. According to our Code of Conduct for Suppliers and Subcontractors, all subcontractors are required to adhere to our safety standards. In terms of frontline worker safety, we sustain consistent communication with our subcontractors. This allows us to evaluate the safety of frontline workers, prevent potential accidents, and enhance awareness of safety issues. As a result, we achieved 0 fatality and very low industrial accident rates compared to the average industrial accident rates of the construction industry in Hong Kong.

### Industrial Accident Rate of the Construction Industry in Hong Kong and the Group



Industrial Accident Rate of the Construction Industry in Hong Kong\*      Industrial Accident Rate of the Group<sup>4</sup>

\* Source from Labour Department, HKSAR Government

Cases of fatality and occupational disease:

0



Industrial accident rate<sup>4</sup>:

1.5



<sup>4</sup> A reportable industrial accident is defined as an incident resulting in 3 days or more of sick leave. Industrial accident rate per 1,000 employees and subcontractors' workers = (Number of reportable industrial accidents sustained by an employee or a subcontractor's worker / Average number of employees and subcontractor's workers in the Reporting Period) x 1,000



## Safety Leadership and Responsibility

Clear lines of responsibility have been established, from general staff, EHS professionals, and operational management to senior executives and the Board, ensuring effective leadership for occupational health and safety. Our safety culture is integrated into all aspects and levels of the Group through open communication and active engagement.

### *Health and Safety Management*

We hold certification for the ISO 45001:2018 Occupational Health and Safety Management System. Our QSE management system includes clear policies, objectives, targets, and evaluation mechanisms for managing health and safety matters at both corporate and subsidiary levels. This covers our operations in Hong Kong, Macau, Mainland China, and the United Kingdom.

Based on our integrated management system, the QSE Manual presents clear standards, practical guidelines, and measures to ensure the health and safety of our employees and subcontractors' workers. Regular reviews of safety objectives, targets, and effectiveness are conducted to improve safety levels.

Our Corporate QSE Unit oversees the implementation, upkeep, and improvements to the QSE management system. The Corporate EHS Committee, along with various Site EHS Committees across different business units, assist in monitoring on-site applications. We analyse data from incident reporting and site observations. The data includes reported injuries, dangerous occurrences, near-miss events, and subcontractors' accidents. We then review our safety measures to continually improve their performance.





### *Risk Management and Performance Monitoring*

We have delegated internal teams and independent third parties to conduct periodic inspections and audits to supervise the health and safety performance of our daily operations. We conduct both scheduled and surprise site visits, along with regular evaluations and analyses of safety performance. Routine measures include the “Cross Business Unit QSE Inspection Scheme” and senior management walks. Through these activities, management and different business units exchange best practices and ideas about how to improve safety on construction sites. Relevant performance data and findings are reported during the regular Site EHS Committee meetings and reviewed by the Corporate EHS Committee, to evaluate our implementation of health and safety measures. This helps maintain our safety standards and fosters a culture of “Think Safety and Work Safely” in the workplace.

Based on our assessment of job hazards and risks, we have developed and implemented mitigation measures to ensure occupational health and safety. During the Year, we updated our internal QSE work instructions on heat stress risk assessment and control measures to protect our employees from the dangers of working in extremely hot weather, in response to the latest statutory requirements on heat stroke prevention.

In light of the Occupational Safety and Occupational Health Legislation (Miscellaneous Amendments) Ordinance and Occupational Safety and Health for Construction and Administrative Regulations, which came into effect on 19 April 2023 in Hong Kong and 1 November 2023 in Macau respectively, we have reviewed the safety management systems of our operations and strengthened the monitoring and surprise inspection mechanism. Meanwhile, we have conducted a series of briefings to our staff and subcontractors to increase their awareness of work safety and emphasize their safety roles and responsibilities.





## Health and Safety Awareness

Maintaining a high level of health and safety awareness is crucial for effective health and safety management. We carry out numerous training and promotional activities to increase health and safety consciousness and encourage safe practices among our staff and subcontractors.

In addition to compulsory basic safety training, we regularly organise seminars and workshops on safety topics, including lifting safety of MiMEP modules and work stress management, aimed at providing our employees with a diverse range of health and safety information.

To foster a culture of safety and prevent workplace injuries and accidents, awareness campaigns and regular promotional activities and publications are organised. We share updated health and safety information and raise awareness through our regularly published newsletters, "Safety Alert" and "Healthy Living". These initiatives aim to encourage our staff and subcontractors to take personal responsibility for their own and their colleagues' safety, thereby making safety a shared responsibility.





## Case study: “Life First” Promotional Campaign

In June 2023, we organised a five-day campaign called “Life First”, which was launched by the Construction Industry Council. Joint top management site walks were arranged to assess site operations and promote risk management. We took this opportunity to understand our frontline workers’ safety concerns, reassess processes in light of serious accidents in the construction industry, and discuss potential preventive measures.

Silent tributes were held at work sites to raise safety awareness. Additionally, we engaged our frontline supervisors and staff in safety briefings, workshops, inspections, toolbox training, and safety reviews. Safety messages were conveyed to staff and workers by on-site engineering personnel and engineering management teams.





## Case study: World Day for Safety and Health at Work

In line with the World Day for Safety and Health at Work in 2023, we arranged a series of safety awareness events for employees and subcontractors. These events took place across all our operational areas, including offices and construction sites. The primary goal of this initiative was to underline and bring to the forefront the significance of maintaining safety within the workplace.



### Safety Innovation

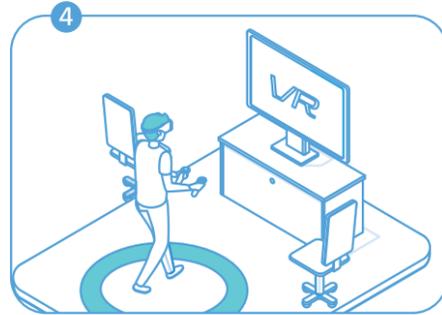
The use of advanced safety technology and smart devices is critical in ensuring the safety of our construction operations. These technologies provide an essential layer of protection at construction sites. Not only do they help to prevent accidents, but they also enable rapid response in the event of an emergency, ultimately saving lives. By continuously investing in these technologies, we can provide a safer, more secure work environment for our employees, while also improving efficiency and productivity in our operations.

In 2023, a dedicated Task Force on Smart Site Safety System was established. This task force was created with the primary goal of ensuring workplace safety by leveraging advanced technology. Experts from diverse fields work collaboratively to develop, implement, and maintain a comprehensive smart site safety system that integrates the latest advancements in technology to ensure optimal safety and efficiency.



# ATAL Smart Site Safety System

## Office



### 1 Centralised Management Platform

- Utilised for responding to, managing, and documenting signals or alerts received from the Smart Site Safety System
- Offer a direct method of monitoring site safety performance online and analysing data

### 2 Digital Works Supervision System

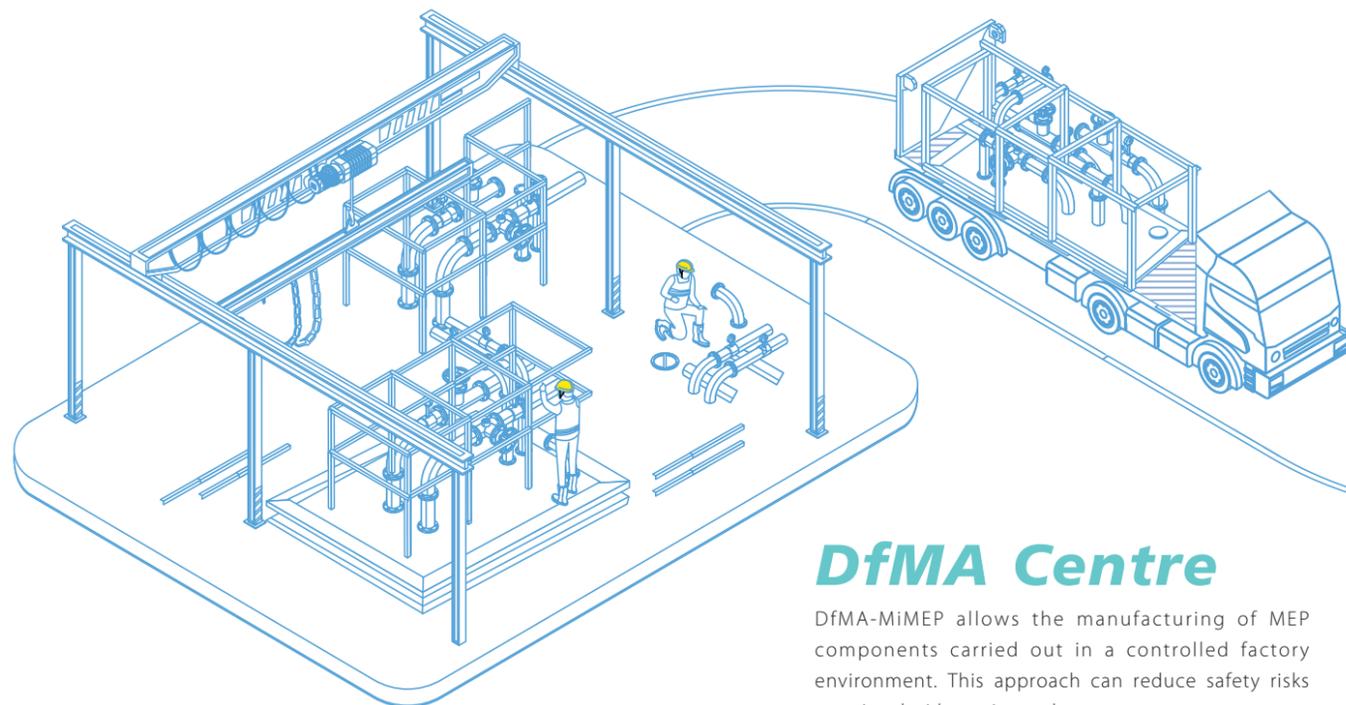
- Enable digital submission, review, and approval of works and inspection documents
- Improve the standard and efficiency of work supervision, enhancing the quality and safety of construction works

### 3 Construction Reality Capture Software

- Paired with a 360° camera, automatically convert site images into a "Street View" of a construction site, to enable remote monitoring of site safety and work processes
- Provide comprehensive and timely documentation of construction sites to facilitate dynamic risk assessment and analysis

### 4 Virtual Reality Training for Safety

- Use virtual reality technology in safety training to enable workers to experience high-risk activities and the serious consequences of accidents, thereby raising the level of safety awareness



## DfMA Centre

DfMA-MiMEP allows the manufacturing of MEP components carried out in a controlled factory environment. This approach can reduce safety risks associated with on-site works.

### 5 Smart Safety Helmet

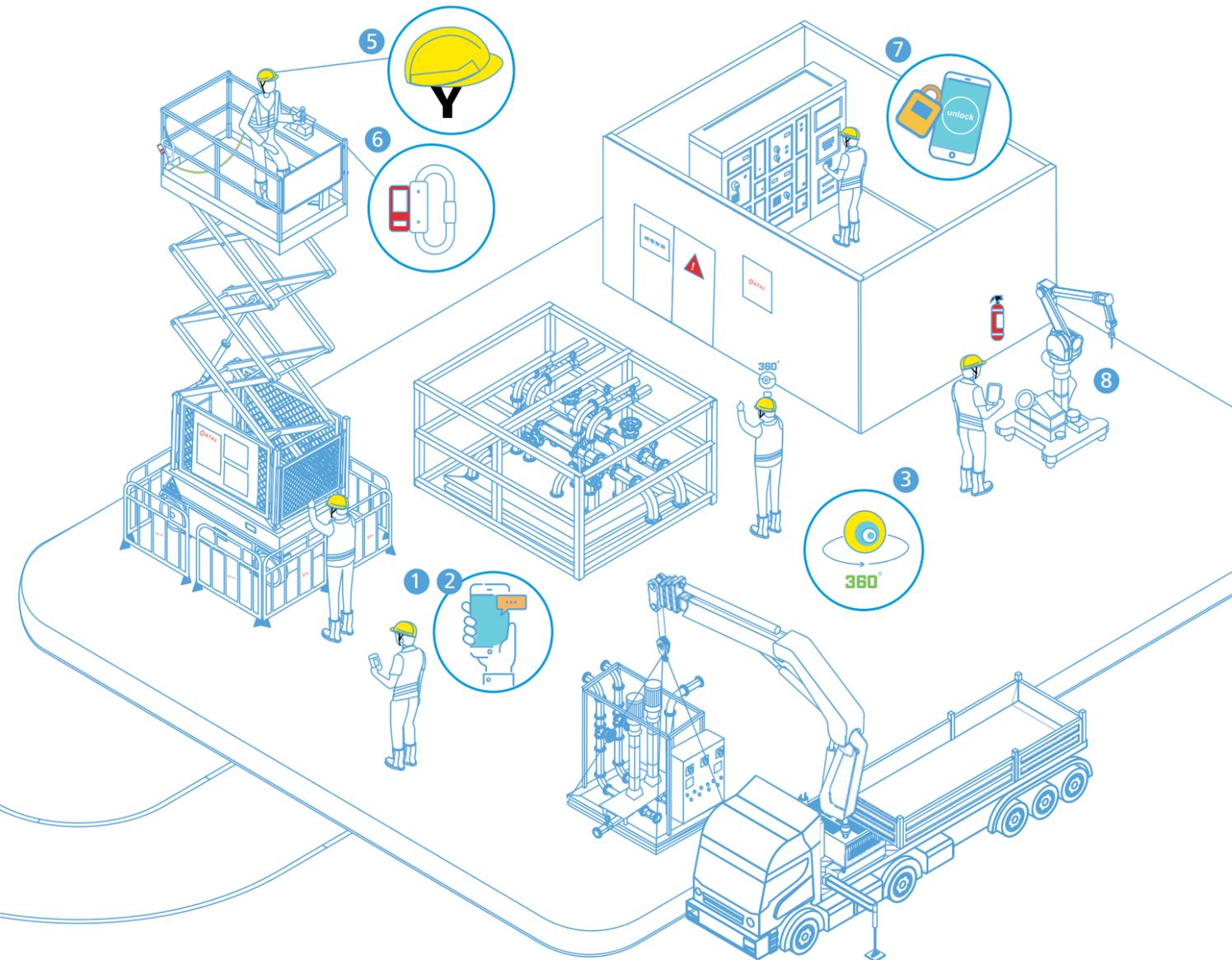
- Monitor the health conditions of workers and detect accidental falls or standstill situations
- Provide early warning alarms at various alertness levels

### 6 Smart Safety Harness System

- A monitoring system that adopts AI and IoT technology to ensure the safety of workers working at height
- Detect improper harness use by workers on elevated platforms and scaffolds to prevent severe accidents through a real-time alert and reporting system

### 7 Bluetooth Smart Lock

- Implement direct access control for E&M facility rooms and main switchboards to improve safety and security at construction sites
- Use our self-developed app to automatically upload and store all access records in the cloud drive for monitoring



### 8 Robotic Welding

- Automate the welding process by utilising robotic arms equipped with welding heads, contributing to a safer working environment and consistent quality of construction works

## Construction Site

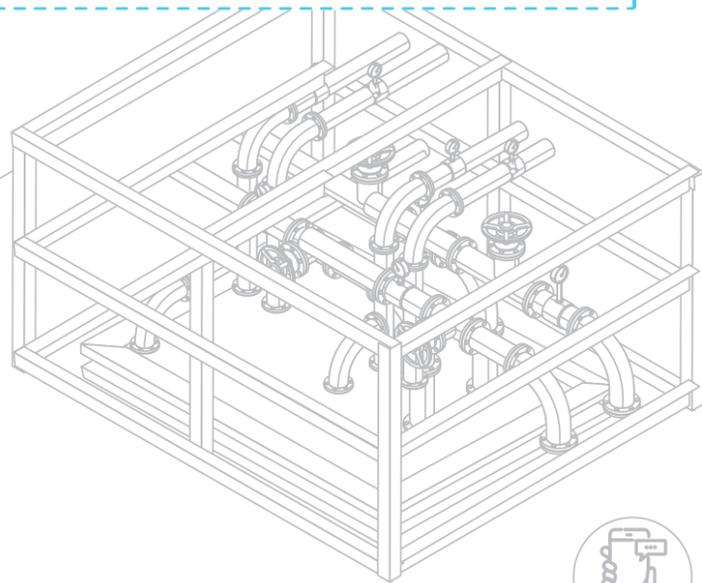
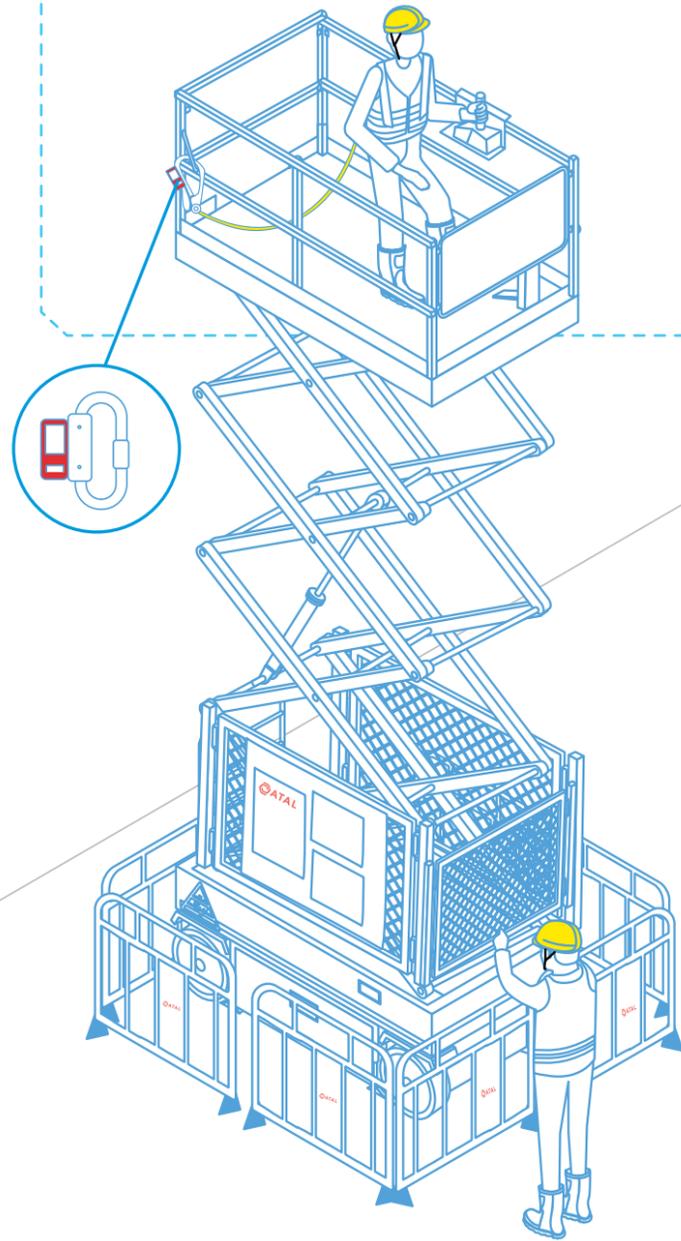


### Case study: Smart Safety Harness System

An all-round smart safety monitoring platform that incorporates the use of smart safety harness to replace manual inspection of workers' safety harness when working at height such as cat ladders, elevated platforms, suspended working platforms and scaffolds.

#### Smart safety harness with sensor

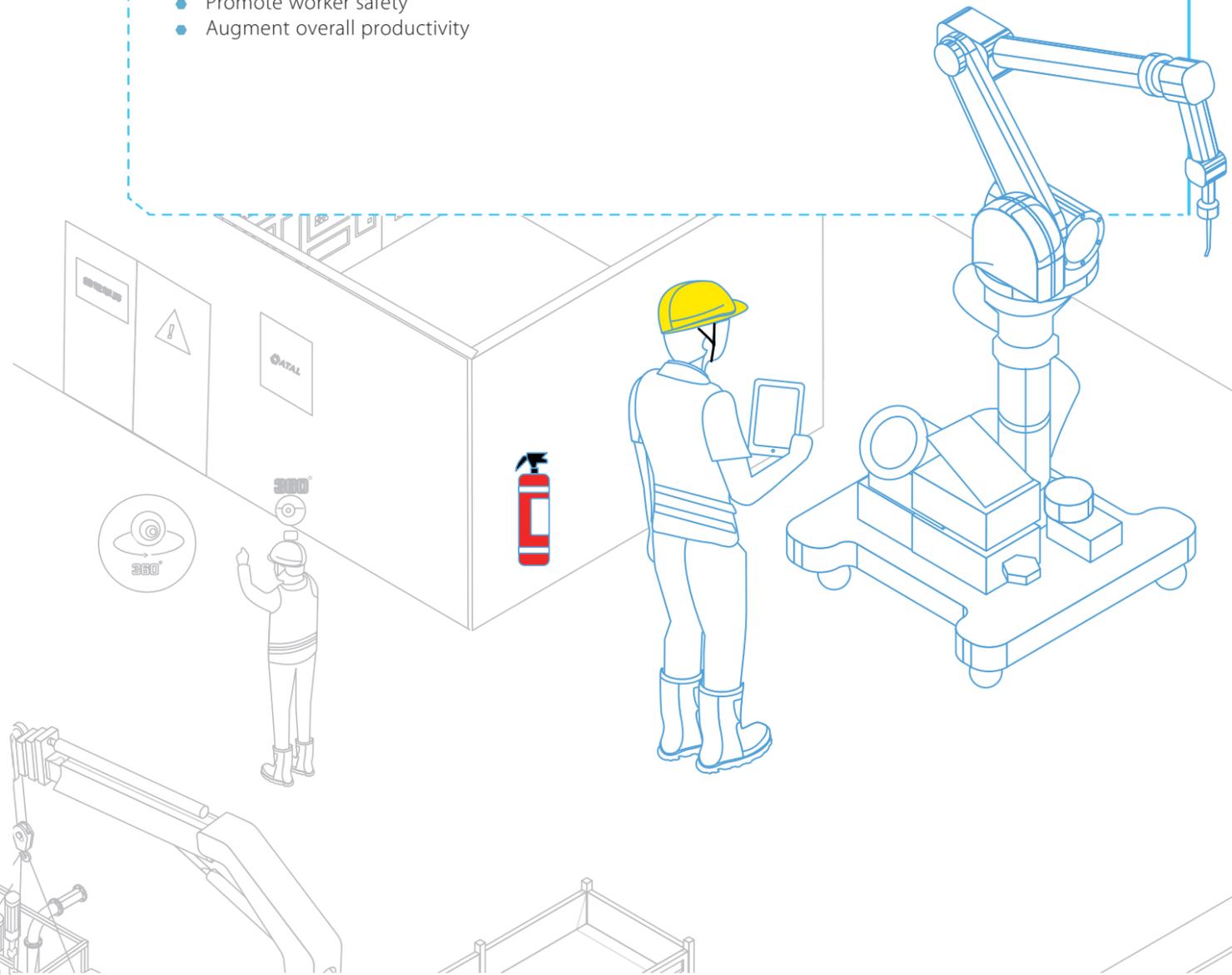
- Simple and lightweight, all-in-one smart harness carabiner, without placing any additional burden on workers
- Sensor detects whether the safety belt is fastened properly to the harness carabiner
- Sensor regularly sends messages to the smart safety monitoring platform for real-time alert and reporting



### Case study: Robotic Welding

Use of advanced automation technology in the form of robotic arms equipped with welding heads. Robotic welding has emerged as a pivotal component in this process, driving both efficiency and sustainability.

- Enhance precision and consistency of welds
- Create high-quality and resilient structures
- Reduce reliance on manual labour
- Promote worker safety
- Augment overall productivity





## REINFORCING BUSINESS ETHICS AND INTEGRITY

We exercise a steadfast commitment to business integrity and ethics. We believe in transparent, accountable, and responsible interactions with partners, customers, employees, and the wider community. We take measures to prevent unethical business practices, ensuring we stay on the right side of compliance.

### In this Chapter

- Business Ethics and Integrity
- Data Privacy and Intellectual Property Rights
- Legal Compliance



# REINFORCING BUSINESS ETHICS AND INTEGRITY

## Business Ethics and Integrity

We have zero tolerance for illicit activities such as extortion, fraud, money laundering, corruption, and anti-competitive activities. Our commitment to integrity is unshakeable, guiding our operations and reflected in our policies on compliance, integrity, and ethical conduct.

Our Code of Conduct instructs employees to uphold the highest ethical standards in business. It guides how they should interact with each other, our business partners, and the communities where we operate. Every new employee is required to confirm that they have read, understood, and will comply with the Code of Conduct upon joining the Group. Employees of certain grades are required to affirm their compliance with the Code of Conduct annually.

### Mandatory Business Ethics Training

We incorporate business ethics training into our onboarding process and schedule regular sessions for existing employees. The focus is on the importance of anti-corruption measures and preventing anti-competitive behaviours. This helps promote awareness and ensures compliance with our ethical standards.

### Tailored Construction Industry Ethics Programmes

We subscribe to the Construction Industry Integrity Charter as part of our effort to foster a culture of integrity and ethical management within the construction industry. This includes improving compliance management through seminars and training programmes, with senior management receiving at least one hour of integrity training annually. The aim is to enhance anti-corruption capabilities and employee awareness, promoting a long-term culture of compliance within the organisation.



## Anti-corruption

The Code of Conduct sets out the operating principles on bribery, corruption, fraud and conflicts of interest. All employees must declare any conflicts of interest when they join the Group, and every three years. Employees can make regular and timely declarations through the automated Human Resources Information System. This system allows all staff, regardless of geographical location, to submit declarations more easily and promptly than completing a paper form.

In 2023, we invited the Independent Commission Against Corruption, HKSAR, to conduct three online training sessions on corruption prevention in the construction industry with our employees in Hong Kong. An external lawyer was engaged to provide training on business ethics, including anti-corruption, specifically related to construction works, to employees in Mainland China. Board members receive anti-corruption training on a regular basis.

## Prevention of Anti-competitive Practices

We adhere to the Hong Kong Competition Law Compliance Manual, which sets out regulations and guidelines for ethical dealing with competitors, vendors, distributors, and indirect resellers. The Group policy on competition and procurement is outlined in the Code of Conduct.

All staff are invited to attend Competition Law compliance seminars. Employees involved in sales and marketing, purchasing, and tendering are required to attend at least one of the Competition Law compliance training courses during their service in the Group. Following each training session, such employees were asked to pass assessment tests to confirm their understanding. Those who passed the assessments were recognised as having successfully completed the training, while those who did not pass were required to retake the training. In 2023, three training sessions focused on anti-competitive practices were conducted by the Competition Commission. In addition, we engaged an external law firm to provide legal training on the recent developments in Competition Law Enforcement to the Company's directors and others.



The Group has commissioned an independent third party to perform a Competition Law compliance audit across all business lines. A briefing session was held to discuss potential pitfalls and make recommendations based on issues identified in the audit. This session engaged employees responsible for submitting tenders, responding to requests for quotations (RFQs); sourcing suppliers or subcontractors; and managing regular contracts with competitors, suppliers, and customers.

## Whistleblowing

We have a Whistle-blowing Policy, which was enriched in 2023, as well as a confidential reporting channel to promote the reporting of potential violations and malpractices. The Group promptly and fairly investigates any reported ethics violations and takes appropriate action. This includes disciplinary action, termination of employment, or preventive measures. We also safeguard whistle-blowers from unfair dismissal, victimisation, and unjust disciplinary actions.

## Data Privacy and Intellectual Property Rights

Acknowledging our responsibility to comply with data privacy and cybersecurity laws and regulations, the Group protects proprietary intellectual property and confidential information. Our Operation Manual includes detailed procedures to regulate intellectual property. This includes a requirement for patent protection for all product and software-related inventions, in compliance with the laws and regulations of the countries where we operate.

To prevent misuse or abuse of any confidential, privileged, or personal information entrusted to the Group, we have defined specific obligations and procedures for data collection, retention, and data access and correction in our Personal Data and Privacy Policy. All staff must sign the Intellectual Property, Staff Invention, and Confidential Information Agreement, as well as the Staff's Declaration on Software Policies for the Group, upon joining. Violators may face disciplinary action, up to and including dismissal.

Investments in cybersecurity technologies have been made to safeguard our systems, network, and data. In response to escalating cyber risks, we have adopted an Endpoint Detection and Response solution. This strategy serves as protection against most ransomware and malicious code. In addition, we continually improve the Group's cyber-vigilance and risk assessment capabilities.



To counter cybersecurity threats and maintain heightened awareness, we conduct cybersecurity awareness training programmes and periodically distribute cybersecurity reminders to all staff. These training programmes are designed to educate and equip our employees with the necessary knowledge and skills to identify and respond to potential cybersecurity threats. The reminders serve as an ongoing reinforcement of the training and help to keep our staff vigilant and prepared.

As part of our commitment to information security, we are taking steps to upgrade our information security management systems and pursue the ISO 27001 certification. By implementing a more robust system, we aim to minimise the risk of any potential cyber security incidents and further enhance the security and integrity of all data processed within the organisation.

## Legal Compliance

Violations of laws and regulations can negatively affect our business operations, performance, financial position, and reputation. The Group is committed to compliance with all applicable laws and regulations. In addition to adopting strict compliance policies, guidelines, and practices, we keep abreast of current and emerging legislation and regulatory changes relevant to our business. Regular internal reviews are conducted to ensure compliance with updated requirements. Any significant updates or amendments are promptly communicated to our employees. In 2023, we launched a newsletter series, *Compliance Starts With You*, to share compliance information and raise awareness.

In 2023, the Group has developed a comprehensive Competition Law Compliance Programme with independent legal advisors to identify and mitigate, among others, any potential risk of violation of the competition laws and regulations, reflecting our dedication to business ethics and integrity.



The table below summarises our performance in compliance management for the Year under review:

Compliance category	Significant reportable cases <sup>5</sup> of breaches in legal or regulatory compliance in 2023	Supplementary Information
<b>Business Practices</b> (relating to corruption and anti-competitive practices)	No reportable cases; no concluded legal cases regarding corrupt practices brought against us or our employees	In November 2022, the Company and a subsidiary of the Company entered into the Cooperation Agreement with the Competition Commission, Hong Kong ("CC") in relation to the resolution of the Proceedings and Second Proceedings against the subsidiary of the Company and various third parties. The Company is not named as a party in the Second Proceedings. The application with the Tribunal in respect of the Second Proceedings was formally filed by the CC on 23 May 2023, and there are no outstanding investigations against the Company and the subsidiary of the Company in relation to air conditioning works.
<b>Employees and subcontractors</b> (relating to employment practices, labour standards, and occupational health and safety)	No reportable cases	Nil
<b>Product Responsibilities</b> (relating to client privacy, product and service information, and customer health and safety)	No reportable cases	Nil
<b>Environment</b> (relating to air and GHG emissions, discharges to water and land, and waste generation)	No reportable cases	Nil

<sup>5</sup> The number of significant reportable cases of non-compliance with relevant laws and regulations. The level of significance of the non-compliance is determined by considering the material effect it has on the Group; or the environment and society and the monetary value of the penalty (i.e., fines over HK\$50,000 are considered significant).



# ABOUT THIS REPORT

This ESG Report outlines the Group’s sustainability strategy, policies, practices, and key performance on material sustainability topics for the key stakeholders of the Group. It covers the reporting period from 1 January to 31 December 2023 (the “Year” or the “Reporting Period”).

## Reporting Boundary

This Report highlights the material sustainability performance of the Group’s core business operations in Hong Kong, Macau, Mainland China, and the United Kingdom, excluding operations within businesses in which the Group has less than a 50% equity interest. The Group will continue to assess its business development and impact on sustainability, making necessary adjustments to the reporting boundary based on the principle of materiality as needed<sup>6</sup>.

## Reporting Standards

This Report is prepared in accordance with the Environmental, Social and Governance Reporting Guide (the “ESG Reporting Guide”) set out in Appendix C2 to the Rules Governing the Listing of Securities on the HKEX. The information in this Report is provided based on the four reporting principles, including “materiality”, “quantitative”, “consistency” and “balance”, in the ESG Reporting Guide.

Reporting Principles	The Group’s Application
<b>Materiality</b>	The ESG Report outlines the significant economic, environmental, and social impacts of the Group’s operations. We have identified material sustainability issues for disclosure through continuous communication with stakeholders and a materiality assessment.
<b>Quantitative</b>	Quantitative data has been presented wherever feasible, along with comparative data. The standards, methodologies, and assumptions used for the calculations have also been disclosed.
<b>Consistency</b>	We have adopted consistent methodologies in measuring and calculating data for disclosure, enabling a meaningful comparison of our ESG performance. Ensuring the quality and accuracy of the disclosed information, we have conducted due diligence and provided specifics as changes occur.
<b>Balance</b>	This ESG Report has been presented in an objective and transparent manner to provide an unbiased overview of the Group’s ESG performance.

<sup>6</sup> The data collection scope of environmental performance indicators has been extended to include all offices, depots, workshop, warehouses and construction sites in all regions of the Group’s business operation, as well as a manufacturing plant in Mainland China.



## Report Approval

We acknowledge our responsibility to ensure the accuracy and reliability of the ESG Report. All information in this Report is sourced from the internal policy documents and statistical data of the Group. This Report has been reviewed and approved by the Board.

## Report Publication and Contact

The Report is prepared in both English and Chinese and is available on the websites of the HKEX ([www.hkexnews.hk](http://www.hkexnews.hk)) and the Group ([www.atal.com](http://www.atal.com)).

We welcome and value your feedback and suggestions on our ESG Report or ESG performance.

Email: [sustainability@atal.com](mailto:sustainability@atal.com)



# KEY STATISTICS

## Environmental Key Performance Indicators<sup>7,8</sup>

Environmental Key Performance Indicators	2023	2022	2021	Unit
<b>Air Emissions<sup>9</sup></b>				
Nitrogen oxides (NO <sub>x</sub> )	847.4	667.8	816.3	kg
Sulphur oxides (SO <sub>x</sub> )	14.7	3.6	4.0	kg
Respirable suspended particles (RSP)	71.9	60.9	75.1	kg
<b>GHG Emissions</b>				
<b>Scope 1 Direct Emissions</b>				
Combustion of fuels in stationary sources <sup>10</sup>	5.5	0.0	0.0	tonnes of CO <sub>2</sub> -e
Combustion of fuels in mobile sources	537.5	523.6	591.3	tonnes of CO <sub>2</sub> -e
Fugitive emissions from equipment and systems <sup>11</sup>	1,399.3	10,467.0	17,206.5	tonnes of CO <sub>2</sub> -e
Emissions from welding <sup>12</sup>	0.4	1.1	1.0	tonnes of CO <sub>2</sub> -e
<b>Scope 1 total</b>	<b>1,942.7</b>	<b>10,991.7</b>	<b>17,798.7</b>	<b>tonnes of CO<sub>2</sub>-e</b>
<b>Scope 2 Energy Indirect Emissions</b>				
Purchased electricity	1,184.2	1,396.9	1,179.8	tonnes of CO <sub>2</sub> -e
Purchased cooling <sup>13</sup>	374.2	363.1	338.7	tonnes of CO <sub>2</sub> -e
<b>Scope 2 total</b>	<b>1,558.4</b>	<b>1,760.0</b>	<b>1,518.5</b>	<b>tonnes of CO<sub>2</sub>-e</b>
<b>GHG emissions in total (Scope 1 and 2)</b>	<b>3,501.1</b>	<b>12,751.7</b>	<b>19,317.3</b>	<b>tonnes of CO<sub>2</sub>-e</b>
<b>GHG intensity (Scope 1 and 2, by floor area)</b>	<b>5.9</b>	<b>21.8</b>	<b>41.5</b>	<b>tonnes of CO<sub>2</sub>-e/thousand ft<sup>2</sup></b>
<b>Scope 3 Other Indirect Emissions<sup>14</sup></b>				
Paper waste disposal <sup>15</sup>	98.4	138.8	142.8	tonnes of CO <sub>2</sub> -e
Use of fresh water <sup>16</sup>	1.6	1.8	1.4	tonnes of CO <sub>2</sub> -e
Sewage discharge <sup>16</sup>	0.8	0.9	0.7	tonnes of CO <sub>2</sub> -e
Business air travel	68.3	8.7	10.9	tonnes of CO <sub>2</sub> -e
<b>Scope 3 total</b>	<b>169.0</b>	<b>150.2</b>	<b>155.8</b>	<b>tonnes of CO<sub>2</sub>-e</b>
<b>GHG emissions in total (Scope 1, 2 and 3)</b>	<b>3,670.1</b>	<b>12,901.9</b>	<b>19,473.0</b>	<b>tonnes of CO<sub>2</sub>-e</b>
<b>GHG intensity (Scope 1, 2 and 3, by floor area)</b>	<b>6.2</b>	<b>22.0</b>	<b>41.8</b>	<b>tonnes of CO<sub>2</sub>-e/thousand ft<sup>2</sup></b>

<sup>7</sup> Slight discrepancies may exist between the sum of the individual columns and the totals due to rounding.

<sup>8</sup> Figures of previous years are updated to align with the extended scope of disclosure of environmental indicators in 2023.

<sup>9</sup> From unleaded petrol and diesel consumed by vehicles, and diesel consumed by generators.

<sup>10</sup> From diesel consumed by generators in construction sites only.

<sup>11</sup> 99.9% of the fugitive emissions come from our hydraulic pressure tests for clients' pressurised cylinders of fire suppression systems in Hong Kong. Due to technical constraints in the industry, a certain amount of fire suppression agent emitted during hydraulic pressure testing.

<sup>12</sup> From welding in the manufacturing plant in Nanjing. Other business operations do not involve welding processes.

<sup>13</sup> Include cooling from the facility management companies for centralised air conditioning systems in Hong Kong only.

<sup>14</sup> Not all scope 3 activities along our value chain are covered.

<sup>15</sup> For Hong Kong and the United Kingdom operations only.

<sup>16</sup> For Hong Kong operations only.



Environmental Key Performance Indicators	2023	2022	2021	Unit
<b>Generation of Hazardous and Non-hazardous Waste</b>				
<b>Generation of Hazardous Waste</b>				
E-waste <sup>17</sup>	10.0	9.9	8.0	tonnes
Construction waste <sup>18</sup>	2,101.6	0.0	0.0	tonnes
Waste cartridge	0.2	0.2	0.1	tonnes
Waste toner bottles	0.06	0.16	0.01	tonnes
Waste filter cotton <sup>19</sup>	0.003	0.106	0.077	tonnes
Waste paint bucket <sup>20</sup>	1.6	3.2	0.7	tonnes
Waste activated carbon <sup>21</sup>	5.1	4.0	0.0	tonnes
Waste paint residue <sup>22</sup>	3.0	3.5	0.7	tonnes
Waste motor oil and oil packaging drums <sup>23</sup>	1.0	0.2	0.7	tonnes
<b>Total hazardous waste</b>	<b>2,122.6</b>	<b>21.2</b>	<b>10.2</b>	<b>tonnes</b>
<b>Hazardous waste intensity (By floor area)</b>	<b>3.599</b>	<b>0.036</b>	<b>0.022</b>	<b>tonnes/thousand ft<sup>2</sup></b>
<b>Generation of Non-hazardous Waste</b>				
<b>By recycling</b>				
Metal	0.9	1.1	1.7	tonnes
Paper	11.1	8.4	10.3	tonnes
Plastic	0.2	0.1	0.3	tonnes
Dry mixed waste <sup>24</sup>	1.4	0.0	0.0	tonnes
<b>By disposal</b>				
General waste	39.9	38.1	38.0	tonnes
<b>By anaerobic digestion</b>				
Food waste <sup>25</sup>	0.5	0.0	0.0	tonnes
<b>Total non-hazardous waste</b>	<b>53.9</b>	<b>47.6</b>	<b>50.4</b>	<b>tonnes</b>
<b>Non-hazardous waste intensity (By floor area)</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>tonnes/thousand ft<sup>2</sup></b>

<sup>17</sup> Based on the estimated weight of personal computers, notebooks, liquid crystal displays, printers, servers, switch and network-attached storage devices, hard disk drives, and batteries for uninterruptible power supply, which were donated to charitable organisations.

<sup>18</sup> From the general refuse, broken concrete, mixed waste, and inert waste generated in construction sites.

<sup>19</sup> From the waste filter cotton generated by the manufacturing plant in Nanjing. Other business operations do not involve generation of such waste.

<sup>20</sup> From the waste paint bucket generated by the manufacturing plant in Nanjing. Other business operations do not involve generation of such waste.

<sup>21</sup> From the waste activated carbon generated by the manufacturing plant in Nanjing. Other business operations do not involve generation of such waste.

<sup>22</sup> From the waste paint residue generated by the manufacturing plant in Nanjing. Other business operations do not involve generation of such waste.

<sup>23</sup> From the waste motor oil and oil packaging drums generated by the manufacturing plant in Nanjing and in provision of building services and lifts and escalators maintenance services in Hong Kong. Other business operations do not involve generation of such waste.

<sup>24</sup> From the dry mixed waste generated by UK operations.

<sup>25</sup> From the food waste generated by UK operations.



Environmental Key Performance Indicators	2023	2022	2021	Unit
<b>Energy Consumption</b>				
Petrol	1,321.7	1,272.2	1,447.2	MWh
Diesel	642.6	602.6	704.5	MWh
Electricity	2,309.8	2,874.1	2,274.6	MWh
Cooling <sup>26</sup>	709.4	723.1	614.3	MWh
Acetylene <sup>27</sup>	1.2	3.0	2.3	MWh
<b>Total energy consumption</b>	<b>4,984.8</b>	<b>5,475.0</b>	<b>5,043.0</b>	<b>MWh</b>
<b>Energy intensity (By floor area)</b>	<b>8.5</b>	<b>9.3</b>	<b>10.8</b>	<b>MWh/thousand ft<sup>2</sup></b>
<b>Water Consumption</b>				
<b>Total water consumption</b>	<b>14,159.2</b>	<b>11,548.8</b>	<b>8,516.1</b>	<b>m<sup>3</sup></b>
<b>Water intensity (By floor area)</b>	<b>24.0</b>	<b>19.7</b>	<b>18.3</b>	<b>m<sup>3</sup>/thousand ft<sup>2</sup></b>
<b>Paper Consumption<sup>28</sup></b>				
<b>Total paper consumption</b>	<b>34.2</b>	<b>38.8</b>	<b>41.9</b>	<b>tonnes</b>
<b>Packaging Material Consumption<sup>29</sup></b>				
Poplar plywood	75.1	60.7	116.9	tonnes
Heat shrink film	3.4	3.4	4.5	tonnes
Stretch film	0.2	0.3	0.3	tonnes
Bubble wrap	0.1	0.2	0.6	tonnes
<b>Total packaging material consumption</b>	<b>78.8</b>	<b>64.5</b>	<b>122.4</b>	<b>tonnes</b>
<b>Packaging material intensity (By million of sales revenue<sup>30</sup>)</b>	<b>1.1</b>	<b>1.0</b>	<b>1.4</b>	<b>tonnes/HK\$ million</b>

<sup>26</sup> From cooling delivered by the facility management companies for centralised air conditioning systems in Hong Kong.

<sup>27</sup> From welding in the manufacturing plant in Nanjing.

<sup>28</sup> Data from procurement records.

<sup>29</sup> Packaging materials used at the manufacturing plant in Nanjing only. Other business operations do not involve the use of packaging materials. The 2021 and 2022 data have been updated to more precisely reflect the actual packaging material consumption.

<sup>30</sup> Sales revenue of the lifts and escalators segment only, covering both external transactions and inter-company transactions.



## Social Key Performance Indicators<sup>31</sup>

Social Key Performance Indicators								
Employment								
	2023		2022		2021		2020	
	Number	Distribution (%)						
<b>Workforce Profile at the end of the Reporting Period</b>	<b>3,010</b>	<b>N/A</b>	<b>2,701</b>	<b>N/A</b>	<b>2,770</b>	<b>N/A</b>	<b>2,686</b>	<b>N/A</b>
<b>By gender</b>								
Male	2,515	83.6%	2,234	82.7%	2,305	83.2%	2,240	83.4%
Female	495	16.4%	467	17.3%	465	16.8%	446	16.6%
<b>By contract type</b>								
Permanent	2,378	79.0%	2,273	84.2%	2,231	80.5%	2,193	81.7%
Contract	101	3.4%	84	3.1%	108	3.9%	90	3.4%
Term contract	268	8.9%	205	7.6%	246	8.9%	232	8.6%
Part time	79	2.6%	53	2.0%	74	2.7%	68	2.5%
Temporary	184	6.1%	86	3.2%	111	4.0%	103	3.8%
<b>By age</b>								
Under 30 years old	747	24.8%	704	26.1%	818	29.5%	736	27.4%
30-50 years old	1,606	53.4%	1,459	54.0%	1,381	49.9%	1,431	53.3%
Over 50 years old	657	21.8%	538	19.9%	571	20.6%	519	19.3%
<b>By grade</b>								
Management	9	0.3%	7	0.3%	6	0.2%	6	0.2%
Senior executive	40	1.3%	38	1.4%	30	1.1%	27	1.0%
Executive	317	10.5%	276	10.2%	269	9.7%	244	9.1%
Professional	961	31.9%	916	33.9%	876	31.6%	840	31.3%
General staff	1,683	55.9%	1,464	54.2%	1,589	57.4%	1,569	58.4%
<b>By location</b>								
Hong Kong	2,570	85.4%	2,340	86.6%	2,458	88.7%	2,390	89.0%
Macau	28	0.9%	31	1.1%	26	0.9%	24	0.9%
Mainland China	295	9.8%	325	12.0%	282	10.2%	272	10.1%
United Kingdom	117	3.9%	5	0.2%	4	0.1%	N/A	N/A

<sup>31</sup> Unless specified otherwise, workforce figures include permanent, contract, term-contract, part-time, and temporary staff working in Hong Kong, Macau, Mainland China and the United Kingdom.



Social Key Performance Indicators								
Employment								
	2023		2022		2021		2020	
	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
<b>New Employee<sup>32</sup></b>	<b>1,047</b>	<b>36.7%</b>	<b>660</b>	<b>24.1%</b>	<b>685</b>	<b>25.1%</b>	<b>681</b>	<b>26.0%</b>
<b>By gender</b>								
Male	899	37.9%	552	24.3%	558	24.6%	575	26.4%
Female	148	30.8%	108	23.2%	127	27.9%	106	24.1%
<b>By contract type</b>								
Permanent	564	24.3%	467	20.7%	425	19.2%	351	10.9%
Contract	60	64.9%	30	31.3%	57	57.6%	53	63.9%
Term contract	101	42.7%	111	49.2%	26	10.9%	59	26.5%
Part time	40	60.6%	15	23.6%	42	59.2%	32	50.4%
Temporary	282	208.9%	37	37.6%	135	126.2%	186	194.8%
<b>By age</b>								
Under 30 years old	466	64.2%	274	36.0%	381	49.0%	401	55.7%
30-50 years old	390	25.4%	288	20.3%	228	16.2%	202	14.4%
Over 50 years old	191	32.0%	98	17.7%	76	13.9%	78	15.6%
<b>By grade</b>								
Management	2	25.0%	1	15.4%	0	0.0%	0	0.0%
Senior executive	4	10.3%	3	8.8%	1	3.5%	3	11.5%
Executive	40	13.5%	25	9.2%	23	9.0%	14	5.8%
Professional	197	21.0%	184	20.5%	148	17.2%	114	13.8%
General staff	804	51.1%	447	29.3%	513	32.5%	550	36.2%
<b>By location</b>								
Hong Kong	974	39.7%	576	24.0%	610	25.2%	608	26.2%
Macau	2	6.8%	6	21.1%	4	16.0%	7	29.8%
Mainland China	63	20.3%	77	25.4%	68	24.5%	66	24.4%
United Kingdom	8	13.1%	1	22.2%	3	75.0%	N/A	N/A

<sup>32</sup> The Group completed two acquisitions in the United Kingdom in 2023. The employees absorbed by the Group as part of the acquisitions were not regarded as new employees. New employee rate = (Number of employees who joined the Group during the Reporting Period/Average number of employees of the Reporting Period) x 100%



Social Key Performance Indicators								
Employment								
	2023		2022		2021		2020	
	Number	Rate (%)						
<b>Employee Turnover<sup>33</sup></b>	<b>568</b>	<b>19.9%</b>	<b>560</b>	<b>20.5%</b>	<b>426</b>	<b>19.3%</b>	<b>288</b>	<b>13.4%</b>
<b>By gender</b>								
Male	455	19.2%	466	20.5%	343	18.8%	241	13.5%
Female	113	23.5%	94	20.2%	83	21.6%	47	12.7%
<b>By age</b>								
Under 30 years old	207	28.5%	215	28.3%	207	44.2%	119	18.3%
30-50 years old	294	19.2%	292	20.6%	190	13.2%	146	12.0%
Over 50 years old	67	11.2%	53	9.6%	29	9.5%	23	8.0%
<b>By grade</b>								
Management	1	12.5%	0	0.0%	0	0.0%	2	33.3%
Senior executive	7	17.9%	1	2.9%	0	0.0%	1	3.8%
Executive	41	13.8%	40	14.7%	31	12.2%	25	10.5%
Professional	241	25.7%	239	26.7%	173	20.5%	114	14.0%
General staff	278	17.7%	280	18.3%	222	20.6%	146	13.7%
<b>By location</b>								
Hong Kong	466	19.0%	503	21.0%	383	20.1%	219	11.8%
Macau	3	10.2%	2	7.0%	0	0.0%	3	13.3%
Mainland China	94	30.3%	55	18.1%	43	26.4%	66	24.4%
United Kingdom	5	8.2%	0	0.0%	0	0.0%	N/A	N/A

<sup>33</sup> Employee turnover rate = (Number of permanent employees who left the Group voluntarily during the Reporting Period / Average number of permanent employees in the Reporting Period) x 100%



Social Key Performance Indicators								
Parental Leave <sup>34</sup>								
	2023		2022		2021		2020	
	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
<b>Employees Entitled to Parental Leave<sup>35</sup></b>	<b>2,899</b>	<b>100.0%</b>	<b>2,701</b>	<b>100.0%</b>	<b>2,669</b>	<b>96.4%</b>	<b>2,571</b>	<b>95.7%</b>
<b>By gender</b>								
Male	2,423	100.0%	2,234	100.0%	2,214	96.1%	2,135	95.3%
Female	476	100.0%	467	100.0%	455	97.8%	436	97.8%
<b>Employees that Took Parental Leave<sup>36</sup></b>	<b>41</b>	<b>1.4%</b>	<b>50</b>	<b>1.9%</b>	<b>34</b>	<b>1.3%</b>	<b>40</b>	<b>1.6%</b>
<b>By gender</b>								
Male	34	1.4%	43	1.9%	19	0.9%	37	1.7%
Female	7	1.5%	7	1.5%	15	3.3%	3	0.7%
<b>Return to Work after Parental Leave<sup>37</sup></b>	<b>41</b>	<b>100.0%</b>	<b>48</b>	<b>98.0%</b>	<b>33</b>	<b>97.1%</b>	<b>40</b>	<b>100.0%</b>
<b>By gender</b>								
Male	34	100.0%	41	97.6%	19	100.0%	37	100.0%
Female	7	100.0%	7	100.0%	14	93.3%	3	100.0%
<b>Retention of Employees that Took Parental Leave<sup>38</sup></b>	<b>29</b>	<b>60.4%</b>	<b>24</b>	<b>72.7%</b>	<b>33</b>	<b>82.5%</b>	<b>51</b>	<b>91.1%</b>
<b>By gender</b>								
Male	24	58.5%	14	73.7%	31	83.8%	47	92.2%
Female	5	71.4%	10	71.4%	2	66.7%	4	80.0%

<sup>34</sup> Parental leave refers to both paternity and maternity leave. The figures reflect all core business operations of the Group in which the Group had more than 50% equity interest throughout the Year, excluding the two acquisitions in the United Kingdom in 2023.

<sup>35</sup> Rate of employees entitled to parental leave = (Number of employees entitled to parental leave as of the end of the Reporting Period/Number of employees as of the end of the Reporting Period) x 100%

<sup>36</sup> Rate of employees that took parental leave = (Number of employees that took parental leave during the Reporting Period/Number of employees entitled to parental leave as of the end of the Reporting Period) x 100%

<sup>37</sup> Return to work rate = (Number of employees that returned to work after parental leave during the Reporting Period/Number of employees due to return to work after parental leave during the Reporting Period) x 100%

<sup>38</sup> Retention rate of employees that took parental leave = (Number of employees working for the Group for 12 months after returning to work from parental leave/Number of employees returning from parental leave in the prior Reporting Period) x 100%



## Social Key Performance Indicators

Health and Safety								
	2023		2022		2021		2020	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Fatality (employees and subcontractors' workers)	0	0.0	0	0.0	0	0.0	0	0.0
Occupational Disease (employees and subcontractors' workers)	0	0.0	0	0.0	0	0.0	0	0.0
Industrial Accident <sup>39</sup>	8	1.5	8	1.5	9	1.8	12	2.8
<b>Employees<sup>40</sup></b>								
Hong Kong	2	0.8	3	1.3	0	0.0	0	0.0
Macau	0	0.0	0	0.0	0	0.0	0	0.0
Mainland China	0	0.0	0	0.0	0	0.0	0	0.0
United Kingdom	0	0.0	0	0.0	0	0.0	N/A	N/A
<b>Subcontractors' workers<sup>41</sup></b>								
Hong Kong	6	3.6	4	2.4	9	5.2	7	6.6
Macau	0	0.0	1	3.5	0	0.0	4	9.5
Mainland China	0	0.0	0	0.0	0	0.0	1	6.9
United Kingdom	0	0.0	0	0.0	0	0.0	N/A	N/A

<sup>39</sup> A reportable industrial accident is defined as an incident resulting in 3 days or more of sick leave. Industrial accident rate per 1,000 employees and subcontractors' workers = (Number of reportable industrial accidents sustained by an employee or a subcontractor's worker/Average number of employees and subcontractor's workers in the Reporting Period) x 1,000

<sup>40</sup> Industrial accident rate per 1,000 employees = (Number of reportable industrial accidents sustained by an employee/Average number of employees in the Reporting Period) x 1,000

<sup>41</sup> Industrial accident rate per 1,000 subcontractors' workers = (Number of reportable industrial accidents sustained by a subcontractor's worker/Average number of subcontractors' workers of the Reporting Period) x 1,000



Social Key Performance Indicators								
Health and Safety								
	2023		2022		2021		2020	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
<b>Lost Days due to Industrial Accident<sup>42</sup></b>	<b>676</b>		<b>900</b>		<b>980</b>		<b>1,457</b>	
<b>Employees</b>								
Hong Kong	90		100		0		0	
Macau	0		0		0		0	
Mainland China	0		0		0		0	
United Kingdom	0		0		0		N/A	
<b>Subcontractors' workers</b>								
Hong Kong	586		545		980		1,019	
Macau	0		255		0		414	
Mainland China	0		0		0		24	
United Kingdom	0		0		0		N/A	
<b>Non-industrial Accident (employees only)<sup>43</sup></b>	<b>1</b>	<b>0.4</b>	<b>2</b>	<b>0.7</b>	<b>0</b>	<b>0.0</b>	<b>1</b>	<b>0.4</b>
<b>By location</b>								
Hong Kong	1	0.4	2	0.8	0	0.0	1	0.4
Macau	0	0.0	0	0.0	0	0.0	0	0.0
Mainland China	0	0.0	0	0.0	0	0.0	0	0.0
United Kingdom	0	0.0	0	0.0	0	0.0	N/A	N/A
<b>Lost Days due to Non-industrial Accident (employees only)<sup>42</sup></b>	<b>260</b>		<b>404</b>		<b>0</b>		<b>8</b>	
<b>By location</b>								
Hong Kong	260		404		0		8	
Macau	0		0		0		0	
Mainland China	0		0		0		0	
United Kingdom	0		0		0		N/A	

<sup>42</sup> Number of days of absence from work due to accidents occurring in the Reporting Period.

<sup>43</sup> A reportable non-industrial accident is defined as an incident resulting in 3 or more days of sick leave. Non-industrial accident rate per 1,000 employees = (Number of reportable non-industrial accidents sustained by an employee/Average number of employees in the Reporting Period) x 1,000



Social Key Performance Indicators								
Training and Development								
	2023		2022		2021		2020	
	Number	Percentage (%)						
<b>Employees Trained<sup>44</sup></b>	<b>2,210</b>	<b>73.4%</b>	<b>2,084</b>	<b>77.2%</b>	<b>1,750</b>	<b>63.2%</b>	<b>1,810</b>	<b>67.4%</b>
<b>By gender</b>								
Male	1,810	72.0%	1,687	75.5%	1,397	60.6%	1,481	66.1%
Female	400	80.8%	397	85.0%	353	75.9%	329	73.8%
<b>By contract type</b>								
Permanent	2,136	89.8%	2,032	89.4%	1,674	75.0%	1,681	76.7%
Contract	23	22.8%	24	28.6%	26	24.1%	24	26.7%
Term contract	44	16.4%	0	0.0%	42	17.1%	89	38.4%
Part time	6	7.6%	6	11.3%	3	4.1%	4	5.9%
Temporary	1	0.5%	22	25.6%	5	4.5%	12	11.7%
<b>By grade</b>								
Management	7	77.8%	7	100.0%	6	100.0%	5	83.3%
Senior executive	33	82.5%	32	84.2%	23	76.7%	26	96.3%
Executive	263	83.0%	242	87.7%	243	90.3%	227	93.0%
Professional	739	76.9%	736	80.3%	682	77.9%	618	73.6%
General staff	863	51.3%	829	56.6%	796	50.1%	934	59.5%
<b>By location</b>								
Hong Kong	1,905	74.1%	1,846	78.9%	1,539	62.6%	1,668	69.8%
Macau	25	89.3%	12	38.7%	12	46.2%	13	54.2%
Mainland China	276	93.6%	221	68.0%	195	69.1%	129	47.4%
United Kingdom	4	3.4%	5	100.0%	4	100.0%	N/A	N/A

<sup>44</sup> Percentage of employees trained = (Number of employees that have completed their training sessions and who remain employed with the Group as of the end of the Reporting Period/Number of employees as of at the end of the Reporting Period) x 100%



<b>Social Key Performance Indicators</b>				
<b>Training and Development</b>				
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>
	<b>Hour</b>	<b>Hour</b>	<b>Hour</b>	<b>Hour</b>
<b>Total Training Hours<sup>45</sup></b>	<b>46,727.3</b>	<b>67,062.0</b>	<b>51,453.9</b>	<b>30,950.0</b>
<b>Average Training Hours<sup>46</sup></b>	<b>14.2</b>	<b>23.0</b>	<b>17.5</b>	<b>11.0</b>
<b>By gender</b>				
Male	14.4	23.5	16.8	10.7
Female	13.2	20.7	20.8	12.1
<b>By contract type</b>				
Permanent	17.8	27.3	21.5	12.9
Contract	1.6	2.2	3.1	1.9
Term contract	1.1	0.0	1.0	3.9
Part time	0.8	0.3	0.1	0.2
Temporary	0.1	0.2	0.1	0.4
<b>By grade</b>				
Management	8.6	12.3	26.0	16.6
Senior executive	17.4	36.4	30.0	24.2
Executive	15.3	25.3	21.7	24.1
Professional	15.5	24.9	20.6	13.6
General staff	13.3	21.1	14.8	7.3
<b>By location</b>				
Hong Kong	16.1	24.5	18.2	11.8
Macau	6.9	2.7	8.1	5.4
Mainland China	3.3	14.5	12.1	4.1
United Kingdom	2.1	24.0	32.0	N/A

<sup>45</sup> Total number of hours of training received by employees during the Reporting Period (including employees who have left the Group during the Reporting Period).

<sup>46</sup> Average training hours = Number of hours of training received by employees who remain employed with the Group during the Reporting Period/Number of employees as of the end of the Reporting Period



Social Key Performance Indicators								
Responsible Operations								
	2023		2022		2021		2020	
	Number of subcontractors	Number of suppliers						
<b>Subcontractors and Suppliers</b>	<b>1,008</b>	<b>2,209</b>	<b>925</b>	<b>2,084</b>	<b>898</b>	<b>1,991</b>	<b>863</b>	<b>1,887</b>
By location								
Americas	2	32	2	32	1	33	1	32
Asia-Pacific excluding Hong Kong and Mainland China	24	36	24	35	24	35	22	31
Europe & Middle East	68	159	1	83	1	72	1	61
Hong Kong	802	1,070	814	1,080	812	1,083	798	1,072
Mainland China	112	912	84	854	60	768	41	691
	Number		Number		Number		Number	
Product Recalls due to Health and Safety Issues	0		0		0		0	
Customer Complaints	47		74		86		96	
Community Investment								
	2023		2022		2021		2020	
	HK\$		HK\$		HK\$		HK\$	
Donation	459,000		705,000		746,000		415,000	

# CONTENT INDEX FOR HKEX ESG REPORTING GUIDE

Aspects, General Disclosure and KPIs	Description	Chapter/Section	Page Number/Remarks
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Governance Structure	(i) A disclosure of the board’s oversight of ESG issues.	Our Approach to Sustainability	8-29
	(ii) The board’s ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer’s businesses).		
	(iii) How the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer’s businesses.		
Reporting Principles	Materiality: The ESG report should disclose: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer’s stakeholder engagement.	Reporting Standards	103
	Quantitative: Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed.		
	Consistency: The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.		



<b>Aspects, General Disclosure and KPIs</b>			
<b>Aspects, General Disclosure and KPIs</b>	<b>Description</b>	<b>Chapter/Section</b>	<b>Page Number/Remarks</b>
Reporting Boundary	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report.	Reporting Boundary	103
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A1.1	The types of emissions and respective emissions data.	Key Statistics	105-116
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions and intensity.		
A1.3	Total hazardous waste produced and intensity.		
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A1.5	Description of emission target(s) set and steps taken to achieve them.	Corporate Sustainability Strategy, Decarbonising Our Operations	10-15, 30-39
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.		



<b>Aspects, General Disclosure and KPIs</b>			
<b>Aspects, General Disclosure and KPIs</b>	<b>Description</b>	<b>Chapter/Section</b>	<b>Page Number/Remarks</b>
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A2.2	Water consumption in total and intensity.		
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Corporate Sustainability Strategy, Decarbonising Our Operations	10-15, 30-39; In 2023, the Group did not encounter problem in sourcing water.
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.		
A2.5	Total packaging material used for finished products and per unit produced.	Key Statistics	105-116
<b>A3 The Environment and Natural Resources</b>			
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Decarbonising Our Operations	30-39; In 2023, the Group had no significant impacts on the environment and natural resources in its operations.
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.		



Aspects, General Disclosure and KPIs	Description	Chapter/Section	Page Number/Remarks
<b>A4 Climate Change</b>			
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A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.		
<b>B1 Employment</b>			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Talent Management, Legal Compliance	76-80, 101-102
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Aspects, General Disclosure and KPIs	Description	Chapter/Section	Page Number/Remarks
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Aspects, General Disclosure and KPIs	Description	Chapter/Section	Page Number/Remarks
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Aspects, General Disclosure and KPIs	Description	Chapter/Section	Page Number/Remarks
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<b>B7 Anti-corruption</b>			
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B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Legal Compliance	101-102; No concluded legal cases regarding corrupt practices brought against us or our employees in 2023.
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	Business Ethics and Integrity	98-100
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<b>B8 Community Investment</b>			
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Community	70-73
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ATAL Website



ANLEV Website



ATAL LinkedIn



ANLEV LinkedIn



ATAL WeChat



ATAL YouTube





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