



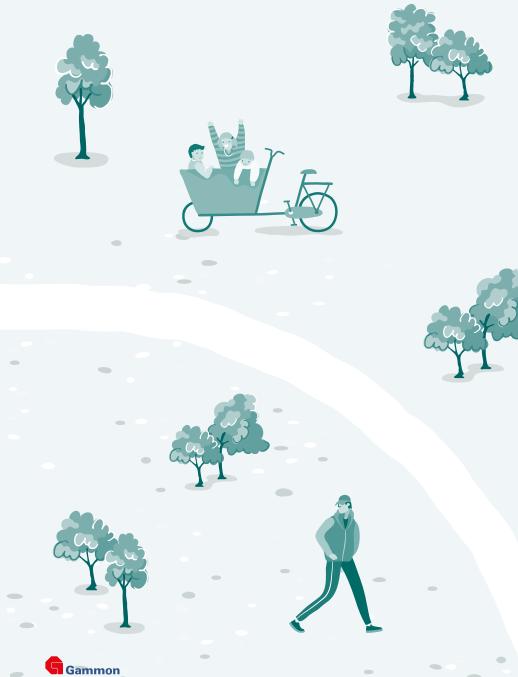
Introduction & Highlights

Sustainability Strategy

Climate & Nature

Resources & Circularity

People & Wellness





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## Introduction

Welcome to the 22<sup>nd</sup> edition of our annual sustainability report! We are pleased to share with you the highlights of our activities in 2024, front and centre of which is the launch of our new sustainability strategy, United Ambitions. As our carbon reduction commitments to the Science Based Targets initiative (SBTi) sit at the heart of our strategy, we provide updates on some of the initiatives we are implementing to meet our promises. These include recent achievements in modular construction, the use of sensors to track plant and equipment, our expanding circularity initiatives, and our use of artificial intelligence. We also introduce a new key focus area - nature and biodiversity - and share our first steps towards contributing to a more naturepositive future.

We continued our focus on diversity, equity and inclusion (DEI) during the year which included a successful event for employees and industry colleagues where we explored how issues such as race, gender and socioeconomic status interact with technology. Attendees even learned some sign language! Additionally, you can read how our employee-led networks are promoting gender equality and inclusivity, in addition to fostering wellrounded and versatile professionals.

Our carbon reduction commitments to the SBTi sit at the heart of our strategy

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We also shine a light on some of the many industry awards we were honoured to receive, hear directly from colleagues at the frontline on issues close to their hearts, and provide updates on how we are providing upskilling opportunities for those in our employ, as well as how we look after their mental and physical wellbeing. We hope you enjoy reading about these stories and the many others we believe demonstrate our commitment to building more sustainably and providing a safe and inclusive environment in which all members of Team Gammon thrive.





Attendees at our DEI event learn some sign language

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## Structure and alignment of the report

GRI 2-3, 2-5

After the initial sections on the company, projects and highlights, the report is largely organised under the three focus areas of our sustainability strategy, United Ambitions ( I view here). Governance information and management approaches for the operation of the business remain largely unchanged and are presented in a separate report 2024 Management Approach. The appendices, found in a separate report 2024 Data and Appendices, include data disclosures (Appendix A) and greenhouse gas inventory Verification Opinion (Appendix B). The report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards and verified against the latest GRI Standards from the Global Sustainability Standards Board by an independent third-party verifier. A comprehensive International Standard on Sustainability Assurance (ISSA) 5000, is early adopted to substantiate the quality of our sustainability assurance engagement. The Assurance Statement for the ISSA and GRI standards is shown in Appendix C. The GRI Content Index (Appendix D) references the required general and material topic disclosures and locations where they can be found in the report. Appendices E, F, G and H contain the materiality assessment result as well as a list of awards, green building projects and memberships of associations and industry bodies, respectively. These reports are available online only through our website at # www.gammonconstruction.com/en/sustainabilityreport.php. Should you wish to provide any comments on the report or suggestions for us to pursue, please drop us an email at # sustainability@ gammonconstruction.com. We welcome your views.

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# Message from the Chief Executive

GRI 2-22

One of Gammon's milestone events in 2024 was the launch of our new sustainability strategy, 'United Ambitions', aptly named to underscore the power of collaboration with our people, customers, architects, consultants, suppliers and the broader industry to turn our vision into a reality. The targets and actions of United Ambitions now fully align with our ambitious Science Based Targets initiative (SBTi) carbon reduction commitments. We have also expanded our priorities to include a pledge to accelerate efforts to halt nature and biodiversity loss, a critical issue in our industry as more projects arise on greenfield sites in Hong Kong's Northern Metropolis.

Our SBTi commitments – to reduce absolute greenhouse gas emissions by 55% for Scope 1 and 2, and 33% for Scope 3, by 2033 – set a high benchmark demanding ongoing innovation and continuous performance improvement. Despite a 17% increase in turnover from 2023, we managed in 2024 to achieve a 10% reduction in our Scope 1 and 2 absolute emissions, and a decrease of 17% for Scope 3. Despite the solid progress, we must accelerate the pace of change, particularly in Scope 3 reductions, which pose our greatest challenge.

We continue to seek innovative products that support our carbon reduction ambitions and those of the wider industry. Throughout the year, we conducted several trials, notably of B100 pure biodiesel. I'm thrilled to see technology we previously incubated in Hong Kong now achieving global success, particularly a battery energy storage device that is now utilised on hundreds of construction projects in and outside Hong Kong.



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Sustainability remains very much at the forefront of Gammon's business strategy and our ambitions.

*Kevin O'Brien,* Chief Executive of Gammon Construction Limited

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Our Project Agile initiative, a multiyear business transformation drive to enhance efficiency and productivity, is also proving beneficial not only for business but also for carbon reduction. We leverage digital technology to optimise plant usage, improving productivity and reducing fuel usage. In addition, we've digitised our entire concrete management system, enhancing operational efficiencies and ultimately reducing the number of trucks in use. We are also accelerating the transition of our plant fleet to electric, trialling further EV equipment, and globally sourcing new technology. With Hong Kong's largest plant fleet, it's important we stay at the forefront of innovation and constantly seek new solutions that guide us to net zero.

Achievements specific to Scope 3 reductions include the procurement of lower carbon steel, as well as the production of concrete mixes with a lower carbon footprint. We also contributed to creating a technical procurement guideline on low embodied-carbon construction to promote the use of materials with lower emissions.



'Awakening the spirit of the lion' during a Chinese New Year lion dance in our head office

We closed the year without loss of life on any of our projects across the Group. While this is always our objective, it's important we don't view it as simply meeting a target. More importantly, it proves we have the capability to work safely and challenge the norm in our industry that view some risks as "expected and accepted". It is crucial we remain fatality-free. Belief is a vital factor on the road to zero harm — belief that we can achieve our goal through effective risk management and a commitment to improvement, and ensure everyone on our sites returns home safely each day.

We held a number of diversity, equity and inclusion (DEI) activities throughout the year, the most noteworthy of which was an insightful event on how technology reshapes DEI which was well attended by colleagues and industry peers. We still have work to do to meet our gender diversity target. In particular, we made changes to our graduate recruitment strategy to address the imbalance from the ground up. We continue to promote Gammon through outreach campaigns at universities and schools and by participating in external programmes such as those organised by The Women's Foundation. I'm proud that, despite the challenging economic climate, we hired a full complement of graduates in 2024, representing a crucial investment in our future.



Resources & Circularity People & Wellness



Arriving at our first Spring Dinner in five years – themed the Gammon Olympics – accompanied by the executive team



Gammon's leadership team, DEI Committee and guest speakers learning sign language at the DEI event

Despite the headwinds from the dynamic socio-economic environment, our prudent risk management ensured we finished 2024 in a strong position. I'm also pleased we increased our involvement in public housing projects, as a viable construction business should meet both market and social needs. In Singapore, our business had a remarkable year, ending with its strongest ever order book and a more balanced portfolio of projects and customers. As the contents of our report will make clear, sustainability remains at the heart of Gammon's business strategy and our ambitions. However, I firmly believe that strategy is only as strong as the culture behind it, and I'm very proud that at Gammon, we have a team genuinely committed to doing right for the world, with the curiosity and determination to seek out new ways of working. It gives me immense confidence that no matter how challenging the landscape, we can drive real, lasting and positive changes in our industry. I hope you enjoy reading about some of Team Gammon's many achievements during 2024 in this report.

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# About Us

### Organisation and report coverage GRI 2-1, 2-3

This annual sustainability report covers the operations of Gammon Construction Limited, its subsidiaries and associated companies (hereinafter referred to as Gammon) in Hong Kong and Macau, Mainland China and Singapore for the 2024 calendar year. The previous report for 2023 was issued in the second quarter of 2024.

# Organisational profile

The principal activities of Gammon are civil engineering, foundation works, buildings, interiors and facade construction, electrical and mechanical installation, manufacturing and supply of fabricated steel, manufacturing and selling concrete, and plant and equipment development and operation. Our business is divided into different divisions and departments, as is summarised in the illustration.

Our clients include the following:

- Government works departments and other government authorities
- Cultural, sports and educational facilities
- Commercial, residential and industrial property developers
- Transport and utilities providers
- Property and other built asset owners
- Other contractors

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## Scale of the business and operations overview

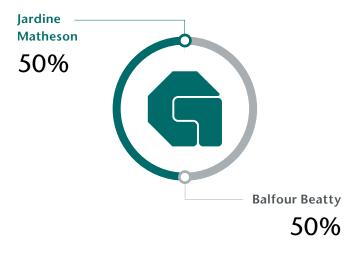
### GRI 2-1, 2-6, 2-7

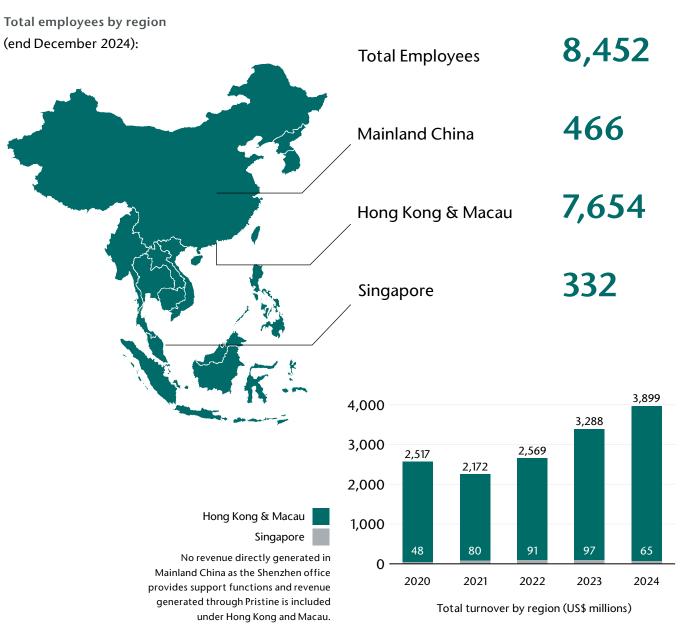
In 2024, we had 101 active projects across the business. The group turnover and workforce data broken down by region is presented to the right.

We describe major project completions and new projects during 2024 in 'Project spotlight and business outlook'. Further details of our operations, company information and performance can be found in the key performance indicators (KPI) table (Appendix A) as well as on our website ( www.gammonconstruction.com). Quantifying our products or services is complex due to the varied and integrated nature of our business, however our current listing of all ongoing major projects is available on request.

Ownership of the business is

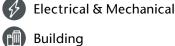
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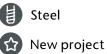
# **Project Spotlight and Business Outlook**

GRI 2-6

















HUNG SHUI KIU/HA TSUEN NEW DEVELOPMENT AREA

We were jointly awarded a contract for site clearance and engineering infrastructure works for the Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development.



### ONE CAUSEWAY BAY

The first building in Hong Kong to receive Buildings Department approval to use concrete sensors as a substitute for the traditional rebound hammer test.



### EQUINIX HK6-1 DATA CENTRE

We won the main contract to fit out a proposed data center (HK6-1). This includes E&M, architectural finishes and alteration and addition works to an existing 17-storey building with one basement level for parking.



TONKIN STREET REDEVELOPMENT PROJECT

We successfully completed the modular integrated construction (MiC) installation at our Tonkin Street Redevelopment project, installing all 726 units within 10 months.



YAU TONG KO CHIU ROAD RESIDENTIAL DEVELOPMENT

We installed the mega truss that allows us to build a residential development above an operational ventilation building, the first contractor in Hong Kong to do so.



**TERMINAL 2 EXPANSION** 

All roof modules were jacked to their final position and the covering was substantially completed.



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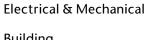
Foundations

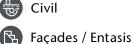
People & Wellness

















**PUBLIC HOUSING AT KAI TAK AREA 2B1** 

We finished the foundations and began superstructure work on our Hong Kong Housing Society project that will provide 1,800 subsidised sale flat units, along with a two-storey retail belt and comprehensive amenities.



**KWUN TONG COMPOSITE DEVELOPMENT (KTCD)** 

We completed visual mock-ups for the KTCD facade system. Our MiC approach includes colourful parasol skins that provide shade from the sunlight.

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CHANGI EAST DEPOT, SINGAPORE

We won the contract for the supply and installation of mechanical services for Changi East Depot in Singapore.

### **Completed projects**



Our CityU project is the largest MiC student hostel in the world when calculated by bed spaces



Six Pacific Place is a 24-storey Grade A commercial tower

Major projects concluded during the year included the City University student hostel at Whitehead, which is the largest student hostel in the world – in terms of bed spaces – to be constructed using MiC. We shaved almost a year off the original tender period with our MiC design, as well as by carrying

Gammon

out foundations in house. We also completed another significant MiC project, our Tonkin Street residential development. At 22 storeys above a six-storey podium, it was the tallest MiC building in Hong Kong at the time of construction and the first private residential development to deliver this approach in concrete. Additionally, we handed over the keys for Six Pacific Place, a Grade A 24-storey commercial tower on Queen's Road East.

### New project highlights

Our Singapore operations concluded 2024 with a record-breaking order book, securing projects that included an international school, a data telecommunications centre, a key bus depot, the supply, installation, testing and commissioning of critical mechanical systems for the Land Transport Authority, and alteration and addition works. In Hong Kong, in addition to the Hong Kong Housing Society development mentioned on <u>page 11</u>, we began work on three high-rise residential building contracts and a 29-storey commercial development. We were also pleased to be awarded three major refurbishment projects.

### Market outlook

While the residential and commercial private sectors are expected to remain cool for a few years, due in part to higher interest rates and macroeconomic uncertainity, the Hong Kong Government remains committed to investing in public housing and major transport and infrastructure projects, such as the Northern Metropolis Development Strategy, which represents a significant pipeline of work. In Singapore, the next decade will bring numerous opportunities in road, rail and port infrastructure while commercial, residential and community developments are in the pipeline. In Macau, casino firms have committed to invest around US\$15 billion in the coming decade, while investments in

transport and energy infrastructure projects coupled with government initiatives aimed at boosting economic growth are expected to further drive the construction industry.



# Performance at a Glance

**700+** in person and online participants at our Sustainability Conference



## Climate & Nature



**10%** reduction in absolute Scope 1 and 2 GHG emissions compared with 2023



**17%** reduction in absolute Scope 3 GHG emissions compared with 2023



**B100** pure biodiesel trial on one of our construction sites



**12%** less energy consumed than in 2023



**1**<sup>ST</sup> Taskforce on Nature-related Financial Disclosures (TNFD) pilot assessment in Gammon to identify and assess nature-related issues





**80%** of B5 biodiesel used on our projects came from a waste cooking oil circularity process



**92%** certified concrete mixes are Platinum or Gold for product carbon footprint



**94%** waste diversion rate





**40,260** people attended training at our Zero Harm Induction Centre



31,817 health screenings



**217** health talks and workshops



84% employment engagement score



71,293 hours of training

HK\$2M in donations



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People & Wellness

# **Award Highlights**

### **Testament to excellence**



We were thrilled to receive five prestigious awards at the Construction Industry Council (CIC) Outstanding Contractor Award 2024. Our Gammon Construction and Gammon E&M teams both excelled, securing major accolades that included the highest commendation – Outstanding Contractor Award – in both the major and specialist contractor categories.

Dubbed the 'Oscars of the construction industry', the awards are a prestigious triennial event that recognise contractors who demonstrate exceptional performance in areas including safety, innovation, sustainability, professionalism and integrity management.



Gammon Construction Limited – Major Contractor Category

- Outstanding Contractor Award
- Professionalisation Award
- Integrity Management Award



Gammon E&M Limited – Specialist Contractor Category

- Outstanding Contractor Award
- Corporate Innovation Award

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### **Project of the year**



We were delighted that our Sentosa Sensoryscape project in Singapore was named Project of the Year by the Building and Construction Authority (BCA) Awards 2024. The awards recognise projects that demonstrate commitment towards transformation.

Sentosa Sensoryscape is a half-kilometre ecological walk through a series of six sensory gardens – sight, touch, taste, smell, sound and 'imagination' – three of which are contained in concrete or steel vessel-like structures that were extremely complex to construct. The concrete Tactile Trellis, pictured, was considered the most challenging vessel to build, as it has no plastering, no painting and a smooth aggregate finish on each precast piece.

### **Commitment to digitilisation rewarded**



Our dedication to advancing our digitalisation journey was acknowledged when we received two prestigious accolades at the CIC Construction Digitalisation Award 2024. In the Organisation (Contractor) category, we secured Gold, while our One Causeway Bay Project earned Silver in the Project (Private) category. It was the second time our team had picked up Gold in the Organisation (Contractor) catetory, following on from our success in the 2021 Awards.

The awards underscore our commitment to promoting and adopting digital tools and workflows, driving innovation to enhance productivity, quality, sustainability and safety across our projects.

Climate & Nature

### Safety first a winning approach



Our prioritisation of safety was recognised by the Lighthouse Club at the International Design for Safety Awards 2024, where we received 10 prestigious honours.

Among these, our work on the automatic people mover and baggage handling system tunnels at Hong Kong International Airport stood out, earning four accolades including a distinguished Gold for its innovative double wall retaining system.

Our Lyric Theatre project at West Kowloon Cultural District also picked up Silver. Other Gammon contracts that received commendations included Central Kowloon Route – Kai Tak West, One Causeway Bay commercial building, Sentosa Sensoryscape in Singapore, the Intermodal Transfer Terminal, Bonded Vehicular Bridge and Associated Roads, and the residential development at Tonkin Street.

### Mark of distinction



We clinched a Distinction Award in the Large-sized Organization Category at the Hong Kong Sustainability Award 2024, organised by The Hong Kong Management Association. Giving us further cause for celebration was the knowledge we were the only contractor to receive such an honour, in any of the categories.

The accolade recognises our strong commitment to sustainability and our ongoing efforts to integrate circularity and sustainable practices into our operations. We are grateful for the passion and collaboration of our colleagues, customers and partners, without which we would not have been successful.

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# Sustainability Strategy

We value the power of teamwork and collaboration to help us reach our goals



### A new strategy

In 2023, we became the first contractor in Greater China to receive validation for its near-term sciencebased emissions reductions targets from the Science Based Targets initiative (SBTi). While we were very proud of this achievement, it underscored the necessity to revise our sustainability strategy, aligning our targets and actions with our ambitious SBTi commitments to reduce absolute greenhouse gas emissions by 55% for Scope 1 and 2, and 33% for Scope 3, by 2033.

In November 2024, we launched our new strategy — United Ambitions. You can learn more about it im here. The title of our strategy encapsulates our belief in collaborative success. Unity is key, stretching across our entire value chain — from our frontline supervisors through to customers, suppliers, architects and beyond. In the complex and dynamic construction industry, it takes all players in the ecosystem to achieve meaningful change.





Climate & Nature

**Key priorities** 

Decarbonisation,

climate adaptation

and resilience

Focus areas

This was why, when formulating the strategy, we started by identifying 20 sustainability topics based on current and future relevant standards and guidelines, market trends, risks and opportunities. We then engaged in a series of interviews, online surveys, meetings and focus groups with our internal and external stakeholders to discern what truly mattered to them considering our environmental and social impacts as well as financial impacts on us. This thorough process enabled us to pinpoint the focus areas most pertinent to our operations and value chain, ensuring they are incorporated into our new strategy.

United Ambitions is structured around three focus areas: Climate & Nature, Resources & Circularity, and People & Wellness. Under Climate & Nature, we are looking to drive transformative change, contributing to a net zero, nature positive and equitable future. Our Resources & Circularity priority includes promoting sustainable resource management through circular design and construction, waste minimisation, and responsible procurement. For People & Wellness, our goals revolve around cultivating a safe, inclusive and people-centric workforce.



CLIMATE & NATURE



RESOURCES & CIRCULARITY



& WELLNESS



Waste and

resources

circularity

Health, safety and wellness



**Sustainable** 

products and

services

Energy

efficiency and

transformation

Talent attraction, development and retention



Nature and biodiversity



Water efficiency and conservation



Diversity, equity and inclusion



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While decarbonisation remains central to our strategy, we have introduced some new priority topics to address critical considerations within the construction industry. In particular, we have committed to making meaningful contributions towards the global ambition of halting and reversing biodiversity loss. Our efforts will include building organisational awareness internally and strengthening collaboration with relevant value chain partners.

Despite these new initiatives, some elements of our sustainability approach remain unchanged. Our mission – to build for a better quality of life and living environment, in a safe and sustainable manner – continues to be our north star. Pioneering innovation remains the cornerstone of how we drive transformative change, as it has been at Gammon for decades. In addition, high productivity construction, such as design for manufacture and assembly, continues to be crucial in reducing waste and improving safety, quality and productivity.

### Sustainability conference

In November, we hosted our fourth sustainability conference since 2014. This event not only fostered collaboration by bringing our customers, consultants, suppliers, industry bodies and government partners together, but it also provided the perfect platform to launch our new strategy, United Ambitions.

We were honoured to have esteemed speakers, including Nancy Gillis from the World Business

Council for Sustainable Development, who delivered an inspiring keynote on the interconnection of climate, nature and people, exploring how businesses can drive transformative change towards a net zero, nature positive and equitable future. Professor Erik Schlangen from Delft University of Technology shared insights on sustainable solutions in the Netherlands, including self-healing concrete and asphalt.



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The conference also featured three engaging panels focused on the transition to zero, nature and biodiversity, and people and wellness. These thoughtprovoking discussions included case studies from local businesses addressing challenges in these areas. In addition to sharing progress on our circularity initiatives, we took the opportunity to recognise and present awards to four suppliers for their contributions and efforts in collaborating with us to minimise waste and promote resource efficiency. With nearly 700 participants attending both in person and online, the conference was very well received. It was gratifying to bring so many people together to share sound and achievable initiatives that can positively impact both our industry and the planet. Following the conference, our sustainability team assessed the carbon footprint of the event through data collection on all guest transportation, hotel energy consumption, waste and more, and purchased offsets accordingly. We also worked closely with the hotel in the lead-up, implementing measures such as banning single use materials and maximising reuse. Even the canapés served during coffee breaks were low-carbon and vegan.



Panel discussions brought together industry experts to share valuable insights and ideas for a more sustainable future



Award trophies were crafted from our waste wooden pallets

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### Green and Caring Site Commitment scheme



In 2024, **98%** of our projects achieved Silver or Green Flag status

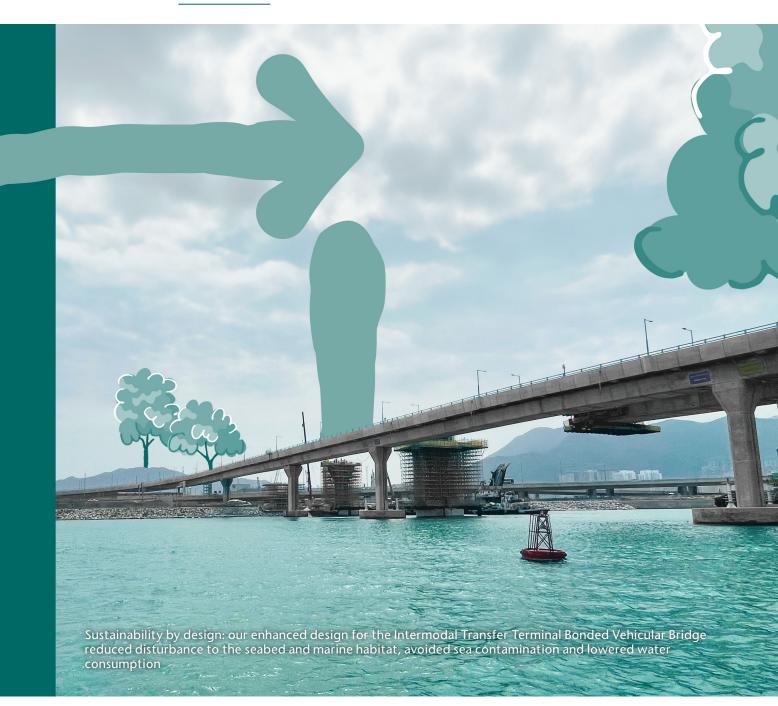
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Now in its 14<sup>th</sup> year, our Green and Caring Site Commitment (G&CSC) scheme is dedicated to advancing sustainability on our construction sites. Bronze, Silver or Green Flag awards are given to sites based on the level of implemented measures that demonstrate: care for the welfare of our workers; reduced environmental impacts and resource consumption; the highest level of safety; proactive engagement with the community; and innovation for better performance.

In 2024, eight projects were awarded Green Flags, representing exemplary sites that have achieved a standard beyond what the client normally requires or the Government mandates. Initiatives that impressed our Green Flag examiners included the use of a cutting-edge robotic system to perform autonomous elevator installation, the provision of cordless fans and ice packs to workers during hot weather, and the recycling of broken concrete into reusable blocks and pavers. They were also pleased to see the efforts to provide a pleasant working environment, such as greening and birthday party celebrations for staff and workers, as well as a high level of community engagement that ranged from installing mosquito traps in the neighbourhood to the provision of health checks.

The G&CSC scheme is a long-term commitment to continual improvement rather than a one-time award and as standards increase and become the norm across projects, sites are challenged to ever higher levels of performance.

People & Wellness



# Climate & Nature

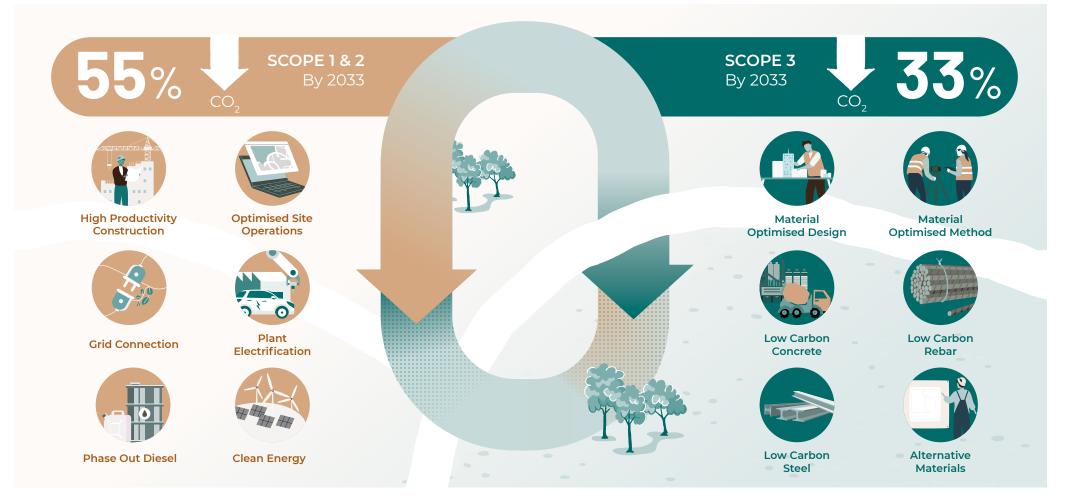
## Highlights of the year

### Decarbonisation strategies to achieve our targets by 2033



We have pledged to reduce our absolute Scope 1 & 2 and Scope 3 greenhouse gas emissions by 55% and 33% respectively by 2033, making decarbonisation one of our most pressing objectives. We were therefore pleased that, despite a 17% increase in turnover from 2023, we managed to achieve a 10% reduction

in our Scope 1 and 2 absolute emissions and 17% for Scope 3 in 2024. This was accomplished by focusing on our clearly defined decarbonisation strategies which are presented below, and which we delve into in more detail on the following pages.



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Our Project Agile initiative, which was introduced to drive efficiencies and productivity within the company, is also supporting our carbon reduction aspirations. Tracking sensors on plant, for example, provide us with useful data to improve efficiency of utilisation, hence we are able to reduce fuel usage. You can read more about this on page 29. In Singapore, we were given a wonderful opportunity to partner with Building and Construction Authority on its lean construction initiative that looks to enhance the process of project management, improve productivity and minimise waste. The findings will not only benefit Gammon but also the wider industry. This is an ongoing process that will conclude in 2025 and we look forward to reporting on the outcomes in the next sustainability report.



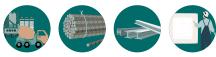
We finished the year with a 12% decrease in total energy consumed, with major contributing factors identified as greater electrification and energy efficiency improvements at site. From 2023, we have been purchasing only electric vehicles for any new passenger cars and by the end of 2024, 51% of our fleet was electric, representing a noteworthy achievement in only a few years. We also increased our electric plant inventory, adding a drilling rig and 10 boom lifts, and began trialling a smaller crawler crane than our self-owned version, as well as different battery storage devices. Representatives from our Plant Department travelled to an international trade fair for construction machinery and vehicles in China, joining close to 300,000 other attendees to ensure we stay abreast of the latest developments, whether electric, hydrogen fuel cell or otherwise.



We also conducted our first trial use of B100 pure biodiesel to power generators on site. Performance issues at lower temperatures made clear that further modifications to the generators were required before fueling with B100 could be considered a reliable option, therefore our trials are ongoing. We are optimistic our talented Plant Department can achieve a solution so please watch this space.

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We also supported an initiative to decarbonise the built environment sector by contributing to the development of a procurement guideline aimed at increasing the demand for low-carbon materials. Named the Technical Procurement Guideline on Low Embodied Carbon Construction, it was created in cooperation with RESET Carbon and the Sustainability Working Group of the Hong Kong PropTech Alliance. This guideline provides a standardised framework for organisations to plan and execute low embodied carbon projects.

New to our sustainability strategy is our nature and biodiversity focus area where we aim to contribute to a nature-positive future by accelerating our actions to halt and even reverse biodiversity loss. A key action has been identifying our most material naturerelated issues so we can set commitments and make action plans - you can read about our involvement with a capstone project on page 34 that supported this process. Additionally, we held a workshop with some of our suppliers of concrete, raw materials, cement and timber to familiarise them with the concept of biodiversity and the expectations clients may have of them in the future.



We continued to report our climate change information to CDP (formerly the Carbon Disclosure Programme) under a **Business Environment Council** 



Low Carbon Charter programme and received an overall score of B. Among the 16 categories in which we were evaluated, we achieved eight A or A- ratings which are summarised below. We also achieved higher scores than the industry average in seven categories. Compared with our 2023 CDP result, we showed improvements in 50% of our categories.

A score categories:

- Governance
- **Emissions Reduction Initiatives and Low** Carbon Products
- Public Policy Engagement and Industry Collaboration
- Scope 1 & 2 Emissions
- Context
- A- score categories:
- Business Strategy
- Dependencies, Impacts, Risks and **Opportunities Process**
- Risk Disclosure



### **Optimising plant utilisation**



One of the success stories of our Project Agile efficiency drive has been the introduction of Trackunit digital sensors that allow us to optimise plant utilisation, save fuel and reduce CO<sub>2</sub> emissions by using data to make smarter decisions. After successful trials in 2023, we fully implemented the technology on generators across the business in 2024, with projects able to monitor data via a dashboard. Additionally, we began trialling its use on selected air compressors and found we were able to reduce fuel usage by 40% with eco mode when idling.

Scissor lifts also got the Trackunit treatment, as did crawler cranes, crane lorries and site passenger vehicles, as we looked to gain greater knowledge in their usage rates and to utilise them more efficiently. The data we received on our passenger cars informed our decision to divest some vehicles and promote carpooling.

More Project Agile initiatives are discussed in our Resources & Circularity section, on page 40.

### **BIM-aided material embodied carbon measurement**



We were pleased to work with the CIC and BEAM Society Limited during the year on the development and testing of a carbon calculator tool integrated with BIM that can estimate the embodied carbon of construction processes in 3D. Known as iBEAM Unison, it allows stakeholders to review 3D models and analyse the sustainability performance of a project. The tool was made available to the public in December and provides a practical means for projects to efficiently analyse green building data, as well as provide insights to enhance sustainable practices. The platform also aims to automate the current green building assessment and other business-related processes to drive efficiency, reduce dependence on human operations, enhance consistency and mitigate the risk of bribery and other irregular practices. Our Kwun Tong Composite Development project became the first in Hong Kong to use iBEAM Unison to gain the BEAM Plus New Buildings V2.0 MW10 Life Cycle Assessment credit.

In Singapore, to address current and prospective customers' requirements for lifecycle carbon tracking, we started using a plug-in called Tally that traces the carbon data for all materials and embeds it in the BIM model, in much the same way as facilities management information is integrated. This enables the model to show the carbon impact of any design changes throughout the duration of the project, after which it can then be handed over to the customer for their own tracking.

Tools such as these are welcome additions to our work processes as they will help us and our customers make better informed and more sustainable decisions about how we build, and the materials we build with.



### Improving concrete's carbon footprint

Concrete is the second most widely used material after water, but unfortunately it comes with a substantial carbon footprint – about 8% of the world's total CO<sub>2</sub> emissions. We are, therefore, constantly seeking solutions that can help to this situation, and one of these is ground granulated blast furnace slag (GGBS) as a cement substitute. Back in 2023 we became the first construction company to receive Buildings Department (BD) approval to use GGBS concrete in the foundation works of a private development project in Hong Kong. Since then, we have been expanding its application, using different mixes in an array of substructure and superstructure projects and in various applications, from raft footings and pile caps, through to structural slabs, walls and columns. Concrete strength grades have also ranged from 45 to 60 and the amount of GGBS substitution from 35% to 60%.

We calculated that, in 2024, the total volume of GGBS used amounted to 10,589 cubic metres, resulting in carbon savings of 2,384 tonnes – or 39% to 69% reductions depending on the mix – compared with ordinary Portland cement. With such encouraging statistics, we are very pleased to be able to both continue our support for its application in public work contracts, as well as promote its use in the private sector.



### The robots are coming!

Automation has already transformed many sectors and we've been watching the market closely for many years, carrying out trials and implementing different technologies that add value to our operations. In 2024, however, we saw a definite uptick in the use of robotics on our sites.

Examples include a mechanical dog equipped with a scanning device and AI-powered system that tracks construction progress against the schedule and identifies delays, helping verify progress for processing payments and improving the accuracy of estimates by analysing reality captures such as 360-degree images. The images are compared with the BIM model where discrepancies and abnormal situations can be easily identified by AI. The scanned information can also help identify safety risks or issues while the dog can easily navigate difficult areas such as confined spaces.



The scanner on this mechanical dog helps the project team track work progress

We've also been using a remote-control load management system for precision rotation and suspension of loads that eliminates the need for taglines, thereby removing people from the drop zone. Painting and inspection robots are also proving their worth, as is one for logistics that consists of a small container on wheels that can be loaded up with equipment and follow the user around the site to reduce manual handling by up to 25%.

We received thanks from Hilti for hosting their drilling robot which, in addition to reducing settingout duration by an impressive 90% and minimising work at height, also enables the drilling pattern to be transferred back to the BIM model as an asbuilt record. This provides useful information for subsequent interface with other trades such as MEP.

As well as safety improvements such as reduced work at height, the greater precision provided by the robots means less waste. The construction landscape is certainly changing and we expect to see automation becoming increasingly common on our sites.

### Getting a boost with Al



Gammon

Construction has been accused in the past of being technologically averse but when it comes to artificial intelligence (AI), many in the industry are embracing it, particularly for its ability to boost productivity and help address labour shortage. Gammon is embracing the use of AI, with some of our more common use cases in 2024 including automatic checking of drawings and models for building code compliance, MEP quantify take-off and modelling, optimisation of plant and equipment use, and computer vision for progress and safety monitoring. And, of course, our self-developed chatbot Gambot2<sup>™</sup> places AI in the hands of frontline engineers and supervisors. You can read more about the safety-related AI initiatives in the following People & Wellness section beginning on page 52.

In Singapore, we were fortunate to participate in the Google AI Trailblazers initiative led by the Singapore Economic Development Board, a programme that aims to promote the adoption of Generative AI within the country. As well as being introduced to partners who helped us develop our knowledge and skill sets, we were delighted to be given free access to Google's powerful large language model, Gemini. Our chosen focus area was tender evaluation where AI can streamline proposals by helping with information retrieval, analysis and presentation. We completed the programme in December and await feedback on our prototype to see how we can build on it to achieve our aims.

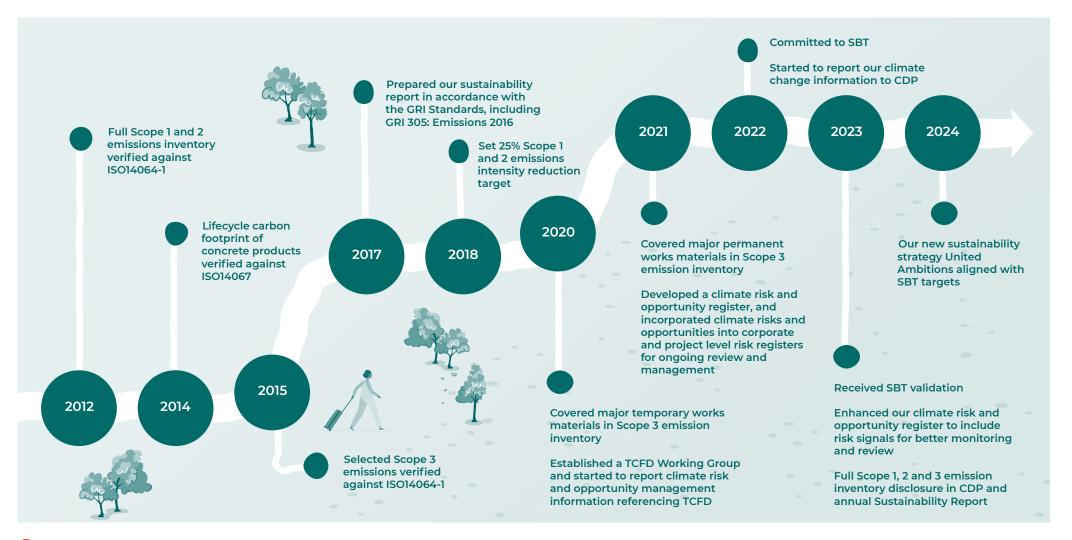
We were awarded the prestigious Diamond (Corporate) Award in the PropTech Integration Company of the Year category at the PropTech Excellence Awards. This accolade celebrates the transformative impact of technology in real estate and recognises our leadership in integrating innovative solutions.



People & Wellness

### **Climate management journey**

With the climate clock ticking, we share our milestone achievements since we formalised our carbon reduction approach 12 years ago. As the years have progressed so too have our aspirations and accomplishments, becoming more ambitious and significant as we work to decarbonise our operations and drive sustainable accountability in the construction sector. We are especially pleased with the headway on our GHG emissions inventory assurance, with independent third-party verification at a reasonable level of assurance achieved for 100% of Scope 1 and 2, and 52% for Scope 3 category 1 purchased goods and services in 2024.



Gammon

### Assessing nature-related issues in the built environment sector

We were fortunate to be involved in a third capstone project with a team of talented students from the Environmental Management and Technology Programme at The Hong Kong University of Science and Technology.

For the 2024 project, the students pioneered a pilot assessment for two of our transport infrastructure projects, following the Taskforce on Nature-Related Financial Disclosures LEAP (Locate, Evaluate, Assess and Prepare) approach, a four-step framework designed to help organisations identify and assess nature-related issues. The two projects, along with four high-impact materials — rebar, cement, aggregate and timber — were chosen due to their economic significance to our civil and infrastructure business, their proximity to ecologically sensitive areas, and our strong relationships with the suppliers. The students were tasked with developing a report to conclude the nature-related dependencies, impacts, risks and opportunities of the two projects. To further engage with the team, we invited them to present at one of our executive committee meetings, providing an opportunity for the students to share insights and exchange ideas with our top management. Some of the key takeaways from the assessment were that supply chain impacts are significant and higher than direct operations, and we should prioritise avoidance over reduction in our actions. It was a privilege to support these promising young students as they begin their journey to becoming our future industry leaders. We will continue to expand the scope of assessment to different types of projects and materials under the Science Based Targets Network which will allow us to further our understanding of our important nature-related issues, helping us to set commitments and actions plans to address our priority impacts and dependencies on nature.





# GREEN ACHIEVER



Carmen Lam Engineer

## 66

Carmen is known for her endless energy and enthusiasm for environmental issues

## DD

We felt Carmen deserved a shout-out after being named an Outstanding Green Achiever at the Hong Kong Awards for Environmental Excellence 2023. We had a chat to learn about some of the initiatives she's implemented and why she's such a keen driver of sustainable construction.



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#### Q. WHY IS SUSTAINABILITY SO IMPORTANT TO YOU?

The growing emphasis on sustainability across the world is an essential evolution in responsible business. I've invested in gaining qualifications in sustainability so I can understand how these practices can enhance our projects both in daily operations and in achieving long-term goals. Working in the construction industry, I recognise our impact on the environment and feel a strong responsibility to implement changes that reduce pollution. Embracing sustainable practices is not just a professional obligation but a personal commitment to innovation and improvement.

I pursued an Advanced Executive Diploma in ESG Strategy and Innovation for Net-Zero in my spare time which equipped me with practical knowledge and strategies to turn ESG and carbon neutrality into measurable actions with business results in an achievable way in our daily operations in the company.

I also obtained the Certified ESG Planner CEP<sup>®</sup>, and I was able to implement the five-step CEPAR methodology to tackle ESG problems in the daily operation of our business.

Gammon

### Q. GIVE US A FEW EXAMPLES OF INITIATIVES YOU'VE IMPLEMENTED THAT SUPPORTED YOUR AWARD

In addition to championing the use of green construction materials, I significantly contributed to implementing low-carbon design practices by proposing alternative construction schemes for temporary works, aiming particularly to increase the reuse rate of structural steel. I was also involved in developing a bolt and nut connection design system for structural steel, enhancing its reusability before disposal.

To boost public awareness of environmental and carbon reduction initiatives, my involvement extended beyond regularly participating in open seminars and workshops. I took an active role in orchestrating a variety of visits and workshops both within our company and the broader community, representing professional institutions. These activities were designed to bolster the professional growth of our colleagues and nurture the development of young engineers locally. Seizing this invaluable opportunity, I aimed to elevate environmental consciousness among the youth.

#### Q. HOW DO YOU FIND TIME FOR IT ALL?

We should make the most of our time to avoid future regrets! I am driven by a desire to continually improve and make a positive impact which pushes me to carve out time for additional studies and activities, even if it means adjusting my personal schedule. My eagerness to learn and grow fuels my dedication to these pursuits, allowing me to balance them with my other responsibilities.



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A mega MiMEP module is delivered to the Lyric Theatre rooftop

Imagine a world where mechanical, electrical and plumbing (MEP) systems are not just built but assembled with precision, speed and sustainability. Gammon is making this vision a reality, spearheading innovation in the construction industry in our region. As an early adopter of the modular approach, the Gammon E&M team has established itself as a leader in the field, garnering numerous industry accolades along the way. In 2024, the team achieved a series of firsts in modular MEP in Hong Kong, setting new standards in scalability, complexity, size and integration.

Gammon

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#### Breaking Boundaries at the Lyric Theatre

The Lyric Theatre project presented unique challenges: safety risks associated with working at height and tight working space for construction and fit-out of two roof ventilation plant rooms. To overcome these hurdles, the team re-imagined and re-engineered the construction of two roof ventilation rooms using a 'mega' multitrade integrated MEP (MiMEP) approach. The result? A groundbreaking solution in which the plant rooms were divided into 81 large, fully integrated modules. These modules incorporated structural elements, architectural builders' works and finishes, MEP systems, and maintenance platforms – a feat that represented the largest MiMEP installation in Hong Kong to date.

This innovative approach delivered remarkable benefits:

- A 20% reduction in installation space requirements.
- An 80% decrease in working-at-height activities, enhancing site safety.
- A 40% faster installation timeline, achieved through a hot-work-free process. The modules were simply craned into position and bolted together with nuts and bolts.

In addition, the team adopted advanced point cloud technology. By collecting precise data from both the MiMEP factory and the site, they conducted a digital rehearsal of the installation. This allowed them to identify and resolve potential issues before the modules even left the factory, ensuring seamless onsite assembly. With more than 80% of the fabrication taking place in the factory, the team reduced material waste by 25% compared with traditional in-situ methods. Improved logistics further enhanced efficiency, demonstrating the sustainability potential of modular construction.



MiMEP units are lowered onto a series of frames and bolted in place to form an entire plant room system



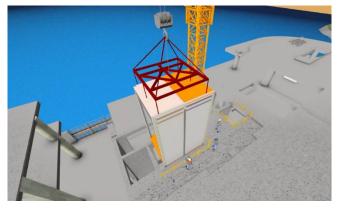
#### Scaling New Heights at Cyberport

The Cyberport Expansion project showcased the scalability of Gammon's modular expertise. The team adopted a large-scale integrated approach to the MEP, with more than 70% of the systems modularised. Nearly 800 modules were integrated into 123 MiC units. These units were 90% complete before leaving the offsite factory, offering welcome efficiency gains:

- 57% reduction in labour requirements.
- Significant decreases in construction waste.
- Safer and more efficient lifting operations on site.

Among the project's highlights was the tallest pipe duct module ever installed by Gammon in Hong Kong. Standing at 6.7 metres – nearly double the typical height seen on our construction sites – it required meticulous planning. The team relied on 3D simulations to rehearse every step of the process, from offloading the modules from a barge to their final placement. At the core of these accomplishments lies Gammon's dedicated MEP module factory in Guangdong Province, China. This state-of-the-art facility not only ensures high-quality fabrication but also seamless delivery and supports sustainable practices by reducing waste and optimising material usage.

Gammon's pioneering work in modular construction offers the industry a beacon for safer, faster and more sustainable building practices. From the rooftop of the Lyric Theatre to the expansive Cyberport project, modular MEP is not just simplifying construction, it's redefining it.



3D installation simulations helped the Cyberport team streamline the real process



The tallest pipe duct module ever installed by Gammon in Hong Kong



III CALLY

Resources & Circularity

People & Wellness

# Resources & Circularity

The marine mud on our project to build the automatic people mover and baggage handling system tunnels at the airport was treated and reused on either our own or other Three Runway System contracts



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Our St George's Mansions and CLP Pulse project included renovation of a Grade 1 listed clock tower for which preservation, reuse and repair of unique features was a key target. The project also won the Grand Award for exceptional quality and innovative design in the Hong Kong Residential (Multiple Buildings) category of the Quality Building Award 2024

### Highlights of the year

One of the key priorities of our Resources & Circularity focus area is to advance resource-efficient operations and uphold the principles of circularity. Our first financially viable circular economy established a local waste cooking oil (WCO) supply chain to produce B5 biodiesel for use in our plant and equipment. Although we only implemented the initiative in the middle of 2024, we were delighted to finish the year achieving our target that 80% of the B5 used on our projects is from the WCO circularity process. The experience taught us that with the right approach, environmental benefits can be realised without sacrificing commercial viability and we have developed further circular initiatives.



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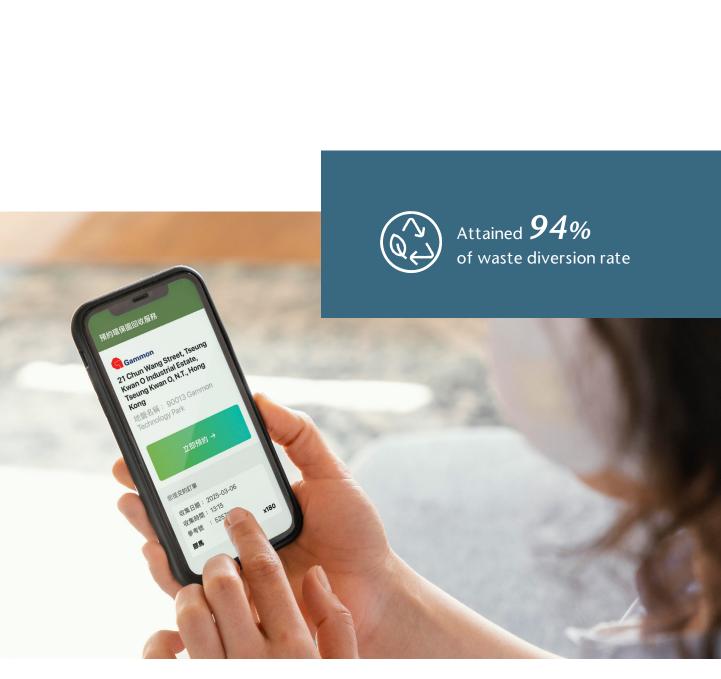
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**Resources & Circularity** 

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One of the key waste-related targets of our new strategy is to achieve a 90% diversion rate by 2033. We were therefore pleased when the year came to a close and we had attained a rate of 94%. While this may suggest we could be more ambitious in our targets, it's important to remember that maintaining a very high rate will be a challenge due to factors that include the space constraints of many Hong Kong and Singapore construction sites which make in-situ sorting of waste difficult. Our achievement in 2024 is also due in large part to the treatment and reuse on site of sediment carried out by our airport tunnelling project with 93% of marine sediment treated and reused for the year.

Building a collaborative value chain to drive the supply of and demand for sustainable products and services is a further objective of our strategy. During the year, we provided professional advice and support to EcoPark, a recycling-business park developed by the Environmental Protection Department, in the development of its digital business-to-business platform with a view to facilitating communication and data retrieval. We have committed to trialling the platform in 2025 to optimise its widespread use by others in the future.



Gammon

Sustainability Strategy

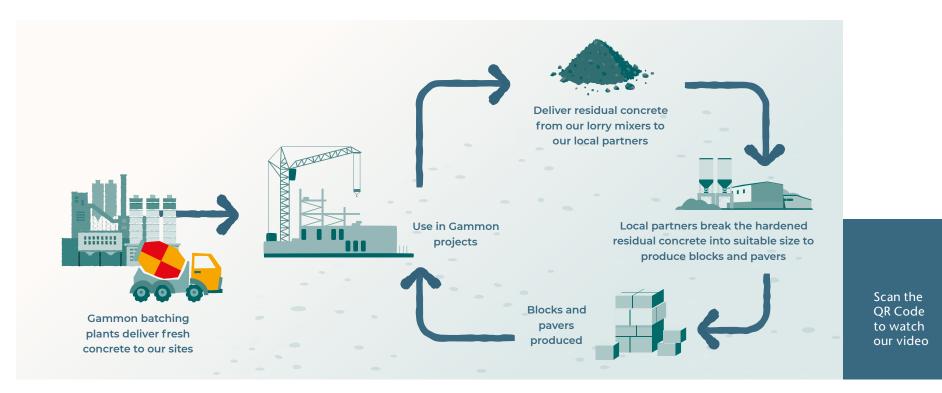
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Riding on the success of our circularity process for B5 biodiesel, we extended the approach to concrete. While we have a digital concrete management system in place that controls wastage (more on this on <u>page</u> <u>42</u>), overordering occasionally occurs and we were keen to explore circularity options to mitigate the effects of this.

We have collaborated with two local companies who collect residual concrete from our lorry mixers and break the hardened product into suitable sizes to produce blocks and pavers. These are eventually used on our projects, thereby completing the circularity process. There are financial benefits to this particular initiative, too. Excess concrete would typically need to be disposed of at a public fill outlet which incurs a fee. Now, our two local suppliers take it back to their yards where the recycling process takes place.

Other circularity practices in use on our projects include those for yard waste and felled trees that are taken to offsite recyclers and processed into mulch or compost which are then used for landscaping on our sites. We've crushed 1.6 tonnes of demolished glazing to make 200 glass sand bags, some of which are used on site while others are earmarked for distribution to property management for use when the project is complete. Timber pallets have also been processed into trophies such as those we presented to suppliers during our sustainability conference, in recognition of their contributions and efforts in collaborating with us to minimise waste and promote resource efficiency. You can see a photo on page 23.

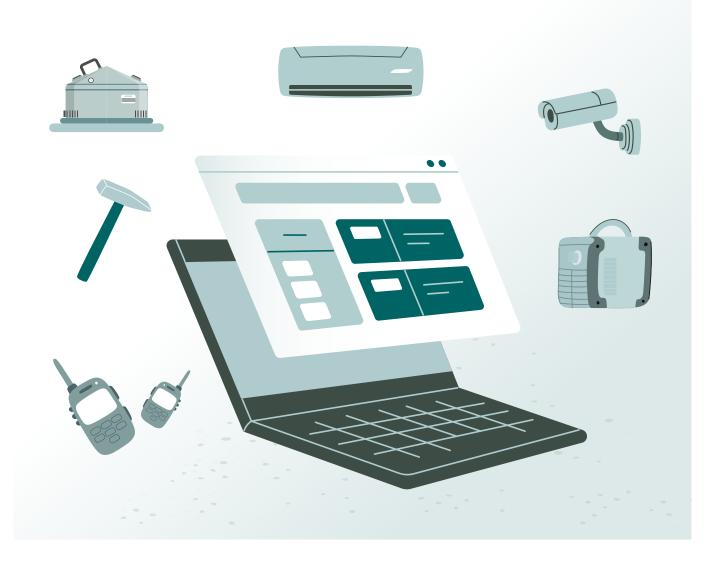
Our next focus is to create a circular economy for the plastic from water barriers that do not have a reuse value which we hope to report on in our next sustainability report.



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### **Shopping around**



The Reuse Better platform we established to facilitate the reuse of site goods within the company was fully implemented in the Hong Kong business in 2024, and we also began piloting it on projects in Singapore. Developed as part of our Project Agile efficiency and productivity drive, the system allows project teams to see what items are available on different sites, with the goal being a reduction in external purchasing.

We also began monitoring its use via a dashboard, ensuring materials and goods are flagged as available for reuse in a timely manner, particularly as projects move into the final phases of operation. New projects then have the opportunity to log on and check the inventory before buying from outside sources, facilitating greater cross-divisional reuse. Integration with our resource planning software allows the platform to be automatically updated weekly, with stocktaking required from sites only twice a year or when demobilising.

With around 22,000 items available, the platform represents a significant opportunity to reduce waste and provide cost savings on our projects.



**Resources & Circularity** 

People & Wellness

### **Concrete management system goes digital**



Our concrete management system enables better optimisation of our trucks

We completed the digitisation of our entire concrete management system which enables us to better optimise routing and rostering of concrete trucks, finding the most efficient way to supply based on demand. The aim is to be able to reduce the number of trucks in operation in the long term.

As orders are received, the concrete team can easily identify peak demand via a dashboard, providing them with the opportunity to intervene and liaise with projects to make scheduling amendments that flatten the curve so that multiple trucks are not required. This does require changes in site practices as well as pre-planning from the concrete team but the process is supported by the visibility of the endto-end digitisation of the system provides.

The system also highlights practices not previously visible, such as sites that hold trucks for extended periods and delays in concrete delivery. Ultimately, we are seeking to change behaviours and improve efficiency, and our concrete management system is providing the information needed to achieve this.



People & Wellness

### **Proactive engagement**



Kevin O'Brien, Chief Executive of Gammon, delivers the opening speech at the ReThink 2024 conference

We are pleased to share our expertise at leading industry events and we highlight below a few that were particularly relevant to the Resources & Circularity focus area of our new sustainability strategy.

Kevin O'Brien, our Chief Executive and Chairman of the Business Environment Council, joined thought leaders and experts at ReThink 2024, an event dedicated to advancing sustainable development through globally recognised risk and opportunity topics.

Kevin delivered a keynote speech at the opening ceremony, providing an overview of Hong Kong's current sustainability landscape and discussing the critical issues all organisations face in the race to net zero. He also delved into the business-policy nexus for circularity and sustainable living, underscoring the importance of business and policy in tackling sustainability challenges such as waste, nature depletion and energy transition barriers, with a particular focus on Hong Kong and the wider region.

Kevin also contributed his insights as a panelist at the Symposium for a Green and Resilient Hong Kong Part 1: Circularity in the Built Environment. Alongside other industry leaders, he shared innovative ideas and inspirations on the theme 'achieving circularity together', spotlighting the crucial role of contractors in the circular economy and our own proactive efforts and solutions, referencing past Gammon projects where these practices were adopted.

As a leader in our field, it's important we speak at events such as these, sharing our experiences with others in the industry and promoting the collaborative approach we know is essential to promote circularity, enhance resource-efficient operations and drive the supply of and demand for sustainable products and services.



# HARNESSING THE POWER OF DATA



Hazel Chan Sustainability Officer

**Jacky Yang** Environmental Engineer 66

## We make informed decisions powered by our data-analytics capabilities.

Data has been described as the new oil. Once refined and processed, it is extremely valuable, and this report is packed with it. We catch up with Jacky and Hazel who are responsible for collecting and presenting our sustainability data, to learn more about what they do and why it matters



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#### Q. JACKY AND HAZEL, PLEASE TELL US BRIEFLY ABOUT YOUR ROLES

Jacky: My tasks involve data system management for a wide range of initiatives, including our greenhouse gas inventory, Science Based Targets commitments and Green & Caring Site Commitment programme, just to name a few. I also manage data control procedures, develop manuals and handle internal and external auditing and reporting, and carry out general research and analysis, such as for our involvement with Feed-in Tariffs and exploring the feasibility of using hydrogen. I'm also helping build a team of data champions in the Sustainability Department!

*Hazel:* I support Jacky and I'd like to point out, we have many different types of data! We don't just report on aspects like waste, water or energy, we also disclose social data such as training and recruitment statistics or gender breakdown. That requires a lot of coordination with other teams.

#### Q. HOW IS DATA HELPING GAMMON'S SUSTAINABILITY AMBITIONS?

Jacky: Gammon is genuine about sustainability and carbon reduction; it's not a public relations gimmick. But you can't manage what you don't measure, so a reliable system is an essential foundation for successful sustainability development, as it ensures accuracy and comparability. It's how we analyse if our actions are heading towards the right direction. For example, in 2024, we achieved a 10% greenhouse gas reduction even though turnover increased which shows we are on the right track. We can't convince people we are doing well without data.

*Hazel:* Other companies may struggle to build their baseline data but we've been publishing our sustainability report for more than 20 years and have a long history of collecting data. We're also collecting more types. The reason we have more types of waste, for example, is not because we have more waste, but we try to distinguish it in a more detailed way. We can then make easy comparisons with vast data which contributes to the transparency of our reporting.





People & Wellness



# Q. WHAT ARE SOME OF THE CHALLENGES YOU FACE IN YOUR ROLES?

Jacky: The sustainability field is evolving really quickly with more data types, standards and regulations coming out every day! It's a challenge to keep up with the fast pace but at the same time, it's what I enjoy about this role. There's always something new, we never do the same thing each day. *Hazel:* There are so many different types of data, and different requirements for audits or disclosures, and they all have different requirements for calculations which makes it challenging. We want to collect more accurate data so every year we increase the types we consolidate. But while it's challenging, it's also meaningful. We're helping to build Gammon's reputation as a pioneer in sustainability.

#### Q. IF YOU HAD THE POWER TO CHANGE SOMETHING IN SOCIETY TO BENEFIT SUSTAINABILITY, WHAT WOULD IT BE?

Jacky: It would be nice to have an internationally recognised sustainability institution. Most institutions are relatively regional and they use different standards and hold different courses and are quite diverse. It would be nice to have a more established path.

*Hazel:* People lack education or awareness of sustainability so I would add it as a compulsory subject in primary school. If future generations can better understand what it is, they will be more aware of the need to take care of society and the environment, and in the future, they may be more likely to take sustainability-related subjects at university and become one of the many talents that are in demand. In that way sustainability can be more sustainable!

People & Wellness

#### () IN FOCUS

# GOING FULL CIRCLE

Between 2018 and 2023 alone, the global economy consumed over half a trillion tonnes of materials - nearly equivalent to the entire consumption of the 20<sup>th</sup> century. Yet, the proportion of secondary materials cycled back into the economy steadily declined during this period<sup>1</sup>. This alarming trend underscores the urgent need for circular design practices to prevent waste and pollution. Circularity demands a radical shift in thinking, transforming the way we design products, services and business models for a sustainable future.

1. www.circularity-gap.world/2024



From left: Jeannette Levels-Vermeer (Course Instructor), Simon Wong (Head of Procurement), Jacky Choi (Senior Architect), Pieter van Os (Program Manager CIRCO International), Frank Wong (Architectural Coordinator), Eddie Tse (Group Sustainability Manager) In December, Gammon had the privilege of participating in a pioneering circular design programme from the Netherlands, a global leader in circular economy innovation. A four-person team attended the CIRCO Track training programme, which equips companies with practical tools to integrate circularity into their business model and day-to-day operations. This hands-on initiative included four workshops, two of which were completed by the Gammon team in December.

Gammon Group Sustainability Manager Eddie Tse, a member of the team, shared his reflections on the experience.



The entire learning process was incredibly intriguing. The Netherlands has been at the forefront of circular design, and it was inspiring to learn from such a forwardthinking country. The CIRCO method provided us with structured tools to identify opportunities, develop circular solutions for business models, and redesign processes and products. It's all about shifting from a linear mindset to a circular one.



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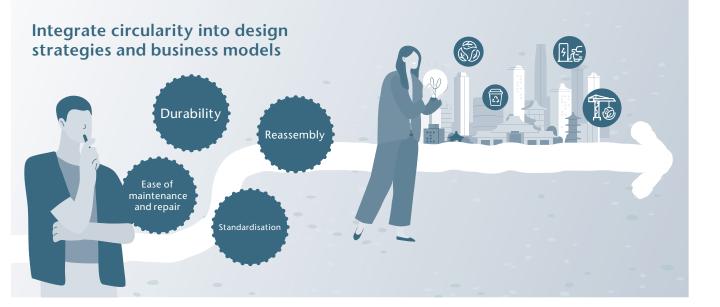
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What made the workshops particularly valuable was the diversity of the Gammon team. "I was joined by three Gammon colleagues from different academic backgrounds and company functions," Eddie continued. "This diversity enriched our discussions and supported the development of constructive ideas. We were fully engaged in an inspiring learning and sharing process."

The CIRCO Track is far from over; two additional workshops are scheduled for 2025. These sessions will play a crucial role in shaping Gammon's roadmap for circular design, which will be integrated into our operations and shared in the next sustainability report. "I'm excited to bring our circular proposition to market and contribute to building a more sustainable future," Eddie noted.

We are grateful to the Business Environment Council Institute of Environmental Education and the Netherlands Consulate-General in Hong Kong for organising this training programme. The CIRCO Track has strengthened our understanding of the circular economy, and provided us with actionable insights into circular design and business models.

Becoming part of the CIRCO International network provides our team with valuable access to the latest thinking and community of innovators, thinkers and practitioners committed to advancing circularity, enabling us to create new value for our business, our partners, our customers and our community. By embedding circularity into our business model, we aim to drive innovation and contribute to the development of a circular economy in which products and materials are reused and raw materials retain their value.





People & Wellness

# People & Wellness









Close to 4,000 staff and subcontractors celebrated the return of our Spring Dinner after a five-year hiatus



### Highlights of the year

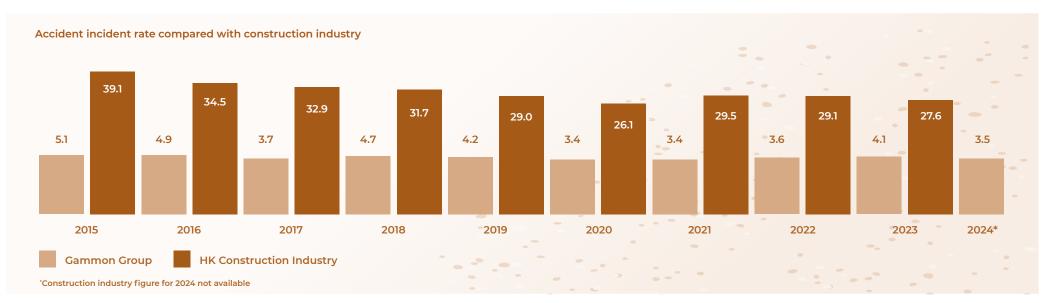
We experienced no fatalities within the business and saw an overall reduction in the number of lost-time injuries, all of which we achieved while operating with our highest recorded workforce of more than 27,800 people. While we are proud of these outcomes, we still have work to do to achieve our accident incident rate (AIR) target of 3.2, falling just shy at 3.5. This served as a reminder that our safety journey is ongoing and demands proactive continual efforts. Sustainability Strategy

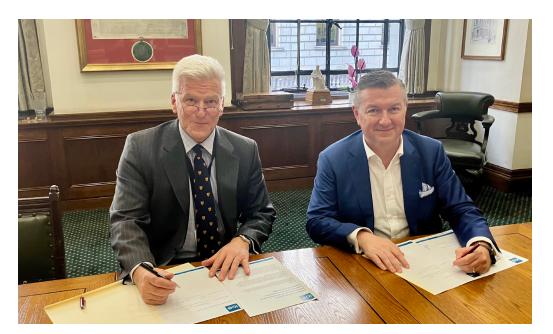
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# Our annual Health & Safety Conference underscores Gammon's commitment to raising the bar of our industry's standards

One of the many examples of such forward-thinking is our annual Health & Safety Conference. In 2024, we were pleased to welcome a diverse array of distinguished speakers from around the world, each contributing to a rich exchange of global insights on safety leadership and wellbeing. The event was a resounding success, drawing 650 online and in-person attendees eager to enhance their safety knowledge. Our safety endeavors continue to earn significant industry recognition, with more than 100 individual and company awards collected during the year. Our commitment to elevating safety standards also led to four of our projects being recognised at the Presentation Ceremony of Plaques for Smart Site Safety System (4S) Labelling Scheme, established by Development Bureau and Construction Industry Council (CIC), underscoring the successful adoption of 4S technologies on our construction sites. Our People and Culture team also garnered some impressive accolades, including five at the Hong Kong Institute of Construction's Employer Appreciation Awards, acknowledging our commitment to training and development. You can learn more about some of our training initiatives on the following pages, with a full list of our awards in Appendix F. Notably, we were named one of the 'Top 10 Happy Companies to Work For' by the Chief Happiness Officer Association, a sentiment echoed in our annual staff survey, which showed an all-time high employee engagement score of 85%!





Signing up as ICE's first international partner



Our graduate engineers enjoyed a weekend of activities at Orientation Camp

Further achievements include collaboration with the Institution of Civil Engineers (ICE) to become its latest corporate and first international partner. The partnership recognises our ongoing dedication to nurturing local talent for Hong Kong's construction industry by offering training and professional development for our engineers, respected both locally and internationally. It will enable us to deepen our investment in professional development and enhance the relevance of ICE qualifications for our employees.

We conducted our largest graduate intake yet, welcoming them to Team Gammon with our first orientation camp since COVID. The weekend event featured games and activities designed to sharpen communication and problem-solving skills, enhance team bonds, foster creativity and collaboration, and build long-lasting connections. We also organised six job fairs in the Greater Bay Area to attract talent from universities in Mainland China, receiving nearly 800 resumes. Additionally, we hosted 43 students from Mainland China to take part in a construction youth exchange programme run by CIC, fostering cultural interaction among our industry's next generation of leaders.



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## HEALTH, SAFETY AND WELLNESS



#### **Driven by data**

Driven by data, we continue to transition from traditional labour-intensive processes to a digital self-service approach that eliminates manual tasks and provides data-driven insights into safety management.

One innovative example is the digitisation of our Zero Harm cards into an all-in-one platform, allowing digital storage on mobile phones and enabling training bookings. The system also provides an active directory of Zero Harm training qualification that is linked to site access control gates, ensuring no entry is permitted without a digital card. Safety infringements are tracked on the system, allowing access restrictions for offenders if necessary. During registration, our system scans the relevant identification card which is then anonymised to ensure data security is safeguarded. Furthermore, we are collaborating with a recycling company and a paver supplier to turn the old plastic Zero Harm cards into paving blocks!

In addition, we've enhanced the monitoring of our dynamic risk assessments (DRA), submitted digitally via our in-house AI-enabled chatbot application Gambot2<sup>™</sup> in a process known as iDRA. A dashboard now allows leaders and safety officers to review engineers' iDRA submissions to ensure they meet suitable standards, with a minimum of two required daily. Our Integrated Data Technologies Department continues to train Gambot's AI engine to automate this review process in the near future.

Gambot is constantly evolving, with 2024 updates including several digital 4S functions such as permits to work, validity checks on certification for handheld tools, plant and equipment, and access control to restricted zones. Gambot also provides access to ChatGPT in addition to the GenAl function that provides a safe platform for staff to improve work efficiency.



#### Health and wellness round-up



We carried out 31,817 health screenings in 2024

We place great importance on the mental and physical well-being of our staff and workers, providing a range of health-related services throughout the year. This approach was recognised at the Hong Kong HR Awards 2023/24 when we received the Innovative Wellness Programme Award from JobsDB by SEEK.

Initiatives included 31,817 health screenings and 217 health talks and workshops for close to 7,500 participants on subjects ranging from preventing lower back pain and addressing unhealthy digital habits through to smoking cessation and understanding food labelling to make better diet choices.

Additionally, 40,260 people completed training at our Zero Harm Induction Centre, either for the first time or as returnees for mandatary refresher courses.

All projects and head office participated in a stand down where we discussed symptoms of common health issues including heart disease, stroke and heat stroke, and the best emergency responses. The interactive event, which featured guiz games with participants, was highly engaging and well received by attendees.

In October, we hosted events and activities to support Jardines Mental Wellness Month, offering staff opportunities to explore topics such as stressbusting strategies, overcoming sleep disturbances, planning for retirement, and creating self-awareness. Our Wellness Fun Day in November also featured a variety of health, fun, relaxation and self-healing activities for staff in head office.



# FROM CLASSROOM TO FRONTLINE



**Chathuri Naiduwa-Handi** Safety Officer Hailing from Sri Lanka, Chathuri Naiduwa-Handi is one of our safety officers, as well as being on the committee of our Multicultural Affinity Group and a member of Women in Gammon and Allies Network. She joined us in 2022 after finishing her PhD, which explored how network relationships drive work engagement and safety performance. She shares a few findings, as well as her personal experiences at the frontline.

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Construction used to be a male dominated industry but with increased focus on DEI, more opportunities are emerging for women.

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#### Q. TELL US ABOUT YOUR PHD.

I investigated network relationships from three standpoints: 1) structural capital - interactions based on hierarchical structure, 2) relational capital - interactions based on mutual trust and companionship, and 3) cognitive capital – the shared understanding of disseminated information.

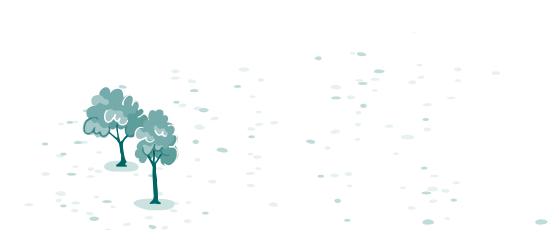
Findings suggest structural capital has no direct impact on either work engagement or safety performance. But relational capital – trust – strongly and positively influences both. When employees develop trust-based relationships within the workplace, it accounts for less work-related stress, higher work engagement and increased safety performance. Shared understanding is challenging, as it takes time and effort from organisations and individuals to establish functional cognitive social capital. With high turnover rates in the construction sector, shared understanding is not easy.

#### Q. HOW ARE YOU FINDING WORKING ON SITE?

The best part of my job is the hands-on experience. I've been an academic for most of my career, so transitioning to the construction industry allowed me to observe our study results in a project environment. It's been an interesting two years so far. It took me a while to grasp the workplace culture, how relationships are established and maintained, and what my place is within the team. These were not spoken out loud, you learn on the go. Project environments are challenging, as teams include individuals from different companies. So there is the potential for a 'them versus us' conundrum while working towards a common objective. This is an example of structural capital's lack of impact on engagement or safety performance.

#### Q. HAVE YOU FACED ANY CHALLENGES AS A WOMAN ON THE SITE?

When I first started in construction, it was suggested that my nationality and gender might not help when handling frontline workers, but these comments were friendly advice, not marginalisation. When you find the right tone of communication within the workplace, tackling day-to-day work becomes easier. It's also important you have a supportive team to back you up when necessary. Construction used to be a male dominated industry but with increased focus on DEI, more opportunities are emerging for women. Companies like Gammon are putting deliberate effort into making positive change, and I think we need to be part of this journey and seize those opportunities.



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# TALENT ATTRACTION, DEVELOPMENT AND RETENTION



Gammon

Recognise, respect and reward talent and support their personal growth To help senior staff better identify high-potential employees for targeted development, we conducted Leader as Coach training for project-in-charge personnel and above. The learning encourages talent management and teaches attendees how to carve out career development plans and coach their team.

After gaining accreditation in 2023 from CIC for both our BIM coordinator and BIM manager courses, we held our first in-house training classes for these important qualifications. By year's end, around 94% of attendees had passed the exam, ready for the next stage of the process which involves interviews with CIC. Our summer school, in collaboration with Tsinghua University in Beijing, restarted in 2024, with 11 high-potential engineers from across the business engaging with directors and key stakeholders to understand business challenges. They participated in training, including digital education, BIM, design and presentation skills before pitching innovative ideas to our executive committee. They then attended a two-week construction management programme at Tsinghua University, gaining a blend of cultural, engineering and safety education from professors around the world.

#### **Training and development**

In 2024, our Gammon Academy offered 455 virtual or classroom training sessions, amounting to 71,293 hours when staff were enhancing their capabilities. New courses added to the curriculum in 2024 included an e-learning version of our carbon essential training, compulsory for all monthly paid staff. We also launched an inclusive leadership workshop for executive directors and directors, later extending it to projects and divisions on a voluntary basis. Topics included understanding privilege and stereotyping and fostering inclusion. Over 140 staff had completed the training by year's end.



Some of our high-potential engineers attend a twoweek summer course in Beijing

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#### **Icon** awards

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Our shareholder Balfour Beatty's prestigous Icon Awards shine a spotlight on the people who help shape, connect, support and build communities. At the inagural 2024 event, we were delighted when two Gammon employees were welcomed onto the stage at a ceremony in London to receive recognition for their achievements. Kennedy Cheung, Director - Civils, brought home the Diamond Award, celebrating his many years of dedication to both Gammon and the wider industry. Kennedy has been the driving force behind landmark projects such as HATS sewage tunnels, Shatin Central Link and, most recently, two Central Kowloon Route projects – Kai Tak West, and Buildings, Electrical and Mechanical Works. He has pioneered innovative methods such as an underwater cofferdam with skidding truss system and eco-friendly rock cavern storage.



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To enjoy a long career in construction, you have to be multi-disciplined and able to help secure new works.

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**Kennedy Cheung** 

Gammon

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Ilona Pak, Project Engineer was honoured with Highly Commended in the Rising Star Award category. From her first day at Gammon, Ilona has demonstrated exemplary skills and drive. She quickly mastered new tasks, and her impressive portfolio includes designing stiffened steel box girders for the Artist Square Bridge and developing advanced data-driven design tools.



Recognition also went to Senior Environmental Engineer Ann So, the Ho Man Tin Package Two Project Team and the crew responsible for a double-wall retaining system for deep excavation at our airport tunnelling project who were finalists in the Building New Futures, Zero Harm Award, and Pioneering Engineering Award categories, respectively.

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To me, engineering means finding practical solutions through technical knowledge and innovation. It's fascinating how new challenges arise just as old ones are solved.

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Ilona Pak

People & Wellness

#### Building tomorrow's women leaders

We were honoured to support the Girls Go Tech event organised by The Women's Foundation and Jardine Matheson. Aiming to inspire technology-savvy young girls during an empowering workshop, we highlighted the essential role of science, technology, engineering and mathematics (STEM) careers and helped to break down gender stereotypes.

Participants were offered an exclusive look into the world of construction engineering, delving into cutting-edge technology through hands-on experiences with BIM, internet-of-things sensors, and virtual reality technology. These tools, pivotal to our Terminal 2 Expansion project, demonstrated the crucial role of STEM in creating greener, safer infrastructures.

# DIVERSITY, EQUITY AND INCLUSION



Foster a diverse, equitable and inclusive environment where all individuals feel valued and empowered

#### Creating a welcoming space for all



Attendees at our flagship DEI event have fun learning sign language

Our flagship DEI event for 2024 explored how identities such as race, gender and socioeconomic status interact with technology. Held in our head office and attended by staff and industry peers, esteemed guest speakers delved into how technology is reshaping DEI, discussing everything from recruitment to the role of AI in making construction more accessible and inclusive.

The event concluded with a lively session of sign language learning that was thoroughly enjoyed by all and highlighted the importance of inclusive communication in the creation of a truly equitable world.

Other DEI functions held during the year include those organised by our employee-led networks. Our Women in Gammon and Allies Network (WinG) held in-person events focusing on helping attendees find financial empowerment, as well as gatherings where Gammon women engineers shared interesting career stories and insights. Our Multicultural Affinity Group (MAG) commemorated the International Day for Elimination of Racism by holding a special function at head office, welcoming guest speakers active in the diversity and inclusion arena who shared their personal experiences and insights on racism and discrimination, while staff also provided accounts of stereotyping via video montages. Additionally, lunch gatherings were organised on selected sites to give attendees the opportunity to share ideas on how to make Gammon a more inclusive place to work.

We also nominated six allies from within the company to join The Women's Foundation's Male Allies Programme which strives to further gender equality by engaging and empowering both men and women to lead more effective conversations around gender. Our six allies, in turn, recruited six ambassadors each to help them carry out DEI promotions on our project sites and ensure a greater understanding of the topic at grassroots level. Sustainability Strategy

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#### **YPG roundup**



Our YPG delegation to the UK enjoyed a site visit hosted by shareholder Balfour Beatty

Our Young Professionals Group (YPG) has been providing a platform for the professional development and social engagement of its members for decades. Chairperson Vivian Loo provides a few of the 2024 highlights in what was a jam-packed year of activities. "One of the stand-out events of the year was our study tour to the United Kingdom, the first time the YPG had ventured out of Asia! Over three days, our delegation visited high-profile construction and infrastructure projects in Birmingham and London, gaining invaluable insights and opportunities for our members to exchange ideas with shareholder Balfour Beatty's frontline staff and senior managers. We also organised a Greater Bay Area study tour, visiting steel, MiC and DfMA factories to experience the production of materials first-hand. And we got to visit Alibaba's Guangzhou branch where they showcased cutting-edge cloud technology.

"Back in Hong Kong, we organised site visits to the Queensway Footbridge, Lyric Theatre and the automatic people mover and baggage handling tunnel project at the airport, gaining greater knowledge of advanced construction methods. We had a lot of fun social events during the year too, including a junk boat trip, indoor rock climbing, and a golf and barbeque day.

"Despite all our outings, we still found time to organise a few community activities, including a basketball challenge in collaboration with a primary school and Inclusive Sports Education, where exercise, mindfulness and play was used to cultivate the behaviours, emotion and social aspects of students with special education needs. And we visited a dog rescue centre where we contributed to the welfare of the animals and gained a deeper understanding of the dedication required to run such a facility."



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#### Caring for the community



Gammon runners helped raise almost HK\$770,000 for the Lighthouse Club's annual Lap Dog Challenge charity event

Caring for the communities in which we operate forms a core part of the Gammon ethos, and by the end of 2024, we had supported or organised about 199 community events throughout Hong Kong, Singapore and China, ranging from tree planting and sporting challenges through to beach clean-ups and outings for the elderly and families whose lives have been affected by construction accidents. We are also proud of our Shared Twilight Years Elderly Service Programme which provides end-of-life services including home visits, repairs, electrical checks and outings to enhance the quality of life of the elderly.

Our donations amounted to HK\$2 million, in addition to the nearly HK\$770,000 raised with our partners for the Lighthouse Club's annual charity event, the Lap Dog Challenge. For the ninth year, we enthusiastically participated in the challenge which requires participants to run as many laps as possible of a 400m athletics track within five hours. The Gammon team completed an impressive 531 circuits, with the money raised going to the Lighthouse Club's Hong Kong Benevolent Fund, as well as the Hong Kong Breast Cancer Foundation as the second beneficiary.

Participation of Gammon staff in charitable events is boosted through our Dollars for Doers programme which matches donations for every hour employees volunteer. In 2024, this amounted to HK\$277,035.

We were delighted to once again have our volunteering efforts recognised by the CIC in its Construction Industry Volunteer Award Scheme 2024, where we received six accolades.

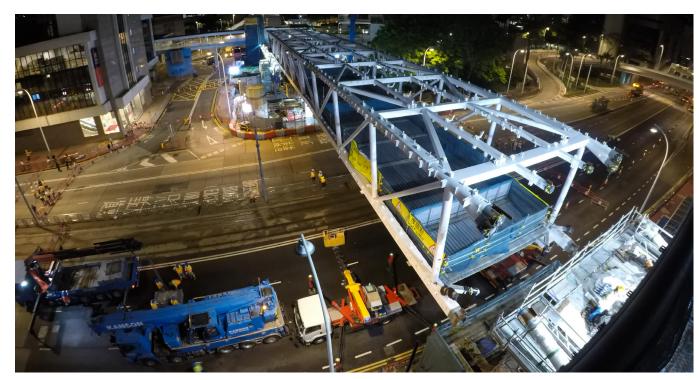


Our many volunteering awards are testament to our commitment to community service and collaboration

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#### Integrating care into our projects



Queensway Footbridge Two was safely launched in two stages

Gammon is the main contractor of the Two Queensway Bridge, a 96-metre-long pedestrian bridge that seamlessly connects Pacific Place to Harcourt Garden in Admiralty.

Constructing a footbridge over Queensway Road – a major thoroughfare featuring six vehicle lanes and two tram rail lines – posed significant challenges.

Gammon

The project highlighted Gammon's innovative use of DfMA to address the site's spatial limitations, improve efficiency, enhance safety and minimise disruption to traffic in this bustling urban environment. Specifically, the two carefully planned night launches of the footbridge – operated from 1am to 5am on 3 March and 21 April – successfully reduced the duration of road closures to only nine hours in total.

stood a red sandalwood (pterocarpus santalinus) tree, a near-threatened species protected under Hong Kong law. Planned meticulously over the course of a year in collaboration with landscape consultants and transplant specialists, the over 50-year-old tree, standing 15 metres tall and weighing over 60 tons, was carefully relocated to a new location 60 metres away to preserve its survival and continued growth. This precisely coordinated operation highlights Gammon's dedication to integrating care into our projects.

Furthermore, along the footbridge's intended route



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### (S) IN FOCUS



Tucked into a corner of Yau Tong, ground-breaking construction is underway on a residential development by a team from the Gammon Buildings Division. Featuring three towers, the complex will provide 700 residential units and includes a two-level parking lot, clubhouse and swimming pool. On the surface, it sounds routine, doesn't it? Not quite, because the project is being constructed over an operating MTR ventilation building, marking the first time this has been attempted in Hong Kong.

To make this feat possible, the project utilised a complex temporary steel structure, known as a mega truss, which supports the permanent steel structure and transfer plate. With the heaviest steel structure weighing 32 tonnes, trial lifting was conducted at the Gammon steel factory in Mainland China to ensure the procedure would be executed safely. It's also where our Construction Services Division (CSD) developed a hydraulically operated counter balance lifting frame (CBLF) for the works, an invention that later clinched the coveted Champion title in the Mechanical Innovation & Implementation Award presented by the Institution of Mechanical

Engineers. Roy Lo, Senior Project Manager of Gammon, explains how the CBLF has been pivotal to safe and efficient installation on the site.

"We needed to erect the mega truss and multiple steel platforms before we could safely construct the building blocks above the ventilation building, which presented significant lifting challenges. Traditional lifting methods posed safety risks and were heavily reliant on skilled labour so our Steel and Plant departments developed the CBLF, which integrates mechanical and hydraulic systems for safe and efficient lifting operations.



People & Wellness





Before(Right) and after(Left): Works take place on top of an operating ventilation building

# GROUND-BREAKING CONSTRUCTION



Achieved 50%

savings on temporary works and resources



Achieved **75%** 

savings in tower crane costs



FULLY REUSABLE, offering an environmental benefit

"It's had a profoundly positive impact on the project, from safety through to efficiency. We've minimised work at height, reduced the need for workers, and eliminated complex rigging. Installation time was cut from eight hours to two per segment, and we achieved 50% savings on temporary works and resources, as well as 75% in tower crane costs. Plus, it's fully reusable, offering an environmental benefit."

Gammon

The project team has also garnered multiple accolades in recognition of its exemplary safety performance, with 2024 highlights including Gold in the Considerate Contractors Site Award, Gold for Project Manager Dick Yuen at the Outstanding OSH Employee Award, and the Grand Award in the Joyful@Healthy Workplace Programme by the Occupational Safety & Health Council.



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We value and encourage dialogue on our sustainability initiatives. Feedback provides insight that helps us to better communicate what is important and of interest to our stakeholders. We encourage questions or comments by contacting: sustainability@gammonconstruction.com

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