

Protecting Our Planet



In response to the worsening climate and environmental challenges, we are committed to creating spaces that exist in harmony with the planet, minimising environmental impacts, and contributing positively to the natural world. Environmental stewardship is a core element of our strong commitment to sustainability. For example, all our operations have environmental systems certified by ISO 14001:2015. With a vision for a sustainable future, we are committed to reducing carbon emissions, improving energy efficiency, and increasing the use of renewable energy. By adopting green building principles, we create climate-resilient, energy-efficient spaces that support biodiversity and thrive with nature. We also promote circular business practices to minimise waste and collaborate with stakeholders to drive collective action towards a low-carbon, sustainable future. Through these ongoing efforts, we aim to create environments where both humans and nature can thrive together.



25.1%

Reduction in 2023's carbon intensity from a 2020 base year



65%

Of existing properties with BEAM Plus/LEED/WELL building certificates¹



>38,000

Plastic bottles recycled through reverse vending machines installed at our sites



1st time

Responding to the Taskforce on Nature-related Financial Disclosures ("TNFD") recommendations, showcasing our efforts as an early adopter

¹ Covers the number of Provisional Assessment and Final Assessment certificates for Existing Buildings as of 30 June 2024.

Innovating Green Building Design

Demonstrating Green Building Leadership

Sustainable building has been a key aspect of the Group's sustainability strategy, reflecting our strong commitment to environmental responsibility and safeguarding the planet. Recognising that construction and property development account for a significant part of our environmental impact, we prioritise energy and resource efficiency to minimise the environmental footprint of our projects while enhancing the well-being of occupants. Our new developments incorporate advanced sustainable features, including Building Information Modelling ("BIM"), Modular Integrated Construction ("MiC") method, smart IoT systems, and Multi-trade Integrated Mechanical, Electrical, and Plumbing ("MiMEP"), demonstrating our commitment to innovative and environmentally responsible design.

Establishment of Guidelines for Sustainable Design and Procurement

Our commitment to green building is driven by our Guidelines for Sustainable Design and Procurement ("the Guidelines"), which provide clear instructions for every

stage of property development, from selecting service providers to the design and construction phases. The Guidelines are structured to promote sustainability in property development by supply chain management, providing a comprehensive framework and checklists for tenderers and contractors. The Guidelines include pre-qualification and qualification checklists, prioritising tenderers who demonstrate strong sustainability practices through bonus requirements. Furthermore, to implement sustainable designs, products and services, and strive to achieve Net Zero, the Guidelines also specify sustainable KPI checklist as well as the additional sustainable features checklist containing the innovative and sustainable technologies. Additionally, an incentivised penalty system has been implemented to encourage service providers to reduce consumption on the natural resources and damage to the Earth by upholding high standards in project delivery and green design performance. Through these measures, we strive to lead our way in green building development. In 2024, we updated the sustainability selection criteria and procedures outlined in the Guidelines to strengthen our commitment to environmental responsibility. Key updates include the introduction of a pre-qualification check for any environmental-related litigation or arbitration cases, as well as the requirement for tenderers to be signatories of decarbonisation initiatives as part of the tender qualification process. To align with our carbon reduction roadmap, we have added Zero-Carbon-Ready Building Certification by Hong Kong Green Building Council ("HKGBC") to our sustainable KPI checklist. Furthermore, we have incorporated Scope 3 GHG emissions and embodied carbon requirements into the sustainable KPIs for all new major projects, mandating that main contractors monitor and report on Scope 3 emission performance and reduction efforts.



Our Commitment

100%

New major project to attain the 2nd-highest rating of BEAM Plus, and target the 2nd-highest rating for LEED and WELL.



Our Achievements

27

BEAM Plus certified*

2

LEED certified

65%

Of existing properties with BEAM Plus/ LEED/WELL building certificates²

1

Registered under BEAM Plus and WELL for new developments

2

WELL certified*

² Covers the number of Provisional Assessment and Final Assessment certificates for Existing Buildings as of 30 June 2024.

(* Covering both Provisional and Final Assessment certificates in BEAM Plus and both Pre-certified and Certified projects in WELL as of June 2024.)

Highlights of Our Green Projects



Tung Chung Business Hub

Located on the northwestern coast of Lantau Island in Hong Kong, Tung Chung East is envisioned as a cutting-edge hub for business and commerce. The project has been designed in alignment with Platinum ratings under BEAM Plus NB Version 2, LEED Version 4 BD+C Core and Shell, and WELL Building Standard Version 2.

Embodied Carbon

The adoption of BIM and MiMEP will improve productivity and reduce construction waste. To further reduce embodied carbon during construction, contractors will be required to use early power-on systems, which enables electrification at the early stages of construction to reduce the energy consumption powered by other energy sources. They will also be encouraged to use battery energy storage and bio-diesel generators for temporary power to further support sustainable energy practices.

Sustainable Mechanical, Electrical, and Plumbing Systems

The project is designed to incorporate a district cooling system to enhance energy efficiency by optimising the design and sizing of pumps, pipes, and fittings. The installation of electrically commutated plug fans will further reduce energy consumption. Additionally, building-integrated photovoltaics solar fins on the south-facing façade and roof-mounted PV panels will generate renewable energy to offset

carbon emissions. It targets an annual energy utilisation index ("EUI") of 76 kWh/IFA m² for the landlord office area, 31% lower in comparison to the Electrical and Mechanical Services Department's benchmark for Grade A Office.

Smart IoT Systems

The project has planned a robust network for occupants by implementing Wi-Fi 6E, 5G, or the most advanced technology available at the time of installation. It will also integrate an AI-enabled digital twin, a smart car park management system, an access control system, AI-powered video analytics for CCTV, and future-proof infrastructure. These advanced features would enable real-time monitoring, analysis, and optimisation of building performance, enhancing operational efficiency and adaptability.



Tung Chung Traction Substation Residential Development

The residential development at Tung Chung Traction Substation has been designed to achieve provisional Platinum ratings under BEAM Plus NB Version 2.0 and WELL Building Standard Version 2 Precertification. The MiC technique will be employed to develop approximately 2,000 flats. This approach shall enable significant reduction of construction waste and noise pollution while enhancing productivity.

Low Carbon Construction

The project will incorporate a green concrete initiative and use low-carbon construction materials in the MiC modules for the residential portion. These measures can significantly reduce embodied carbon emissions, contributing to a more sustainable built environment.

Natural Ventilation and Acoustic Comfort

The project is designed with the concept of prioritising occupant wellbeing and environmental comfort. Air Ventilation Assessment will ensure the development supports natural wind flow, reducing the urban heat island effect and improving outdoor comfort for residents and pedestrians. UV-C sterilisation technology can enhance occupant health by minimising the risk of infectious diseases, while acoustic treatments in residential units balance air flow with noise reduction, ensuring a comfortable living environment.

Smart Monitoring

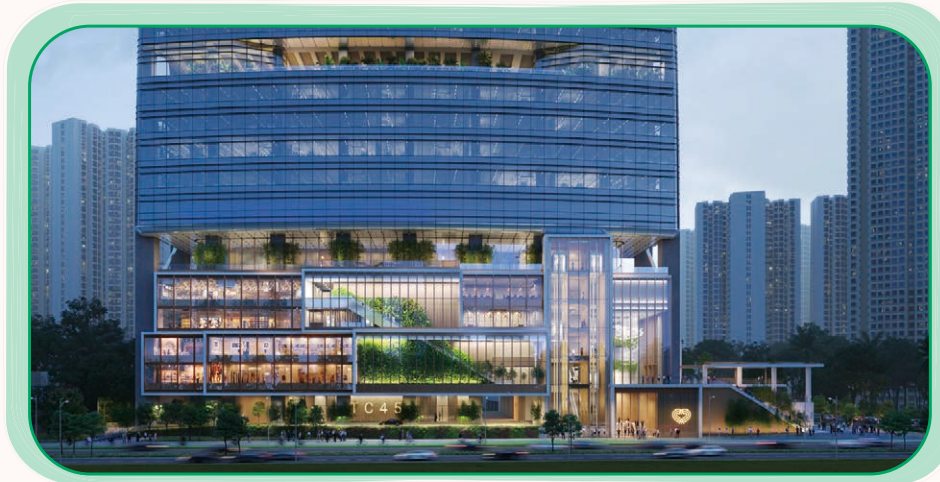
Advanced smart systems enhance operational efficiency and safety. A smart drainage network will be adopted to monitor water levels and hazardous gases in real-time, improving response to potential risks. The Smart Site Safety System shall integrate IoT technology to monitor construction activities, reducing risks by alerting workers to potential hazards and ensuring compliance with safety standards. These innovations will enhance workplace safety and optimise site management.

Embracing Innovation and Sustainability in Construction Practices

The Group has adopted MiMEP in various projects as part of our commitment to sustainable and efficient construction practices. MiMEP is an innovative construction approach where mechanical, electrical, and plumbing systems are prefabricated off-site in a controlled environment, then transported and assembled on-site.

This method offers numerous benefits, including enhanced construction efficiency, improved quality control, reduced material waste, and shorter project timelines. By minimising on-site work, MiMEP also contributes to a safer working environment and lowers carbon emissions associated with traditional construction processes.

Tung Chung Business Hub



As a project for business and commerce of the Group, Tung Chung Business Hub shall adopt MiMEP in its pump rooms, fan rooms, and air handling unit rooms to improve productivity and reduce construction waste.

Lee Garden Eight



Lee Garden Eight, a joint venture commercial property development project of the Group and Hysan Development, incorporates MiMEP across 85% of the project, achieving Hong Kong's highest private sector adoption rate while reducing environmental impact, enhancing worker safety, and improving overall construction efficiency.

Sustainable Construction Materials

Ensuring our projects being steered by environmentally friendly practices has been our top commitment, as we strive to reduce the noticeable impacts of our embodied carbon and construction materials on the environment and natural resources. We have adopted a design thinking approach that considers the entire life cycle of building materials, from sourcing to disposal, to minimise our ecological footprint. To achieve this, we use materials from renewable and recycled sources, employ energy-efficient technologies and promote waste reduction and recycling. For instance, One Hennessy has adopted 100% low VOC content materials and wood-based products that are free of urea-formaldehyde. More than 20% of the construction material used are from recycled materials, and over 50% of the wooden building materials used are FSC-certified. In addition, the construction waste recycling rate of the project is over 94%.

Our commitment to sustainable building practices aligns with our goal of creating properties that are aesthetically appealing, fully functional, cost-effective, environmentally responsible and resilient. The Guidelines for Sustainable Design and Procurement encourages the adoption of Construction Industry Council ("CIC")-certified green products or equivalent alternatives as construction materials in our major projects. For all new building projects, embodied carbon from raw material acquisition to handling is included in the sustainable KPI checklist. Additionally, aligning with our sustainability goals, particular alteration and addition projects must achieve at least a 10% reduction in embodied carbon for major construction materials, compared to the project's estimated total embodied carbon without incorporating green construction materials.

Case Study: Sustainable Construction Materials used in Nina Park



To reduce carbon emissions, Nina Park has fully adopted green concrete that received platinum certificate by the CIC Green Product Certification Scheme during the construction phase. This resulted in 41.6% less carbon emissions compared to traditional approach, equivalent to 260.3 tCO₂ saved.



Speeding Up Green Transition

Performance Highlights



25.1%

Reduction in 2023's carbon intensity from a 2020 base year



>38,000

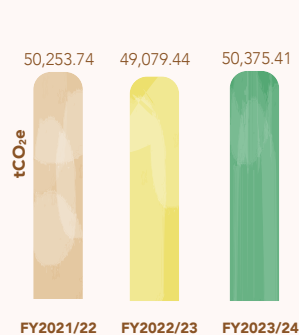
Plastic bottles recycled through reverse vending machines installed at our sites



167 tonnes

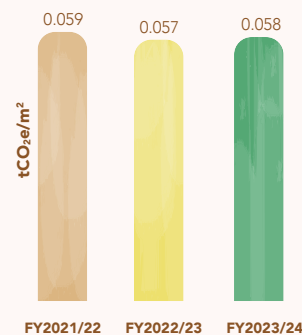
Of food waste divert from ending up in landfills, a 38% increase compared to the previous Reporting Period

Total Carbon Emissions³ (Scope 1 & 2)*

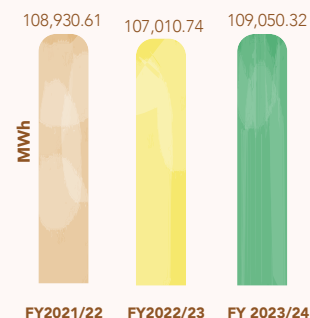


(*Location-based method)

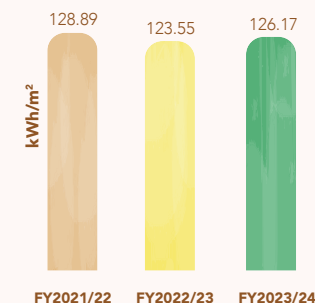
Carbon Emissions Intensity³ (Scope 1 & 2)*



Total Energy Consumption³



Energy Intensity³



³ During FY2023/24, our energy intensity and carbon intensity increased by 2.1% and 2.9%, respectively, compared to FY2022/23 due to increase in our property occupancy and operations. For example the lease out rate at Nina Tower increased by 20%, leading to an 8.7% increase in overall electricity consumption in the building. The guest room nights of our hotels also increased by over 30% compared to previous Reporting Period.

Managing Our Energy Usage and Carbon Footprint

In response to the urgent call to address climate change and sustainability, we have embarked on a transformative journey towards a sustainable future. Our ambitious “Chinachem Group Carbon Reduction Roadmap – CCG 3050+” (“CCG 3050+”), is aligned with the 1.5°C pathway which has been endorsed by the Science Based Targets initiative (“SBTi”). Through CCG 3050+, our goal is to reduce operational carbon intensity in Scope 1 and 2 by 51.8% and Scope 3 carbon intensity from capital goods, downstream leased assets, and waste generated in operations by 20% by 2030, with 2020 levels serving as the benchmark.

We initiated several green projects to accelerate our sustainability journey, including advancing renewable energy deployment, replacing the chiller system at Nina Tower, upgrading chillers at multiple properties such as Lucky Plaza, Leighton Plaza and Two Chinachem Plaza, launching Cooling as a Service (“CaaS”) in Flora Plaza and adopting energy efficiency measures in One Hennessy and Nina Hospitality’s hotels and residences. We remain dedicated to pursuing further opportunities for green transformation and reducing our environmental impact.

Advancing Renewable Energy Deployment

Increasing usage of renewable energy is essential for advancing our transition toward low-carbon operations. We are actively installing renewable energy systems, including solar photovoltaic (PV) panels, across our properties. For example, the solar PV panels installed at Nina Tower generated 28,681 kWh of renewable energy during the Reporting Period. Furthermore, we acquired 99,875 kWh of Renewable Energy Certificates (“RECs”) from local providers, a 97% increase compared to the previous year.

To raise our clean energy consumption, we will continue to identify opportunities to grow renewable energy generation across our portfolio and secure off-site renewable electricity options wherever feasible.



28,681 kWh

Of renewable energy generated during the Reporting Period

167% increase

Compared to the previous year

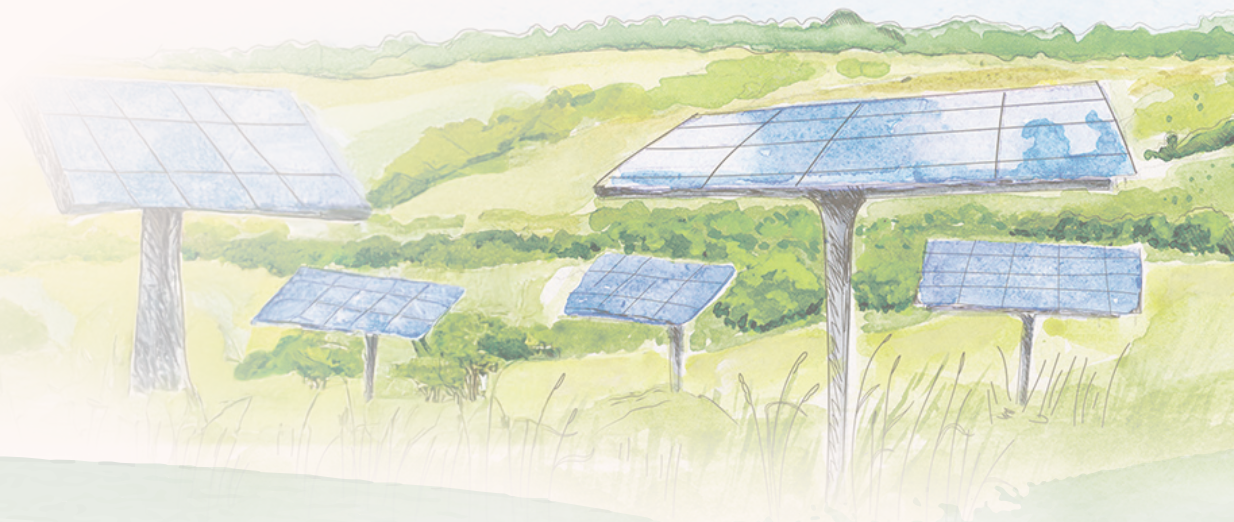


99,875 kWh

Of Renewable Energy Certificates acquired from local providers

97% increase

Compared to the previous year



Nina Tower Zero-Carbon Chiller System Replacement

Since 2023, we partnered with a local energy provider to introduce Hong Kong's inaugural zero-carbon chiller system at Nina Tower. Utilising cutting-edge technology, the advanced water-cooled air conditioning system incorporates Artificial Intelligence ("AI") for efficient management, continuous real-time monitoring, and round-the-clock onsite maintenance. This setup not only provides energy-efficient air conditioning services for the entire complex but also leads to a significant reduction in carbon emissions.

The primary enhancements include transitioning from air-cooled to water-cooled chiller systems, for reduced energy consumption, water recycling for flushing to conserve resources and integrating advanced control technologies like AI and machine learning to optimise chiller performance.



These advancements are estimated to cut annual energy usage by up to

45%



Slashing approximately

6,300

tons of CO₂ emissions

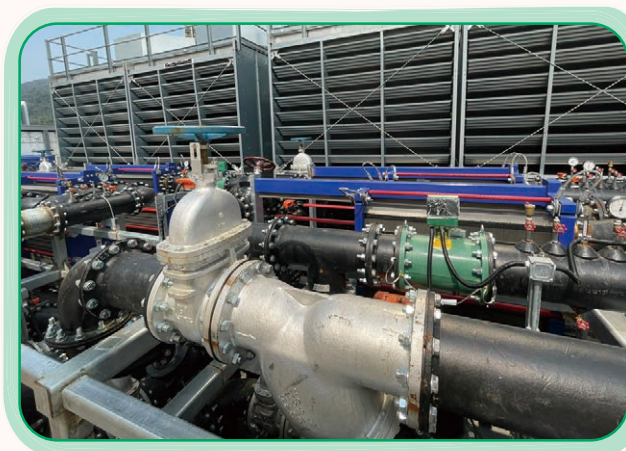
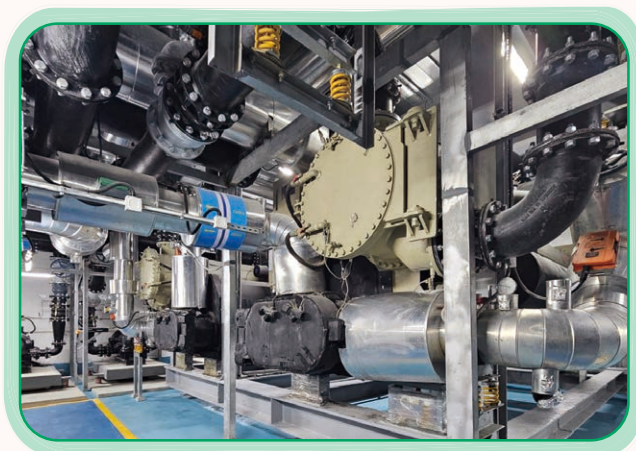


Yearly equivalent to planting

274,000

trees

Another environmentally conscious upgrade involves using the eco-friendly refrigerant, which has a significantly lower impact on the environment compared to the standard refrigerant. Besides operational sustainability, green practices extend to the construction phase, with the adoption of MiMEP practices and BIM to prefabricate key components off-site, ensuring precise installation and minimising construction waste.



Cooling as a Service at Flora Plaza

In a collaborative effort, the Group joined forces with a local energy provider and a property developer partner to launch a new Cooling as a Service initiative at Flora Plaza in Fanling. Expected to boost energy efficiency by 50% and cut electricity use by 15%, the new system will save 500,000 kWh annually, equivalent to powering 160 households or reducing 200 tonnes of carbon emissions. The AI-managed PlantPRO system ensures optimal cooling adjustments based on data and indoor conditions, enhancing Flora Plaza's shopping experience and the Group's sustainable development efforts.

Enhancing Energy Efficiency through Strategic Measures

To drive energy efficiency and sustainability in our properties, including One Hennessy and Nina Hospitality's hotels and residences, we have introduced a comprehensive set of initiatives. These include the deployment of a sophisticated building management system, installation of occupancy sensors in closets to optimise lighting usage, transition to energy-efficient LED lighting solutions, implementation of charter governing external lighting, adoption of high-efficiency water pumps, utilisation of water-cooled chillers for enhanced cooling efficiency, and the incorporation of a high-efficiency lift system.



One Hennessy

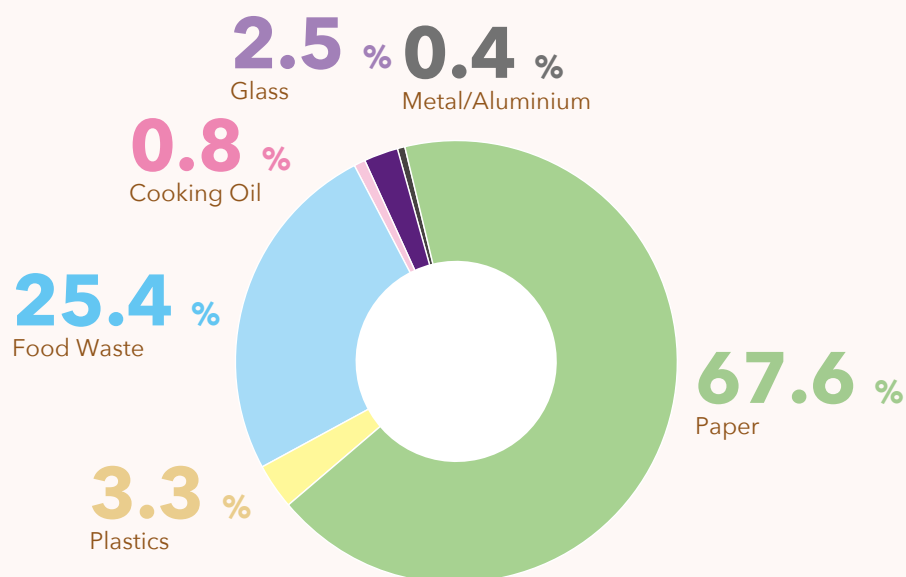
Nina Hospitality's hotels and residences

Sustainable Waste Handling

We understand the vital need to minimise waste and are committed to reshaping our business methods to align with a circular economy. Our waste reduction efforts extend beyond project design and construction. We are committed to implementing strategies to prevent waste in our operations and utilising digital tools and technologies to minimise resource consumption and actively reduce waste. Besides reducing waste within the Group, we also understand the importance of creating positive impact outside the Group. For example, the REACT Campaign carried out a range of community engagement programmes, aiming to educate and empower the public on waste reduction, recycling practices, and to promote shift towards more environmentally friendly habits.

Performance Highlights

Composition of Materials Recycled (Non-hazardous waste)



Total Amount of Materials Recycled



Paper Reduction Strategies

In line with our digital transformation journey, we have initiated several programmes to phase out traditional paper-based processes, including utilising the Intelligent Property Management System ("iPMS"), adopting eco-friendly products and practices. These initiatives aim to enhance productivity and significantly cut down on paper usage within our operations.

To reduce paper usage in the workplace, we implemented the iPMS, which marks a significant advancement in our approach to managing office buildings. This system facilitates the generation of paperless work orders for maintenance assignments, thereby decreasing the volume of physical paperwork in our operational processes.

To facilitate paperless workflows and improve material stocking, we have upgraded the functionality of the Electronic Request and Approval Platform ("eRAP"). This enhancement allows for the completion of additional administrative tasks online, including expense reimbursement.

A collection of large, colorful Easter eggs decorated with various patterns like zig-zags, polka dots, and floral designs, displayed on a green surface with a small white bunny figurine in the foreground.

Food wastage plays a considerable role in the waste stream directed towards landfills in Hong Kong. During the Reporting Period, we managed to divert over 167 tonnes of food waste from ending up in landfills, a 38% increase compared to the previous Reporting Period. This conscientious effort of redirecting food waste resulted in the reduction of a significant quantity of greenhouse gas emissions. For example, we encourage our guests to bring their own reusable containers to take home any excess coffee grounds at our buffet restaurants for personal use, thereby reducing food waste and promoting eco-friendly practices.



Water Conservation

We prioritise water conservation efforts within our business, despite its minimal impact on local water resources. Our commitment to the collective responsibility of preserving water and averting scarcity is unwavering. To this end, we vigilantly monitored water consumption in our buildings and have implemented various water-saving mechanisms. These initiatives encompass installation of water meters, water flow regulators, automatic taps, and water-saving showerheads. Furthermore, we modified landscape irrigation schedules to reduce evaporation. As part of our efforts to promote a culture of water conservation, we proactively educate our colleagues, tenants, residents, and hotel guests about the significance of preserving water.

Nina Hospitality promotes sustainable practices by incorporating a message card in hotel rooms. This card enlightens guests about the hotel's water conservation initiatives and provides guidelines on engaging in the linen and towel reuse programme. Our goal is to decrease water and energy usage and encourage guests to participate in our sustainability endeavours.

Performance Highlights

Total Amount of Water Consumption⁴



Water Intensity⁴



⁴ During FY2023/24, our water intensity increased by 10.2% compared to the previous Reporting Period, mainly due to the increase of guest room nights of our hotels by over 30% compared to FY2022/23.



Sustainable Sourcing

As a community developer with varied operations, we recognise our impact across the value chain. We work closely with suppliers and business partners to integrate sustainability at every level. During the Reporting Period, we updated the Group's sustainable procurement guidelines to align with Environmental Protection Department, Hong Kong SAR Government Green Procurement standards. Alongside our departmental Standard Operating Procedures ("SOP") for Procurement, we strive to enhance our sourcing practices in purchasing, design, and construction processes, prioritising local suppliers to reduce our carbon footprint.

Sustainable Cuisine and Delicacy

Food sustainability has been a major environmental concern, and the Group is committed to offering delicious dishes that embody sustainability. Our Cantonese cuisine restaurant, RÚ, adopts the sustainable development concept by primarily using local ingredients, thereby supporting environmental protection efforts.

The restaurant's menu features an extensive selection of 90 meticulously crafted dishes, including sustainable seafood, vegetarian choices, and farm-to-table creations. We prioritise using local ingredients such as hydroponic vegetables, free-range chicken and eggs, farmed Sabah fish, and canned crab meat, which are more environmentally friendly options. Endangered seafood species are excluded, supporting our commitment to sustainable procurement. Many of our restaurants source sustainably in alignment with WWF guidelines. Additionally, we have recently partnered with the Lever Foundation, a non-profit organisation, to ensure that all Food and Beverage operations at Nina Hospitality exclusively use cage-free eggs by 2025.



Promoting Sustainability with Our Stakeholders

Implementing effective sustainability practices requires collective action and collaboration. To engage our stakeholders, we have expanded our green initiatives through industrial collaboration, customer engagement campaigns, education, and awareness programmes. These include organising Chinachem Group Sustainability Conference, seeking partnerships in decarbonisation, and conducting regular events on sustainable living and working environment.

Chinachem Group Sustainability Conference 2023



Chinachem Group Sustainability Conference 2023, organised in partnership with the Hong Kong Green Building Council, was held at Nina Hotel Tsuen Wan West under the theme “Pioneering an Inclusive Net-Zero Future for Hong Kong”.

Aligned with the Government’s Climate Action Plan 2050, which outlines the vision of “Zero-carbon Emissions · Liveable City · Sustainable Development”, the conference aimed to explore innovative strategies to accelerate Hong Kong’s transition towards a more inclusive and carbon-neutral future. This year’s event attracted over 2,600 participants, recording an increase in attendance of over 50% compared to the previous year and featured 16 esteemed international and local speakers. Experts from government, academia, the architecture, technology, gerontology, and finance sectors, alongside representatives from professional bodies and environmental advocacy groups, shared their insights on critical topics such as policymaking, Hong Kong’s carbon market, green construction and design, partnership for impact, and youth engagement.

Entering New Sustainability Partnership to Explore More Decarbonisation and Electrification Opportunities



Chinachem Group and CLP Power Hong Kong Limited signed a Memorandum of Understanding in November 2023 to strengthen collaboration on energy efficiency, decarbonisation, and electrification. The partnership supports our evolving business directions and our ambitious CCG 3050+ decarbonisation targets by enhancing operational efficiency and advancing sustainability initiatives.

"Ho Ho Sustain" Festive Campaign to Promote Sustainability

In December 2023, the Group launched the "Ho Ho Sustain" festive campaign, designed to encourage socially and environmentally conscious choices through a range of sustainable activities hosted across the Group's malls, hotels, and Central Market. From interactive workshops and eco-friendly gift options to festive culinary experiences and a New Year countdown event, the campaign aimed to make the holiday season both impactful and sustainable.



Central Market ESG Events - "Net Zero Earth Day"



In support of Earth Day 2024 and to raise public awareness of environmental protection, the Group actively participated as a venue partner in various sustainability events, for example, the "Net Zero Earth Day" event held at Central Market.

Building Climate Resilience in Our Places

We recognise the possible risks and opportunities that climate change may present to our operations. Our disclosures make reference to the recommendations of IFRS S2 Climate-related Disclosures (“IFRS S2”) and Task Force on Climate-Related Financial Disclosures (“TCFD”), across the four essential pillars: governance, strategy, risk management and metrics and targets.

Governance on Climate-related Issues

The ESG Steering Committee, which is chaired by the CEO, is responsible for overseeing the Group’s overall ESG strategies, reviewing and endorsing plans and monitoring the progress. The ESG Planet Sub-Committee ensures climate-related considerations are effectively embedded into strategic decision-making and daily operations. More details on our ESG governance structure can be found in the “Strengthening Our ESG Governance Structure” section.

The ESG Department drives Group-wide initiatives and coordinates with business units to assess and monitor climate-related risks and opportunities. This supports strategic planning and contributes to the sustainability of property lifecycles.

Strategy on Climate-related Issues

We recognise the significant impacts of climate change and are dedicated to responding effectively. In pursuit of this goal, we have developed climate-resilient strategies and policies that guide our response. Our Climate Change Policy serves as our guideline to integrate climate change considerations into the decision-making process of the Group’s businesses, activities, supplies, products and services and mitigate the impact of our business operations on the climate.

To guide our transition to a low-carbon society, we have released “CCG 3050+” roadmap, aligning with the 1.5°C pathway and approved by SBTi. This strategic roadmap underscores the Group’s commitment to achieving significant carbon reductions across our operations and value chain, supporting our efforts to combat climate change and drive sustainable development.

To promote sustainability, minimise environmental impact, adopt sustainable designs, and strive for Net Zero, the Group has implemented and updated the Guidelines for Sustainable Design and Procurement that guides the sustainability considerations of the project design and construction processes, specifying both mandatory and optional sustainability elements to ensuring that our projects consistently meet and exceed sustainable design standards.

Since 2021, the Group has implemented a Green Finance Framework to leverage sustainable financing for eligible green and social projects that support our business strategy and vision. As of 30 June 2024, we have jointly secured 34.7 billion (HKD) of sustainable financing, including five green loans and two sustainability-linked loans.

The Group recognises that businesses need to address both physical and transition risks associated with climate change, as these risks are affecting our properties, operations, supply chain, and the safety and well-being of our employees. Alongside the challenges posed by climate change, there are also significant opportunities to be explored. We have identified climate-related risks and opportunities that could bring potential impacts to our business and operations.

To mitigate potential disruptions and bolster our resilience against climate-related risks, as well as capitalise on emerging opportunities, the Group has diligently devised tailored responses and strategies. These robust measures are aimed at minimising potential losses, accelerating the transition to a low-carbon economy, and fortifying our ability to adapt to the evolving risks posed by climate change.

Impacts and Responses to Physical and Transition Risks

Physical Risk Drivers

Potential Impacts to the Group

Areas for Consideration

Drought Stress



- Increased water consumption costs
- Reduced access to potable water

- Inspect systems regularly to fix leaks
- Upgrade to water-saving fixtures and recycling systems

Heat Stress



- Reduced tenant and occupant comfort
- Higher energy consumption for cooling

- Conduct energy audits and upgrade insulation, façades, and windows to improve efficiency
- Maintain and replace HVAC systems with energy-efficient models and advanced features
- Monitor weather warnings and use shading devices to reduce heat gain and cooling loads

Hurricanes and Typhoons



- Significant building damage and loss
- Increased risk of ignition and explosion

- Conduct regular inspections to identify structural wear or instability
- Secure outdoor and rooftop equipment with stable bases and anchor bolts
- Inspect, repair, and upgrade to impact-resistant windows and doors
- Train staff on emergency protocols for hurricanes and typhoons

Wildfire



- Damage to building infrastructure
- Property loss and safety hazards

- Use fire-resistant building materials and install barriers to slow fire spread
- Designate multiple evacuation routes for safe exits during emergencies

Surface Water Flood and Coastal Flood



- Damage to building infrastructure
- Increased repair cost for basements and critical utilities
- Business interruptions leading to loss of revenue
- Floodwater can block access routes

- Install flood barriers at main entrances and sump pumps to manage water during floods
- Regularly clear drains, gutters, and downspouts to prevent blockages
- Enhance emergency plans, train staff on flood prevention protocols, and monitor weather warnings
- Designate multiple evacuation routes for accessibility during emergencies

Landslide



- Damage to foundations
- Landslides can block access routes
- Business interruptions leading to loss of revenue

- Inspect slopes and vegetation regularly, and plant deep-rooted vegetation to prevent erosion and enhance stability
- Monitor landslip warnings and designate multiple evacuation routes for safety

Transition Risk Drivers**Potential Impacts to the Group****Areas for Consideration****Policy and Legal**

- Strengthened regulations, building codes and standards on building energy efficiency
- Hong Kong's plan to establish carbon pricing scheme and the launch of the China trial carbon trading market
- Additional operating cost for GHG emissions

- Conduct building energy audits to ensure compliance
- Develop internal future-proof targets to prepare ahead for regulatory transition to more stringent building codes
- Review material sources of carbon exposure from time to time and estimate the financial impact on the Group's operations
- Conduct a comprehensive study on Internal Carbon Pricing ("ICP") to explore the conceptual framework of ICP and details on implementation to advance our climate transition

Technology

- Emerging technologies in building construction and property management

- Invest in green technology and commercially viable alternative construction materials
- Leverage partnerships with different stakeholders to drive innovative solutions for sustainable development
- Proactively support tech ventures to translate research outcomes into real-world solutions to foster the Group's climate and energy transition capabilities

Market

- Growing expectations from customers for green and energy efficient properties

- Integrate sustainability, technology and innovation into our building design and daily operation
- Develop internal future-proof targets to further meet consumer demand on green building space

Reputation

- Higher expectations from customers and more stringent climate disclosure requirements from financiers, impacting how company manages and discloses its climate risk and opportunities

- Enhance sustainability disclosure and continue to disclose our ESG-related information annually
- Continue to conduct climate risk assessment, disclose potential climate risks, and enhance the breadth and depth of the disclosure
- Strengthen engagement efforts with tenants and relevant stakeholders in climate resilience and sustainability

Strategies to Harness Opportunities

Climate Opportunities

Digitalisation and PropTech



- Implementation of new technologies in building construction and property management to address the climate transition needs, such as the use of smart technologies to enhance energy saving

- Conduct feasibility studies and integrate sustainability, technology and innovation into our building design and daily operation
- Adopt research and development ("R&D") on smart technology adoption in buildings
- Develop smart apps and consumer engagement technology on low carbon living
- For more information, please refer to the "Cultivating Technological Solutions through Strategic Partnerships" sections of this Report

Consumer Preference



- Growing expectations from customers for green and energy efficient properties, which will require for innovations, strategies, and systems to compete for higher rents and valuations
- Decreased asset valuation of properties with high climate exposure

- Integrate sustainability, technology and innovation into our building design and daily operation
- Set targets on obtaining green building certifications. Currently, the Group aims to attain the 2nd-highest rating of BEAM Plus for 100% new major project, and target the 2nd-highest rating for LEED and WELL
- For more information, please refer to the "Innovating Green Building Design" and "Managing Our Energy Usage and Carbon Footprint" sections of this Report

Renewable Energy Growth



- Adoption of renewable design and renewable resources as the ways to decarbonise buildings, such as the use of solar panel and energy

- Conduct feasibility studies to expand renewable energy use and green technology adoption
- Consider renewable energy as building option
- Procure Renewable Energy Certificates to support renewable energy initiatives

Green Finance



- Increasing trend of green and sustainable finance, allowing businesses to access lower-cost capital which incentivise investment in green and climate-resilient projects and R&D

- Continue to invest more in low carbon projects and enhancement of sustainability performance and obtain funding
- Consider enhancing disclosure of use of proceeds and progress achieved by projects funded by existing green loans to demonstrate credibility
- For more information, please refer to the "Investing in Sustainability" section of this Report

Risk Management on Climate-related Issues

A robust climate risk management is crucial for a successful journey towards decarbonisation. Our Group has adopted an active approach to ensure accurate identification of climate risks based on the latest scientific research, and we are making significant progress towards achieving our climate goals. In addition, climate-related consideration has been integrated into the Group's Enterprise Risk Management ("ERM") framework. As part of this framework, we will identify, assess and address the potential impacts of climate-related risks on our operations, supply chain and business model, alongside other risks. This holistic approach will enhance the management of climate-related topics and improve our overall resilience against the changing climate.

Based on the identified climate-related risks, the Group has conducted scenario analysis to better understand the potential impacts of climate change over the short, medium, and long term. For the climate-related physical risk assessment study and scenario analysis, it comprises 42 existing buildings and five new construction project sites. We

have considered the exposure of assets to climate hazards under different scenarios and each building's vulnerability. The assessment evaluated various climate hazards, including drought stress, heat stress, hurricanes and typhoons, wildfire risk, surface water floods, coastal floods, and landslides. We also conducted a scenario analysis for transition risks and estimated the potential financial implications for the identified transition risks and opportunities detailed in our scenarios.

Physical Risks

Understanding climate exposure involves developing scenarios to project future changes in variables. For physical risks scenario analysis, downscaled climate change projections were sourced from the Intergovernmental Panel on Climate Change ("IPCC"), NASA, the Hong Kong Observatory, and academic research. Three climate scenarios and three time horizons of short, mid and long-term have been selected to evaluate future risks.

Climate Projections of Physical Risks Scenario Analysis

Timeframe	Representative Year
Short-term	2030
Mid-term	2050
Long-term	2100

Climate Scenario	Description	Global Surface Temperature Increase (by 2100)
SSP1-2.6/Low-Emission	Low-emission, sustainable future, aligned with Paris Agreement	1.8°C
SSP2-4.5/Moderate Emissions	Moderate emissions and climate policies, balanced view	2.7°C
SSP5-8.5/High-Emissions	High-emission, fossil fuel-intensive, limited climate policies, high-contrast	4.4°C

Physical Risks Assessment

To understand the potential impacts of increased physical risks for our portfolio, we have mapped projected changes in climate variables to the locations of our properties. Based on this, we have evaluated the overall risks of each property by incorporating

both its exposure and vulnerability to specific climate hazards. The charts below show the proportion of our properties with different levels of risks to the climate hazards under different scenarios.

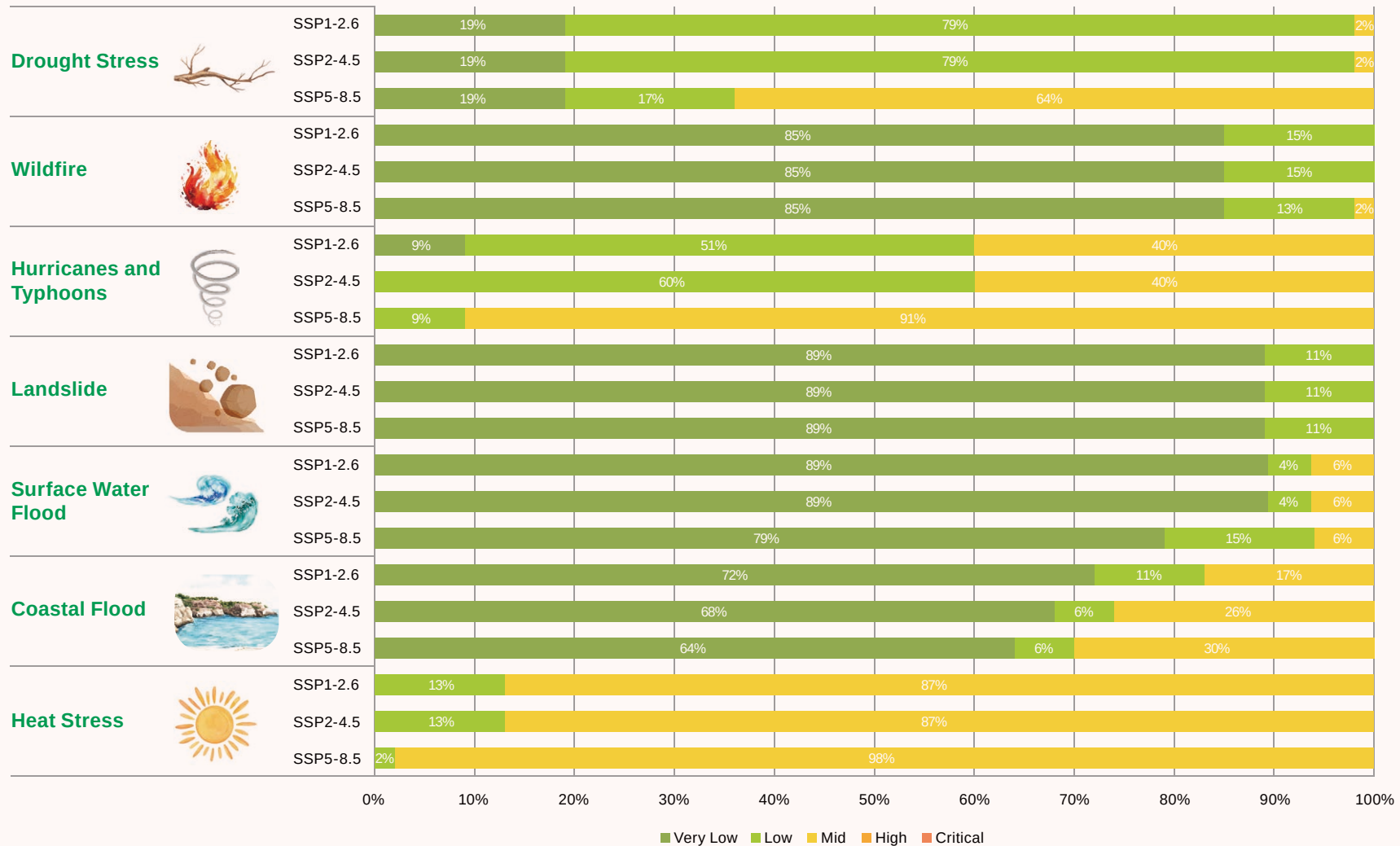
Proportion of Portfolio by Overall Physical Risk Levels in 2030



Proportion of Portfolio by Overall Physical Risk Levels in 2050



Proportion of Portfolio by Overall Physical Risk Levels in 2100



Financial Impact Assessment of Physical Risks

Additionally, we have assessed the associated financial impacts to evaluate how these risks and opportunities could influence our business operations, strategies, and overall financial performance. We conducted a comprehensive Value at Risk ("VaR") assessment to quantify potential financial impacts associated with identified physical climate hazards, providing a quantitative measure of the potential financial exposure of our assets to climate-related risks under different scenarios and timeframes. The VaR assessment results are minimal and immaterial across all climate hazards, scenarios and timeframe, indicating that none are currently considered to be material from a financial perspective.

Transition Risks

Transition risks and opportunities identified by the Group are supplemented by the latest literature and data to provide both qualitative narratives and quantitative modelling for the transition risks scenario analysis. The downscaled projections of the climate system, economy, and energy sector were obtained from Network for Greening Financial Services ("NGFS") and International Institute for Applied Systems Analysis ("IIASA"). The Group has referenced two highly contrasting transition scenarios to enable planning for both best- and worst-case outcomes. Future risks are assessed across three time horizons of short, medium, and long term, same as those used in physical risk assessment.

Climate Projections of Transition Risks Scenario Analysis

Climate Scenario

Description

Current Policies (3°C + of warming)

This scenario assumes that only currently implemented policies are preserved. Emissions grow until 2080 leading to approximately 3°C of warming

Slow developments of low carbon technology or market changes are expected

Net Zero 2050 (1.5°C of warming)

This scenario assumes that ambitious climate policies are introduced immediately. Net CO₂ emissions reach zero around 2050, giving at least a 50% chance of limiting global warming to below 1.5°C by the end of the century

Rapid developments of low carbon innovation and technology including carbon removal are expected

¹ The VaR assessment assumes a business-as-usual case, without incorporating potential mitigation measures or investments. For financial loss estimation, the 95th percentile data was applied to account for the risks of more severe extreme weather events with low probabilities, which could result in much greater losses than typical case, while the 50th percentile data was used for quantitatively scoring the typical risk level of the buildings.

Financial Impact Assessment of Transition Risks

To assess the key impacts and financial implications of the Group's identified transition risks and opportunities, we have mapped relevant financial impact parameters to these risks and opportunities and conducted scenario analysis. The profit and loss implications are quantified and expressed as percentage changes in carbon and energy costs, providing a clearer view of potential financial exposure.

Under the Net Zero 2050 scenario, we anticipate a significant rise in carbon tax beginning in the 2030s and extend from 2100s onwards. Under the Current Policies scenario, the notable increase in carbon tax is expected to start from the 2050s onward. Furthermore, a substantial reduction in electricity costs is expected to commence in the 2030s and extend from 2100s onwards under the Current Policies scenario. Meanwhile under the Net Zero 2050 scenario, the reduction in electricity costs is expected to begin in 2050s and extend beyond the 2100s.

Metrics and Targets on Climate-related Issues

To address climate change risks, we have set ambitious climate-related targets – CCG 3050+ to define our pathway to reduce carbon emissions in line with the Paris Agreement goals to help limit the global temperature increase to 1.5°C above pre-industrial levels. We continue to monitor and disclose key climate-related metrics.

Science-Based Targets

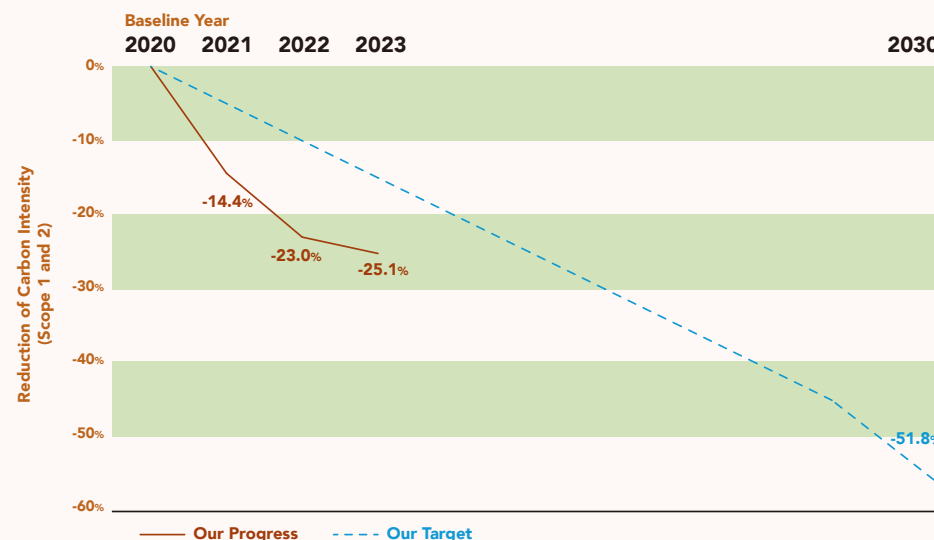
In January 2022, the Group received validation from the Science Based Targets Initiative ("SBTi") that the Group's carbon reduction targets – CCG 3050+ fulfil the conditions for limiting global warming to 1.5°C. SBTi is the globally most recognised organisation for evaluating and approving scientifically based reduction goals pledged by businesses without considering any CO₂-compensating climate projects. The Group is the second real estate developer in Hong Kong to complete this validation.

These approved SBTs are:

- Reduce operational carbon intensity under Scope 1 and 2 by 51.8% by 2030 from a 2020 base year; and
- Reduce Scope 3 carbon intensity from capital goods, downstream leased assets and waste generated in operations by 20%.

Trends of Scope 1 and 2 Emissions

We target to lower our operational carbon intensity under Scope 1 and 2 by 51.8% by 2030 from a 2020 base year. In 2023, the carbon intensity reduced 25.1% from a 2020 base year, further from 23.0% in 2022.



Protecting Ecosystems - Our Commitment to Biodiversity Enhancement

The Taskforce on Nature-related Financial Disclosures (“TNFD”) was established in 2021, aiming to integrate nature considerations into financial decisions and promote investments that benefit the environment. We have demonstrated our strong support to TNFD by officially committed to be an inaugural Early Adopter.

We are a silver member of the World Wild Fund for Nature Hong Kong, and have signed pledges such as the No Shark Fin Restaurant Pledge and the Earth Hour Pledge. These initiatives showcase our determination to conserve natural resources and advocate for sustainable practices. We are committed to incorporating nature into our properties:

Nina Park

- Diverse plant community of a variety of native trees, shrubs, and flowering plants with 30% green area coverage
- Provide suitable habitat for nesting sites with green corridors



One New Street Square in London, UK

- Biophilic design, incorporating 6,300 plants, 1,500 sq ft of green walls, landscaped terraces



Governance on Nature-related Issues

The ESG Steering Committee, which is chaired by the CEO, is responsible for overseeing the Group's overall ESG strategies, reviewing and endorsing plans and monitoring the progress. More details on our ESG governance structure can be found in the "Strengthening Our ESG Governance Structure" section.

The Group's commitment to environmental and nature protection is evident through our various policies including the Climate Change Policy, Sustainability Policy, and Sustainable Procurement Policy. Moreover, the Group emphasises ecosystem balance in operations and procurement, assessing suppliers' adherence to nature-related standards. We have integrated robust governance mechanisms into our supply chain management and are committed to monitoring nature-related impacts through controls and grievance mechanisms. The Group also engages with local stakeholders and hosts an annual Sustainability Conference to address nature-related issues.

Strategy on Nature-related Issues

We recognise the interconnectedness of our business with natural resources and are committed to responsibly and sustainably managing our dependencies, impacts, risks, and opportunities associated with nature. Our strategy commences with a comprehensive evaluation of our use of resources, such as water, land, and biodiversity to ensure the resilience and sustainability of our operations. We actively strive to reduce our environmental footprint by embracing innovative technologies and methods that cut down on resource consumption and waste generation. To address potential risks, we regularly assess environmental impacts and engage in proactive risk management, including the formulation of contingency plans for natural disasters and resource scarcity. Moreover, we identify significant opportunities in supporting nature-friendly initiatives, such as investing in renewable energy, sustainable supply chains, and projects that enhance urban biodiversity. Through nurturing a strong bond with nature capital, our objective is to bolster our business resilience in the long term, contribute to ecosystem health, and create value for our stakeholders and the communities we engage with.

Risk and Impact Management on Nature-related Issues

In 2024, we commenced our first TNFD study in line with the TNFD framework, specifically adopting the LEAP (Locate, Evaluate, Assess, Prepare) approach. We have embarked on this journey to better understand our impacts and dependencies on nature, and to manage the associated risks and opportunities.

Our LEAP Assessment Scope and Framework

Our LEAP assessment covers our 62 crucial assets, including hotels and residences, construction projects, residential, industrial, and commercial properties in Hong Kong. Through the implementation of the LEAP approach, we have identified the locations of our operations and supply chains in critical ecosystems, evaluated our impacts and dependencies on nature, assessed the associated risks and opportunities, and devised strategies to lessen adverse effects and leverage beneficial outcomes. We have conducted stakeholder engagement to obtain insights from stakeholders on the actual dependencies and impacts on the nature specific to the Group.

Locate

In the Locate phase, we examined the geographical distribution of our operations and their interactions with the natural surroundings. The aim was to pinpoint priority zones where these interactions could yield substantial risks or opportunities to guide our decision-making processes. Our prioritisation was based on the proximity of operational sites to areas of significant biodiversity value (e.g. IUCN red list) through the utilisation of tools such as the Integrated Biodiversity Assessment Tool ("IBAT"), WWF Risk Filter, and comprehensive desktop research.

In conducting the location-based analysis, we have shortlisted 23 sites that are in close proximity to crucial biodiversity areas. We have carried out an assessment to identify impacts and propose potential mitigation strategies.

Evaluate

When assessing the dependencies and impacts related to nature throughout the real estate value chain, we have undertaken an in-depth analysis. This evaluation offers a glimpse into the interactions between each aspect of the value chain and natural ecosystems, emphasising notable areas of concern and opportunities for enhancement. By employing the ENCORE (Exploring Natural Capital Opportunities, Risks, and Exposure) database, as advised by TNFD, as well as the insights from stakeholder engagement, we have identified top five nature dependency and impact topics for our value chain.

Top Five Nature Dependency Topics



Mass Stabilisation and
Erosion Control



Ground Water and
Surface Water



Climate Regulation



Mediation of Sensory Impacts



Flood and Storm Protection

Top Five Nature Impact Topics



Soil Pollutants



Water Pollutants



Non-GHG Air Pollutants



Solid Waste



Water Use

Assess and Prepare

The LEAP approach recommends that for better integration of nature-related considerations in businesses, a company should identify and prioritise the nature-associated risks and opportunities associated with the most significant impacts and dependencies highlighted during the initial "Locate" and "Evaluate" phases. As per TNFD, nature-related risks refer to potential hazards that organisations encounter due to their interactions with nature and society at large. The Group has acknowledged the nature-related risks and opportunities that could influence our operations, outlined in the table presented below.

Physical Risks

Risks	Potential Impacts	Risk Mitigation
Biodiversity Loss: Construction activities near protected areas and key biodiversity zones may negatively impact local biodiversity.	- Increased costs for biodiversity mitigation measures (e.g. flood barriers, enhanced site management) - Potential delays in project timelines due to stricter environmental regulations	- Conduct pre-development biodiversity assessments for new development projects, ensuring minimal impact on surrounding ecosystems - Establish a robust compliance framework to ensure adherence to environmental regulations - Implement monitoring and reporting mechanisms for construction activities
Resource Scarcity: Supply chain disruptions for essential raw materials due to resource scarcity and ecosystem degradation	- Project delays due to unavailability of materials - Raw materials extracted from ecologically sensitive areas may incur additional costs to comply with regulations	- Diversify suppliers to reduce dependency on single sources - Enforce compliance with the Supplier Code of Conduct, prioritising suppliers with certified sustainable practices - Optimise resource efficiency by adopting efficient construction practices to minimise consumption, such as MiC method at ECHO HOUSE
Natural Disasters: Ecosystem degradation may reduce natural barriers, increasing vulnerability to natural disasters	- Increased costs for disaster recovery and infrastructure repairs - Potential damage to property and business continuity	- Ensure all new major development project achieve the second-highest sustainable building assessment scheme rating (such as BEAM Plus, LEED and WELL certifications) - Integrate climate-resilient infrastructure (e.g. flood barriers) and biophilic design (e.g. green roofs) in new development projects - Collaborate and support institutions and NGOs to conserve and protect biodiversity, such as partnering with The Green Earth to organise beach and trail clean-ups and supporting The University of Hong Kong and Lingnan University in conducting an Insect Pollinator Survey at Nina Park
Pollution: Air and noise pollution from construction activities may harm local ecosystems and communities	- Increased health and safety costs, potential legal claims, and fines - Negative community relations and opposition to future projects.	Use low-emission and quieter construction methods, such as adoption of electric-powered construction equipment, MiC and MiMEP methods

Transition Risks

Risks	Potential Impacts	Risk Mitigation
Policy and Regulatory: Stricter regulations on biodiversity, land use, and environmental impact assessments ("EIAs")	- Increased compliance costs and potential project delays - Risk of fines and legal repercussions for non-compliance	- Proactively monitor and align with emerging policies and regulations - Participant in industry coalitions (e.g. policy groups of Hong Kong Green Building Council, Business Environment Council and Hong Kong Green Finance Association) to advocate for balanced regulations - Conduct regular training on environmental compliance
Market Risks: Fluctuating prices of alternative construction materials	- Budget unpredictability and potential delays in project schedules - Risk of reduced competitiveness if sustainable materials are not prioritised	- Build strategic partnerships with certified sustainable suppliers - Incubate and invest in R&D for innovative, low-environmental-impact solutions (e.g. "CCG Accel - Powered by HKSTP" accelerator programme and partnering with NAMI to green building technology)
Reputational: Increased public scrutiny and awareness of biodiversity and sustainability issues	- Potential decline in revenue and customer trust - Increased costs for marketing and public relations efforts	- Disclose nature-related performance annually via TNFD-aligned reports - Engage with stakeholders through different channels (e.g. focus groups and surveys allowing stakeholders to report environmental concerns and feedback)
Technological: Growing market preference for alternative construction materials with lower environmental and biodiversity impacts	- Higher procurement costs for sustainable materials - Lagging behind industry innovation curves	Incubate and invest in R&D for innovative, low-environmental-impact solutions (e.g. "CCG Accel - Powered by HKSTP" accelerator programme and partnering with NAMI to green building technology)
Liability: Potential liability arising from non-compliance with environmental regulations or damage caused by the Group's activities	- Legal costs and potential fines for regulatory breaches or environmental harm claims - Restoration costs to remediate damaged ecosystems - Long-term reputational damage leading to decreased customer trust and loss of business opportunities	- Establish a robust compliance framework to ensure adherence to environmental regulations - Implement monitoring and reporting mechanisms for construction activities - Engage with stakeholders through different channels (e.g. focus groups and surveys allowing stakeholders to report environmental concerns and feedback)

Opportunities

Opportunity Types	Opportunities and Potential Impacts	Opportunity Management
Sustainable Buildings and Certifications	- Increased demand for sustainable-certified properties in Hong Kong's competitive market - Higher rental premiums and tenant retention due to sustainable-focused designs (e.g. BEAM Plus and WELL certifications) - Enhanced market positioning as a leader in sustainability	- Integrate biophilic design (e.g. green walls at Nina Tower) and blue-green infrastructure (e.g. rainwater harvesting at Nina Park) to enhance sustainability and biodiversity - Ensure all new major development project achieve the second-highest sustainable building assessment scheme rating (such as BEAM Plus, LEED and WELL certifications)
Resource Efficiency and Circular Economy	- Cost savings through reduced material waste and energy/water consumption - Compliance advantages with Hong Kong's tightened waste disposal regulation	- Adopt MiC method at ECHO HOUSE and recycled materials (e.g. ceiling products with 96% recycled content in Shun Fook Barn) to reduce construction waste - Install net-zero carbon chillers at Nina Tower and LED lighting/water-saving fixtures across hotels - Conduct proper sorting and recycling waste at construction sites
Eco-Tourism and Community Engagement	- New revenue streams through biodiversity-focused offerings and activities - Strengthened community relations and loyalty via educational initiatives	- Explore eco-tours and workshops at Nina Park, highlighting pollinator habitats - Partner with The Green Earth to organise beach and trail clean-ups
Innovation and Partnerships	- First-mover advantage through adoption of cutting-edge sustainable technologies - Easier access to sustainable financing for TNFD-aligned projects	- Incubate and invest in R&D for innovative, low-environmental-impact solutions (e.g. "CCG Accel - Powered by HKSTP" accelerator programme and partnering with NAMI to green building technology - Participate in policy groups of Hong Kong Green Building Council, Business Environment Council and Hong Kong Green Finance Association to shape future regulations
Reputation and ESG Leadership	Aligning with international guidelines (e.g. TNFD recommendations) to improve ESG ratings and market evaluation	- Publish TNFD-aligned disclosure with third-party verification - Showcase biodiversity efforts (e.g. Nina Park's pollinator habitats) in marketing campaigns

Metrics and Targets on Nature-related Issues

We have pinpointed nature-related physical and transition risks and opportunities, and we have identified relevant metrics on spatial footprint, state of nature, resources, and capital deployment to facilitate the monitoring and tracking of nature-related performance. We are exploring on the selection and adoption of the identified metrics and establishing our approach to acquire reliable data for the specified metrics. Short- to long-term objectives will be established for the material metrics with substantial nature-related dependencies and impacts, allowing them to align with the overarching strategy.