粉嶺皇后山邨
Queens Hill Estate, Fanling

Environmental Report

環保報告

粉嶺山麗苑
Shan Lai Court, Fanling

管治架構

房屋署環保健康安全委員會由房屋署署長擔任主席，負責就房委會的環境、健康、安全及可持續發展事宜制訂政策和策略方針。

綠色建築認證

房委會設計和建造的建築物，必須符合香港綠色建築議會綠建環評新建建築的評估標準。這項評估用於評核新建建築物生命周期內的環保特性。我們的目標是讓所有新建建築物達到金級標準或以上。2024/25年度落成的建築物所獲的綠建環評新建建築評級表列於下頁：

綠色生活

環保工作目標

Governance

Chaired by the Director of Housing, the Housing Department Environmental, Health and Safety Committee is responsible for developing and formulating policies and strategic directions in the areas of environment, health, safety and sustainability of HA.

Green Building Recognition

Buildings designed and constructed by HA must meet the assessment criteria of the Hong Kong Green Buildings Council (HKGBC)'s Building Environmental Assessment Method Plus for New Buildings (BEAM Plus NB), which provides a lifecycle assessment of the environmental attributes of new buildings. We aim for achieving the Gold rating standard or above for all new buildings. The BEAM Plus NB ratings for buildings completed in 2024/25 are shown in the table on the next page:

Green Living

Environmental Targets

建築項目 Project

新建建築1.2版暫定評級（金級）NB V1.2 Provisional Assessment (Gold)

葵涌大窩口道公營房屋發展計劃第一期 Public Housing Development at Tai Wo Hau Road Phase 1, Kwai Chung
葵涌大窩口道公營房屋發展計劃第二期 Public Housing Development at Tai Wo Hau Road Phase 2, Kwai Chung
觀塘德田街公營房屋發展計劃 Public Housing Development at Tak Tin Street, Kwun Tong

新建建築2.0版暫定評級（金級）NB V2.0 Provisional Assessment (Gold)

東涌第109區公營房屋發展計劃 Public Housing Development at Tung Chung Area 109
啟德第2B3號地盤公營房屋發展計劃 Public Housing Development at Kai Tak Site 2B3
啟德第2B4號地盤公營房屋發展計劃 Public Housing Development at Kai Tak Site 2B4
樂富聯合道公營房屋發展計劃 Public Housing Development at Junction Road, Lok Fu
葵涌石梨街公營房屋發展計劃 Public Housing Development at Shek Li Street, Kwai Chung
將軍澳影業路公營房屋發展計劃 Public Housing Development at Ying Yip Road, Tseung Kwan O
東涌第42區公營房屋發展計劃第一期和第二期 Public Housing Development at Tung Chung Area 42 Phases 1 and 2
粉嶺新運路公營房屋發展計劃 Public Housing Development at San Wan Road, Fanling
美東邨（較舊部分）重建計劃 Redevelopment of Mei Tung Estate (Older Part)
薄扶林南華景街公營房屋發展計劃 Public Housing Development at Wah King Street, Pok Fu Lam South
元朗橫洲B號地盤公營房屋發展計劃 Public Housing Development at Wang Chau Site B, Yuen Long

新建建築1.2版最終評級（金級）NB V1.2 Final Assessment (Gold)

啟翔苑 Kai Cheung Court
錦駿苑 Kam Chun Court
和田邨 Wo Tin Estate 1
菁田邨 Ching Tin Estate
荔景邨恒景樓 Heng King House, Lai King Estate
裕雅苑 Yu Nga Court
麗瑤邨喜瑤樓 Hei Yiu House, Lai Yiu Estate
愉德苑 Yu Tak Court

新建建築2.0版最終評級（鉑金級）NB V2.0 Final Assessment (Platinum)

青富苑 Ching Fu Court 2

1

屯門和田邨
Wo Tin Estate, Tuen Mun

2

青衣青富苑
Ching Fu Court, Tsing Yi

零灌溉系統 — 節約用水

零灌溉系統收集雨水，用以澆灌花圃，大大節省保養屋邨綠化空間的耗水量。零灌溉系統自2016年起用於新公營房屋項目，截至2024/25年度完結，合共44個屋邨已裝設該系統。

Zero Irrigation System (ZIS) – Water conservation

ZIS is an irrigation system for planters that collects and reuses rainwater, significantly reducing the amount of water needed to maintain estate greenery. ZIS has been used in new public housing projects since 2016. By the end of 2024/25, ZIS had been installed in 44 estates.

微氣候研究與空氣流通評估

為作出更佳的環境決策，我們在設計屋邨時進行微氣候研究及空氣流通評估，以檢視地盤和建築物的各項環境因素，例如風氣流、建築物自然通風、日光照射、熱舒適度、空氣污染物排放等。此舉有助我們優化設計，減少能源消耗和碳排放。

Micro-climate studies & Air Ventilation Assessment

To make better environmental decisions when designing estates, we use micro-climate studies and Air Ventilation Assessments for environmental factors such as wind flow, natural building ventilation, daylight penetration, thermal comfort, and air pollutant emissions in relation to estate sites and buildings. This facilitates a better design for reductions in lowering energy usage and carbon emissions.

啟德啟欣苑設置零灌溉系統，植物生長茂盛
A flourishing garden adopted ZIS at Kai Yan Court, Kai Tak

將軍澳昭明苑平台花槽設有零灌溉系統
Podium planters utilising ZIS at Chiu Ming Court, Tseung Kwan O

位於上水的零灌溉系統
Planters with ZIS in Sheung Shui

大埔富蝶邨善用布局，在住宅大廈間留下通風走廊，加強自然通風
The domestic blocks at Fu Tip Estate, Tai Po are positioned to form open breezeways for better natural ventilation

環保材料

我們多年來強制使用綠色建材，以粒化高爐礦渣粉，取代35%用於建造預製外牆、預製樓梯、預製板間牆、預製混凝土板和預製垃圾槽的水泥。我們最近與學者和本地混凝土供應商探討以大量粒化高爐礦渣粉取代水泥的可行性，並擴展其應用範圍至公營房屋項目的地基樁柱、樁帽和其他混凝土構件。

新工程項目採用的環保材料規格，均與「綠建環評新建建築2.0版」所訂的標準一致，並定期檢討更新，以符合香港綠色建築議會「綠色產品認證及標準計劃」的準則。

Green materials

Over the years, 35% of the cement used to produce precast facades, precast staircases, precast partition walls, precast concrete panels and precast refuse chutes has been replaced by the mandatory use of green construction material Ground Granular Blast-furnace Slag (GGBS). Currently, we are working with academics and local concrete suppliers to explore the possibility of using high volumes of GGBS to replace cement, and extending its application to foundation piles, pile caps and other concrete members in public housing developments.

The specifications for green materials that are included in our new works projects are all aligned with BEAM Plus for New Buildings version 2.0. We regularly review and update our specifications to align with the HKGBC's Green Product Accreditation & Standards Scheme.

我們的合作研發機構在先導計劃的試驗樁應用粒化高爐礦渣粉前，就不同配比的礦渣粉混凝土配方進行測試（左起）
Our collaborative research institute conducted tests on different GGBS concrete formulations (from left) before applying GGBS to the test piles of a pilot project

碳排放量估算

碳排放量估算讓我們估算樓宇在生命周期內的二氧化碳排放量，相關資訊可用作減少碳排放；也有助在整個項目周期中，為個別住宅大廈以至整個屋邨訂立碳排放量基準，方便比較不同大廈和屋邨的碳排放表現。

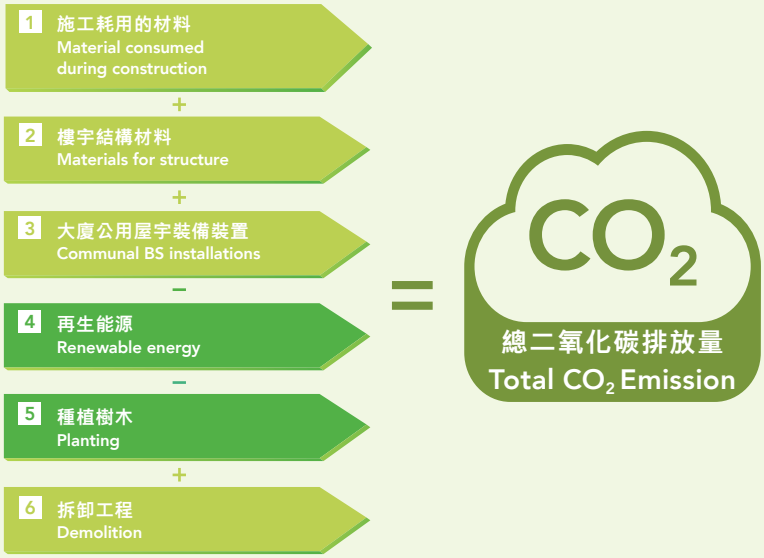
施工期間耗用材料、製造樓宇結構材料、公用屋宇裝備裝置耗電，以至拆卸工程，均會產生二氧化碳。碳排放量估算涵蓋上述各項的二氧化碳排放量，並計及使用可再生能源和綠化活動所抵銷的排放量。這些數據對制訂可行的改進方案及優化屋邨設計的長遠持續發展，至為重要。

Carbon Emission Estimation (CEE)

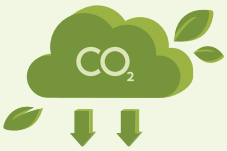
The CEE enables us to assess the carbon dioxide emissions of buildings over their life cycles, information that can be used to reduce carbon emissions. Implementing the CEE allows us to establish emission benchmarks for both individual housing blocks and entire housing estates throughout the project cycle. These benchmarks facilitate comparisons of the emissions performances across various buildings and estates.

The CEE encompasses carbon dioxide emissions arising from materials consumed during construction, materials used in structures, the electricity consumed by communal building services (BS) installations, and demolition activities. It also considers the emission off-sets generated by renewable energy applications and greening activities. This data is vital for setting achievable improvement goals and enhancing the long-term sustainability of our estate designs.

碳排放量估算
Carbon Emission Estimation

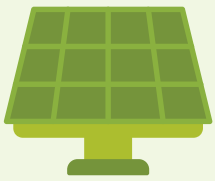


已進行估算的項目共
Conducted for
17 個
projects



自採用這估算方法至今，估計碳排放量減少
Estimated reduction in carbon emissions since roll-out by
18%

光伏發電系統
PV Systems



已安裝於 **162** 幢新住宅大廈，
總發電容量為
Installed in 162 new domestic blocks,
with a total system capacity of
1 486 千瓦 kW

東區小西灣邨的柔性太陽能光伏發電系統
A flexible PV system at Siu Sai Wan Estate in Eastern District

可再生能源

我們十多年來為新建公共屋邨安裝已接駁電網的太陽能光伏發電系統，並參與本港電力公司的上網電價計劃。這些光伏系統以可再生能源發電，目前的供電量不少於每幢大廈公用電力需求的1.5%。

2024/25年度，我們在現有公屋大廈加裝28個柔性太陽能光伏發電系統，並繼續在現有屋邨物色其他合適大廈，安裝光伏發電系統。

Renewable energy

We have been installing grid-connected photovoltaic (PV) systems in new PRH estates for over a decade, as well as participating in the feed-in tariff schemes of Hong Kong's electricity supply companies. Currently, our PV systems are producing renewable energy that accounts for at least 1.5% of each building's communal electricity consumption.

In 2024/25, we retrofitted another 28 flexible solar PV systems at existing PRH blocks. We will continue to identify other PRH blocks in existing estates that are suitable for PV systems.

將軍澳昭明苑
Chiu Ming Court, Tseung Kwan O

設計階段的**49**幢住宅大廈中，
公用地方屋宇裝備裝置的平均能源消耗量設定為
Average energy consumption of BS installations in communal areas of 49 domestic blocks at design stage is

每年每平方米
20.63 千瓦時 kWh/m^2/per annum

節約能源

房委會屋邨住宅和非住宅範圍的無障礙通道已設置二級光度照明系統和高效節能發光二極管（即LED）照明器。新升降機系統以高效節能的無齒輪裝置驅動，配備永磁同步電機，效率更高、更可靠。此外，功率八千瓦或以上的升降機系統則配備再生電力功能。

公眾教育方面，我們鼓勵公屋租戶養成習慣，在使用能源時更注重可持續發展原則。我們所有新建住宅大廈入口大堂均已安裝「智能計量儀監察系統」，顯示該大廈及鄰近大廈每月的電力、煤氣和食水耗用量，培養租戶節能意識，並營造積極節能氛圍，激勵大家儉用能源。

現有公屋大廈公用地方的照明裝置如有損壞，一律更換為發光二極管凸面照明器；至於傳統的出口指示燈牌和方向指示燈牌，也更換為高效節能的發光二極管指示牌。

Energy conservation

Both domestic and non-domestic areas of HA estates utilise two-level lighting systems for barrier-free access, as well as energy-efficient LED luminaires. Our new lift systems run with energy-efficient gearless drives that utilise permanent magnet synchronous motors for enhanced efficiency and reliability, and regenerative power is used for lift systems with motor ratings of 8kW and above.

On the public education front, we encourage PRH tenants to adopt more sustainable energy habits. The Smart Meter Monitoring and Energy Information Display Systems being installed at the main entrance lobbies of all our new domestic blocks display each block's monthly consumption of electricity, gas and fresh water, as well as the consumption of neighbouring blocks. This information helps foster public awareness of energy conservation, and spurs friendly competition in energy-saving.

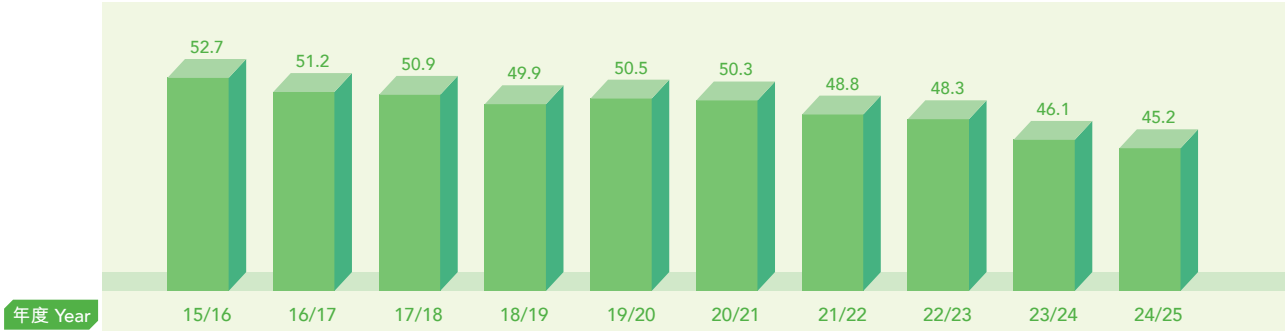
We continue to replace defective public lighting fixtures with LED bulkheads in all the communal areas of existing PRH blocks, as well as replacing conventional illuminated exit and directional signs with energy-efficient LED versions.

智能計量儀監察系統
A Smart Meter Monitoring and Energy Information Display System

粉嶺皇后山邨
Queens Hill Estate, Fanling

觀塘坪石邨（左）和深水埗榮昌邨
Ping Shek Estate, Kwun Tong (left) and Wing Cheong Estate, Sham Shui Po

屋邨公眾地方的用電量
Electricity consumption in the public areas of estates



碳審計工作

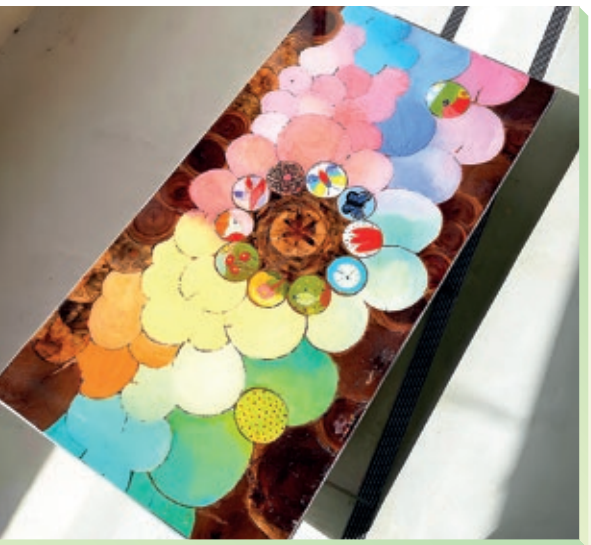
今年，我們繼續為選定的14幢典型住宅大廈進行定期碳審計，監察碳排放情況。有見近年落成的非典型設計公屋大廈愈來愈多，房委會將根據其能源設計標準，挑選另外三幢非典型公屋大廈，納入碳審計工作。

Carbon audit

This year we continue to carry out regular carbon audit exercises in 14 selected typical domestic blocks to monitor their carbon emissions. Given the rising number of non-standard block designs introduced, we will select three more non-typical blocks for conducting carbon audits from the recently completed PRH projects based on the energy design standards adopted.

較2011/12年度
14幢典型住宅大廈的碳足跡平均
Against 2011/12 carbon footprint of 14 typical housing blocks on average

↓29%



青衣青康路北第一、二期公營房屋發展計劃所砍伐的樹木獲回收，用於社區參與工作坊，製作藝術品和長凳
Felled wood from Phases 1 and 2 of Ching Hong Road North, Tsing Yi was salvaged and used in community engagement workshop to produce artworks and wooden benches

公共屋邨的綠化環境與樹木管理工作

園林廢物處理及升級再造

在新建房屋項目工地和現有公共屋邨砍伐樹木後，適用的木材將送往由環境保護署營運的園林廢物回收中心「林•區」，切碎後再造成蓋土物或其他合適產品。

綠化改善工作

年內我們在20個公共屋邨進行綠化改善工作，鋪設草坪和栽種多款花卉植物，營造綠意盎然、空氣清新的宜居環境、靜謐的休憩處，供居民享用。

為確保邨內樹木健康生長，不會危及居民安全，我們每年都進行樹木風險評估。檢查員通過房委會網上「企業樹木管理系統」的流動應用程式，可輕易找到樹木位置並記錄樹木狀況。房委會中央電子樹木數據庫則利用「地理信息系統」，儲存最新的樹木數據。

我們定期邀請熱心居民參與「屋邨樹木大使」計劃，協助監察樹木，至今已招募約1 280名成員（包括約600名學生）。

Greening and Tree Management in PRH Estates

Yard waste treatment and upcycling

When trees are felled at our new housing project sites and existing PRH estates, suitable timber will be sent to Y • PARK, the yard waste recycling centre operated by the Environmental Protection Department, for shredding and recycling into mulch or other appropriate products.

Greening improvement

Greening improvements through the introduction of lawns and a diverse range of flowering plants were carried out at 20 PRH estates during the year. Such improvements helped create pleasant living environments, offering lush greenery, fresh air, and peaceful spots for residents to enjoy.

To ensure the trees on our estates remain healthy and pose no safety issues for residents, we carry out a tree risk assessment exercise every year. Using HA's web-based Enterprise Tree Management System via a mobile app, tree inspectors are able to easily locate individual trees and record their condition. HA's centralised electronic tree database, which utilises the Geographic Information System, keeps our tree data up to date.

We regularly invite keen local residents to join our Estate Tree Ambassador (ETA) scheme and help with our tree monitoring work. Currently there are about 1 280 ETAs (including around 600 pupils).

公屋租戶齊參與

舉辦綠化活動

我們肩負的環保工作，還包括鼓勵公屋居民關注環保和可持續發展議題、舉辦環保活動等，讓租戶為社區環保出一分力。年內，我們在10個屋邨舉辦植樹日，在20個屋邨推行一系列綠化活動，並在10個屋邨推行社區農圃計劃；又利用Facebook專頁、房屋資訊頻道、海報、橫額等媒介，向居民宣傳環保措施，加強公眾教育。

Engaging PRH Tenants

Organising green activities

Among our environmental responsibilities are those of raising awareness of green and sustainability issues among our PRH communities, and organising green events that give tenants an opportunity to play their part in "going green". During the year, we organised tree planting days in 10 estates, held a series of greening activities in 20 estates, and conducted community garden programmes in 10 estates. Channels such as Facebook, the Housing Channel, and displays of posters and banners were used throughout the year to publicise our green initiatives and further our public education efforts.

小學生參與「屋邨樹木大使」活動
An ETA activity joined by primary school pupils

荃灣石圍角邨植樹日
A Tree Planting Day at Shek Wai Kok Estate, Tsuen Wan

環保辦公室
Green Offices

房委會辦公室的用電量
（與2018/19基準年相比）
Electricity consumption in HA offices
(against the base year 2018/19)

↓13.92%

超過目標減幅的6%（與2018/19基準年相比）
Exceeded our target of a 6% reduction (against the base year 2018/19)

房委會辦公室的耗紙量
達到在運作環境相若的基礎上維持與2023/24年度水平相若的目標
Paper consumption in HA offices –
Meeting the target of maintaining comparable consumption to that of 2023/24 under comparable operating conditions

房委會總部的用水量
達到在運作環境相若的基礎上維持與2023/24年度水平相若的目標
Water consumption in HA Headquarters (HAHQ) –
Meeting the target of maintaining comparable consumption to that of 2023/24 under comparable operating conditions

統計數字摘要 Summary of Statistics

新工程項目及現有屋邨 New Works Projects and Existing Housing Estates

能源消耗 Energy Consumption	已消耗能源 Energy consumed
現有屋邨的能源消耗量（千瓦時）Energy consumption in existing housing estates (kWh)	
屋邨公眾地方的用電量 Electricity consumption in public areas of estates	425 160 420
屋邨公眾地方的平均用電量（每戶每月） Average electricity consumption in public areas of estates (per flat/month)	45.20
太陽能光伏板產生的可再生能源量 Renewable energy generated from PV panels	1 564 718
建築工程承建商的能源消耗量（千兆焦耳）Energy consumption by construction contractors (GJ)	
建築活動的柴油消耗量 Diesel consumption for construction activities	2 105 598
運送建築廢料的柴油消耗量 Diesel consumption for transportation of construction waste	4 215 278
建築活動的用電量 Electricity consumption for construction activities	50 005
合約車輛的汽油消耗量 Gasoline consumption for contract cars	22 839

溫室氣體排放 Greenhouse Gas (GHG) Emissions	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
現有屋邨住宅大廈的溫室氣體排放強度（公噸二氧化碳當量／平方米）GHG emission intensity in existing housing domestic blocks (tonnes CO_2e/m^2)						
各住宅大廈類型的平均數 Average of domestic block types	0.024	0.024	0.024	0.023	0.022	0.021

水資源管理 Water Management	用水量 Water consumed	回收再用水量 Water recycled
新工程項目（立方米） New works projects (m^3)	3 309 078	910 588
現有屋邨公眾地方（立方米） Public areas of existing housing estates (m^3)	2 373 904	–

廢物管理 Waste Management	處理方法 Handling Method		
	已回收循環再造 Recycled	已運往公眾填土區 Public fill	已運往堆填區 Landfill
新工程項目的廢物處理量（公噸）Amount handled in new works projects (tonnes)			
有害廢物 Hazardous waste	125.68	–	30.95
非有害廢物 Non-hazardous waste	694 311	2 307 454	480 579
現有屋邨的廢物處理量（公噸）Amount handled in existing housing estates (tonnes)			
非有害廢物 Non-hazardous waste			
廢紙 Paper	24 080	–	–
塑膠 Plastic	2 540	–	–
鋁罐 Aluminium cans	1 890	–	–
舊衣物 Used clothes	700	–	–
玻璃樽 Glass bottles	535	–	–
月餅盒 Mooncake boxes	11	–	–

房委會辦公地點 HA Office Premises

能源消耗 Energy Consumption	已消耗能源 Energy consumed
房委會辦公室的能源消耗量（千瓦時）Energy consumption in HA office premises (kWh)	
用電量 Electricity consumption	30 760 586
平均用電量（每名員工）Average electricity consumption (per staff)	3 040

物料使用 Materials Consumption	已使用物料 Materials consumed
房委會辦公室的物料使用量 Materials consumption in HA office premises	
耗紙量（令／員工）Paper consumption (reams/staff)	12.54

水資源管理 Water Management	用水 Water consumed
房委會辦公室的用水量（立方米）Water consumption in HA office premises (m^3)	
房委會總部 HAHQ	9 742
房委會總部（每名員工）HAHQ (per staff)	2.35

廢物管理 Waste Management	已回收循環再造 Recycled	已運往公眾填土區 Public fill	已運往堆填區 Landfill
房委會總部的廢物處理量（公噸）Amount handled in HAHQ (tonnes)			
有害廢物 Hazardous waste			
碳粉盒 Toner cartridges	2	–	–
慳電膽及光管 Fluorescent lamps and tubes	2	–	–
非有害廢物 Non-hazardous waste			
一般廢物 General waste	–	–	157
廢紙 Paper	143	–	–

將軍澳昭明苑的平台花園
Podium garden of Chiu Ming Court, Tseung Kwan O