The ICC team applies IoT technology for

Proactively growing the Group's sustainable property portfolio

In recent years, Environmental, Social and Governance (ESG) has become a hot topic. More and more corporates are increasingly reviewing the sustainability of their business to enhance the disclosure of relevant information. In keeping with its Building Homes with Heart spirit, the Group is dedicated to providing premium products and services to its customers. It was among the first batch of property developers in Hong Kong to incorporate sustainable elements in all aspects of property management and operations. Currently, the Group has various types of developments in Hong Kong and on the mainland that have received green building certificates or other sustainable building certificates. Over 95% of the Group's ongoing construction sites (by total gross floor area) in Hong Kong have registered with Building Environmental Assessment Method (BEAM) Plus to benchmark their performance in sustainable construction against objective standards.

The Group implements one-stop green construction and management, integrating sustainable concepts from the property planning, design, material sourcing and construction stages to operations and maintenance. It promotes the use of environmentally friendly materials, techniques and operation modes to save energy, reduce waste and avoid air, water and waste pollution.

Many of the Group's offices, malls and residential developments in Hong Kong and on the mainland meet international standards for green buildings, with ratings from the Hong Kong Green Building Council's BEAM Plus and the US Green Building Council's Leadership in Energy and Environmental Design (LEED). In addition to achieving green certification for buildings under development, the Group has continuously enhanced the green level of its existing buildings. Its Hong Kong headquarters, Sun Hung Kai Centre, which was completed almost 40 years ago, obtained the 'Excellent' rating in Management under the Selective Scheme of BEAM Plus Existing Buildings V2.0 in 2020, on top of a previous 'Excellent' rating for Energy Use in 2019. Additionally, its

property management subsidiaries apply green management initiatives. The ISO 14001 Environmental Management System has been accredited across the Group's property management portfolio and construction sites. They also help promote green awareness among residents, tenants and contractors and encourage everyone to adopt various green conservation measures.

Sustainable buildings cover not only green measures, but also a broader scope, including health and safety elements, to achieve 'sustainability'. Recently, the Group's ICC in Hong Kong earned the city's first WELL Health-Safety Rating for Facility Operations (WELL HSR) certificate, awarded by the International WELL Building Institute.





Amid the pandemic, the Group's developments have a series of anti-coronavirus measures to protect the safety and health of tenants, customers, residents and staff. Smart measures include (from left) touchless lift buttons, intelligent disinfection stations, anti-pandemic robot cleaners and touchless infrared temperature screening.

在疫情下,集團各物業均採取一系列防疫措施,保障租戶、顧客、住客和員工的安全健康。智能措施包括(左起)免觸式升降機按鈕、智能消毒站、智能防疫機械人及免觸式紅外線體溫測量



Shanghai ICC promotes sustainable living among tenants 上海環貿廣場向租戶宣傳實踐可持續生活



The Group strives to develop more sustainable buildings. Pictured are ICC (left), Shanghai IFC (top) and Shanghai ICC (bottom) 集團致力建設更多可持續發展物業・圖為環球貿易廣場 (左)、上海國金中心(上)和上海環貿廣場(下)



Moreover, following the COVID-19 outbreak, the Group immediately launched a host of measures in its properties to strengthen precautions and enhance public health to protect the safety and health of tenants, customers, residents and staff. Innovative technology has been utilized in the anticoronavirus initiatives to enhance cleaning efficiency and hygiene standards, and give users confidence that the facilities are safe. The Group's malls and frontline mall staff gained recognition for excellent customer service and comprehensive anti-pandemic measures at the Hong Kong Retail Management Association's 2020 Service Talent Award. Please see page 22 for details

To ensure long-term sustainable business growth and value creation for stakeholders, the Group will continue to develop more sustainable buildings. It has also embarked on measures to further enhance its ESG performance and disclosure levels. The latest environmental efforts include establishing a new 10-year energy-reduction target and updating its sustainability-related policies to strengthen operational governance.

Green building certificates

For its Hong Kong projects alone, the Group had received 49 green building certificates as at 30 June 2020, seven of which attained the top 'Excellent' or 'Platinum' ratings. To benchmark its performance on sustainable construction against objective standards, the Group registered 27 ongoing construction sites with BEAM Plus, representing over 95% of its ongoing construction sites by total gross floor area.

Separately, the Group's property management subsidiaries have applied innovation and technology to continuously raise facilities management and service standards in recent years. In the Excellence in Facility Management Award 2020, organized by the Hong Kong Institute of Facility Management, the Group's developments clinched 48 awards. For details of the awards, please refer to page 24.

Of its existing projects, the most outstanding green achiever among local projects is ICC, and the best among its mainland projects are Shanghai IFC and Shanghai ICC.

Hong Kong: ICC sets a new standard for Hong Kong sustainable buildings

From the design and planning stages to construction, landscaping and property management, environmental features have been put in place to ensure that ICC maximizes energy efficiency to become a sustainable building.

In 2017, the project was awarded the first-ever top Platinum certificate in the BEAM Plus Existing Buildings Version 2.0 scheme, issued by the Hong Kong Green Building Council. In 2020, ICC received the top 'Outstanding' rating in the BREEAM In-Use scheme, under the Building Research Establishment Environmental Assessment Method (BREEAM), developed by the Building Research Establishment (BRE) in the UK, and received full marks in three assessment categories. BREEAM certification, which is the first of its kind in Hong Kong, placed the skyscraper in the top 3% of green buildings around the world. Recently, the building was awarded the WELL Health-Safety Rating for Facility Operations (WELL HSR) certificate by the International WELL Building Institute, representing the first building in Hong Kong to earn this certificate.

Maximizing energy efficiency

6

Driven by its 'I-Intelligence, C-Collaboration, C-Continuity' management approach, the team deploys smart technology in its smart-management system to monitor and control the operations and power consumption of the different facilities and equipment. The team applies Internet of Things (IoT) technology to collect and analyze big data via mobile digital systems for energy-efficiency optimization in the tower. Lighting units, which are now equipped with motion sensors and dimmers, are controlled via an in-house built mobile app to pre-set the brightness level of different zones in different time slots.





ICC collects food waste from tenants daily, which is decomposed and converted into organic fertilizer for gardening 環球貿易廣場每日向租戶收集廚餘,再分解及處理成種植用的

Recycling food waste

In 2012, ICC installed its own food waste decomposer and started collecting food waste from tenants. The collected food waste is decomposed and converted into organic fertilizer for planting, which is used in its organic farm. Some of the organic fertilizer is distributed to a kindergarten and an elderly centre.

Green procuremen

During the procurement process, the ICC team includes terms or specifications related to environmental protection to help source goods or services that are good for the environment, thus encouraging suppliers to go green together.

Promote green living

For community engagement, the team organizes green and energy-saving initiatives for tenants and other stakeholders to achieve sustainability. Regular waste-recycling collections are organized to encourage waste reduction among tenants, including waste paper, metals, plastics, glass, regulated electrical equipment, coffee grounds and Christmas trees.

Since the beginning of the coronavirus outbreak, the team has immediately taken prudent, all-round disease prevention and control measures, including introducing a smart anti-pandemic robot and more touchless facilities. ICC has also continued to enhance its operations, maintenance and emergency plans to combat the virus, and strengthen the confidence of its tenants and the public.





ICC, Shanghai IFC and Shanghai ICC receive green building certificates from renowned organizations 環球貿易廣場、上海國金中心和上海環貿廣場屢獲權威機構頒發綠色建築認證

Mainland: Shanghai IFC and Shanghai ICC receive the Platinum rating in LEED

Shanghai IFC and Shanghai ICC implement environmental concepts into their daily operations to provide a sustainable work environment for tenants.

Recently, both Shanghai IFC and Shanghai ICC received the Platinum rating in the LEED V4.0 for Building Operations and Maintenance: Existing Buildings, achieving 103 and 100 points, respectively, to reach the top four certified buildings under this category in the world. Shanghai IFC even clinched the highest number of points in the world in 2020, setting a record for integrated commercial developments around the world and projects in the East Asia.

Shanghai IFC and Shanghai ICC incorporated LEED standards in the project design and construction stages. The landmark projects adopt green measures in daily operations to meet the sustainability requirements of low-carbon buildings.



Shanghai IFC has a rainwater recycling system, which uses collected rainwater for irrigation 上海國金中心設有雨水回收系統· 把收集所得雨水用作灌溉

Energy optimization

Shanghai IFC and Shanghai ICC have a series of energy-saving measures. For example, building automation systems are used to count the power consumption of each facility to ensure energy efficiency and the reduction of carbon emissions. There are regular checks and adjustments on the electrical and mechanical systems and meters to keep them at the optimum level. Durable LED lighting and green refrigerants are used.

Using resources efficiently

Product and material procurement and waste management plans are in place. Environmentally friendly materials and highly efficient equipment are selected in the procurement process. To reduce waste, there is a waste separation and recycling scheme with regular record keeping – over 50% of the recyclable waste was recycled and over 70% of the durables were re-used. Regarding water management, rainwater is collected for irrigation, sanitation facilities with water-saving design are used, and variable frequency drive water pumps are used to ensure the use of water is adjusted according to circumstances.

Promoting sustainable living

Sustainable living is promoted among tenants. Regular questionnaires are given to get tenants' comments on indoor environment quality and promote green living. Both projects encourage tenants to take green transport, and carpools and green transport priority parking spaces are available. Green transportation accounts for 70% of tenant trips.

In response to the coronavirus pandemic, special management services have been provided, including the addition of touchless infrared temperature screening equipment, enhanced frequency of cleaning and sanitizing public facilities and equipment, pandemic response exercises, and notices reminding tenants to uphold good sanitation and hygiene practices.

集團積極擴大可持續發展物業組合

近年,環境、社會及管治成為熱門話題,愈來愈多企業加強審視業務的可持續發展,提高相關資訊的披露。秉持「以心建家」的精神,集團致力為顧客提供優質產品及服務,是於本港首批將可持續發展元素加入物業發展及管理的地產發展商。目前,集團在本港及內地分別有多個不同類別的物業項目取得綠色建築認證或其他可持續建築認證,而香港超過95%的在建建築工地(按總樓面面積計算)已於綠建環評(BEAM Plus)登記,以客觀標準評估工地在可持續建築方面的表現。

集團推行一條龍環保建築及管理,將可持續發展理念融入物業規劃、設計、採購、建築,以至營運及保養的過程中,提倡使用環保物料、技術及作業模式,務求達至節約能源、減少廢物、避免空氣、水及廢物污染。

可持續發展物業不只限於環保措施,而是更廣濶的範疇,包括健康及安全元素,以達到「可持續」。最近,集團在港的環球貿易廣場率先成為典範,成為全港首座獲國際WELL建築研究院頒發物業設施運營管理《WELL健康 - 安全評價準則》證書的大廈。

此外,2019冠狀病毒疫情爆發後,集團旗下物業馬上推出多項措施,強化的戶來 不作,加強公眾衛生,致力保障租戶來 顧客、住客和員工的安全健康。在防疫 工作上更善用創新科技,提升清潔香 及衛生標準,讓用戶加倍安心。在以 零售管理協會舉辦的「2020傑出服務 獎」中,集團商場及其前線服務團憑 著優質的顧客服務與全面的抗疫措施備 受嘉許。詳情請參閱第22頁。

為確保業務有長遠可持續的增長,為持份者創造價值,集團將繼續興建更多符合可持續發展要求的物業,並會進一步提升在環境、社會及管治方面的表現及披露水平。在環保方面,最新工作包括

可持續發展物業不只限於環保措施,而 訂立新一個十年節能目標和更新可持續 是更廣濶的範疇,包括健康及安全元 發展相關的政策,以強化營運管治。

经色建築認證

單以香港項目計算,截至2020年6月30日,集團共有49項綠色建築認證,當中更有七項屬最高級別的「卓越」或「鉑金」級。為方便以客觀標準評估工地在可持續建築方面的表現,集團共有27個在建建築工地於綠建環評登記,按總樓面面積計算,佔在建建築工地逾95%。

另外,集團旗下物業管理公司近年善用 創新及科技,持續提升設施管理和服務 質素。集團旗下發展項目在香港設施管 理學會舉辦的「卓越設施管理獎2020」 中,合共獲得48個獎項。有關獎項的更 多資料,請參閱第24頁。

在既有項目當中,環保表現最突出的本 地項目為環球貿易廣場,內地項目則為 上海國金中心和上海環貿廣場。

Sun Hung Kai Centre obtained two 'Excellent' ratings under BEAM Plus Existing Buildings V2.0 新鴻基中心在「綾建環評既有建築20版 | 中・獲兩項「卓越 | 評級





Tsuen Wan Plaza leverages Internet of Things (IoT technology to enhance its lighting system 荃灣廣場運用物聯網科技提升照明系統

香港: 環球貿易廣場為香港可持續建築物定立新標準

環球貿易廣場由設計及規劃,以至建築、園藝及物業管理,均落實環保措施,務求達致最佳能源效益,成為可持續發展的建築物。

於2017年,項目獲香港綠色建築議會頒發第一張 「綠建環評既有建築2.0版」最高級別「鉑金」級 認證証書。於2020年,在英國建築研究院的綠色建 築評估系統BREEAM In-Use中得到最高級別「傑 出」評級,並在當中三個評估範疇得到滿分佳績, 屬全港首個獲BREEAM認證的綠色建築,躋身成為 全球首3%的頂尖綠色建築行列。最近,項目獲國際 WELL建築研究院頒發物業設施運營管理《WELL健 康 - 安全評價準則》證書,成為全港首座獲此認證 的大廈。

提高能源效益

團隊多年來以「智能、協作及持續性」為管理方針,運用智能科技,實踐智能管理系統,監察及控制不同設施與設備的運作及用電量。團隊應用物聯網科技,使用流動數碼系統收集大數據,經分析後從而優化樓宇的能源效益。團隊運用自家研發的流動應用程式,配合增設動態感應器和調光器的照明設備,為不同區域在不同時段預設光暗度,從而降低電力消耗。

廚餘回收差用

自2012年,環球貿易廣場 自置廚餘機,向租戶收集廚 餘。廚餘經分解及處理後, 製成種植用的有機肥料,在 其有機農圃使用,部分則分 發予幼兒園和老人中心。

色採購

環球貿易廣場團隊在採購過 程中納入與環保相關的條款 或規格,盡量採購對環境友

善的產品或服務,鼓勵供應商共同實踐環保理念。



ICC engages the community in green and energysaving initiatives 環球貿易廣場積極連繫社區,推廣環保及節能工作

推廣綠色生活

團隊積極連繫社區,與租戶及其他持份者攜手進行環保及節能工作,實踐可持續發展。為鼓勵租戶減少廢物,團隊定期安排廢物回收,包括廢紙、 金屬、塑膠、玻璃、四電一腦、咖啡渣及聖誕樹等。

新型冠狀病毒疫情爆發後,團隊馬上採取審慎全面的疾病預防和控制措施,包括引入智能防疫機械人及更多免觸式設施等,並持續改善其營運、維護和緊急應急計劃,加強租戶及公眾的信心。

內地:上海國金中心和上海環貿廣場榮獲LEED鉑金級認證

上海國金中心和上海環貿廣場亦致力將環保理念融入 物業管理日常營運環節,為租戶帶來一個可持續發展 的工作環境。

最近,上海國金中心和上海環貿廣場以節能和可持續發展的營運和日常管理體系,獲得「LEED 4.0版既有建築」「鉑金級」認證,評分分別為103和100分,名列該類別全球認證項目頭四名;上海國金中心更成為2020年全球最高分項目,亦是目前全球最高分的商業綜合發展項目及東亞區最高分項目。

早於項目設計和建築階段,上海國金中心和上海環貿 廣場就參考LEED的標準。在日常營運中,則採取環 保節能措施,積極實踐低碳建築的可持續理念。

優化能源

上海國金中心和上海環貿廣場採取一系列節能措施,例如使用建築設備自動化系統去獨立計算各項設施的 耗電量,確保有效節能減排。團隊不時檢查與調較機 電系統及儀表,確保系統保持在最佳狀態。項目亦選 用節能耐用的LED照明系統及環保製冷劑。

善用資源

項目制定產品和物料採購及 廢物管理計劃。在採購時 選擇保材料和和,設有 為減少廢物,設有 为類回收及定期的廢物 50%可循環再造的耐用品面 地再造,逾70%耐用品面 明,逾70%耐用品面 明,會會 明水作灌溉,設施 的用水。在水作灌溉, 以使用變頻水泵以便 医情況調節用水量。



Shanghai ICC encourages tenants to take public transportation, offering carpool and green transport priority parking spaces

上海環貿廣場鼓勵租戶乘搭公共交通,並設有共乘 及綠色車輛優先停車位

宣傳可持續生活

項目積極向租戶宣傳實踐可持續生活,定期進行租戶問卷調查,了解他們對室內環境質素的意見,並推廣環保理念。項目不但鼓勵租戶乘搭綠色交通,並設有共乘及綠色車輛優先停車位,租戶選用綠色交通出行率更達70%。

針對新型冠狀病毒疫情,項目採取特殊管理,包括增設免觸式紅外線測溫儀,加強公共設施設備的清潔及消毒頻率,並進行突發性疾病應對演習,向租戶發出預防通告,提醒租戶做好個人衛生防護工作。