



# Buildings Department Environmental Report 2024



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# Director's Message

[Buildings Department Environmental Report 2024](#)

We are pleased to present the Environmental Report 2024 of the Buildings Department (BD). This report highlights our vision and commitment to fostering a sustainable built environment in Hong Kong, encapsulating our progress and achievements in meeting the targets and objectives set forth in our environmental commitments.

2024 was a busy yet fruitful year for us. After years of dedicated effort and investment, we successfully launched the final stage of the Electronic Submission Hub (ESH) and introduced new Building Information Modelling (BIM) plan-checking tools to enhance our public services in building control and better support our stakeholders.

ESH is a web-based collaborative platform designed to facilitate the preparation and processing of paperless submissions under the Buildings Ordinance (BO) (Cap. 123), while also promoting a greener environment. Following the successful launches of Stage 1 in June 2022 and Stage 2 in March 2023, Stage 3 of ESH was launched on 30 June 2024. This final stage expanded the platform's capabilities to accept all types of plan submissions, further reducing paper usage. As at end 2024, ESH saved over 77 000 sheets of A1-sized paper drawings and over 5.6 million pages of paper documents.

To further promote the integration of BIM and encourage electronic submissions, BD collaborated with the Lands Department (LandsD) to launch BIM plug-in tools for two native software applications in March and September 2024 respectively to facilitate the checking of floor areas stipulated under the BO as well as the lease conditions. Additional plan-checking tools covering sanitary fitments, fire safety, building separation requirements and structural plan compatibility are also in the pipeline.

In addition to the advancements with the ESH and BIM automated checking tools, our focus in 2024 continued to build on our strength and responsiveness to society's aspiration. We actively reviewed statutory requirements and proposed new initiatives aimed at promoting



sustainability and enhancing our built environment.

To encourage the use of innovative building materials and technologies (IBMT) that may enhance the safety, health and environmental performance of buildings, as well as productivity in the building industry, BD implemented a pre-acceptance mechanism for IBMT in April 2024.

To further promote green buildings, an enhanced gross floor area (GFA) concession mechanism came into effect on 30 June 2024. This new mechanism requires private development projects to achieve an "anticipated Gold" rating under the Building Environmental Assessment Method (BEAM) Plus or meet new specific standards for a quality built environment to qualify for a 10% GFA concession.

To promote elderly-friendly building design, BD is coordinating with relevant bureaux to incorporate more comprehensively the concepts of universal design and accessibility into relevant guidelines, design manual and regulations.

I would like to take this opportunity to thank our colleagues and external partners for their invaluable contributions and continued support in our sustainability journey. Together, let us strive to create a more sustainable and inclusive built environment for all.

**Mr HO Chun-hung, JP**  
Director of Buildings

## SUSTAINABLE ORGANISATION

### 1.1. Our Approach

**Our Vision:** To make the built environment safe and healthy for our community.

**Our Mission:** To set and enforce safety, health and environmental standards for private buildings.

**Our Culture:** To go the extra mile in serving our customers and the community in general.

BD is committed to promoting building safety, developing and enforcing safety, health, and environmental standards for private buildings, striving to improve the quality and sustainability of our built environment. We firmly uphold core responsibilities under the remit of the BO, as well as playing an active role in supporting relevant initiatives and policies of the Government.

### 1.2. Management Commitment

BD endeavours to cultivate a sustainable culture within and beyond the organisation through a robust sustainability management mechanism with an aim to support the Government's sustainability agenda. The Director of Buildings, together with the senior management - including a Deputy Director and six Assistant Directors - plays a pivotal role in decision making on key policies that encompass economic, social, environmental and sustainability aspects.

The approach of collaboration and harmonisation is well embedded in BD's management mechanism, driving our implementation of sustainability-related programmes. Our senior management team regularly reviews existing policies and assesses social and environmental performance to identify potential impacts on sustainability-related matters through maintaining active communication with different stakeholders.

Since 2010, we have been an Associate Member of the Hong Kong Green Building Council and have actively participated in its Committee work to promote environmental performance assessment and advance sustainable building practices.

## SUSTAINABLE BUILT ENVIRONMENT

It is our strategy to establish our statutory requirements as well as administrative guidelines to support the development of a sustainable built environment and to facilitate the adaptive re-use of heritage buildings with the goal of providing a high-quality living and built environment for both present and future generations of Hong Kong.

### 2.1. Modernising Building Design Standards

As an ongoing initiative of enhancing sustainable development, we are continuously reviewing and proposing revisions to building standards as needed. This is to implement a performance-based building control system and enhance the standards for the design and construction of buildings and associated works under the BO.

Targets	Performance in 2024
● <i>Review of the Building (Planning) Regulations (B(P)R)</i>	◆ The review to convert the prescriptive requirements into performance-based standards was ongoing.
● <i>Review of the Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations</i>	◆ The major enhanced design standards had been promulgated for adoption via Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (APP-164). The second stage of legislative amendments resulting from the review was targeted to be submitted to the Legislative Council in 2025.
● <i>Formulation of a Code of Practice on Seismic-resistant Design Standards for Buildings in Hong Kong (Seismic Code)</i>	◆ The Steering Committee had accepted the final draft of the Seismic Code and Explanatory Notes, which took into account the key comments and views received during the interim consultation with industry stakeholders. This Code would provide detailed technical guidelines for assessing the effects of seismic actions on buildings. Further consultation with stakeholders on the Code would be conducted. If necessary, legislative amendment would be proposed to support the implementation of the Code.

# CHAPTER 2

Targets	Performance in 2024
<ul style="list-style-type: none"><li><i>Review of Building Energy Efficiency requirements</i></li></ul> <p>To review the Residential Thermal Transfer Value (RTTV) and Overall Thermal Transfer Value (OTTV) in accordance with the “Energy Saving Plan for Hong Kong’s Built Environment 2015~2025+”.</p>	<ul style="list-style-type: none"><li>◆ The RTTV standards were reviewed and tightened up in February 2022 and the next review would be completed by 2030.</li><li>◆ The OTTV standards were reviewed and tightened up in August 2019. The second review had been completed and implementation of the updated standards was scheduled for 2025.</li></ul>
<ul style="list-style-type: none"><li><i>Review of the relevant design requirements pertaining to ventilation within and between buildings</i></li></ul>	<ul style="list-style-type: none"><li>◆ The review of the following design requirements to further foster a quality, sustainable and liveable built environment was underway:<ul style="list-style-type: none"><li>• Enhancing the design of re-entrants and light wells to improve ventilation within buildings.</li><li>• Enhancing the design of communal podium gardens and sky gardens for better ventilation between buildings.</li><li>• Enhancing ventilation performance standards for lavatories to achieve a healthier indoor environment.</li></ul></li></ul>

## 2.2. Promoting Green and Sustainable Building Developments

Since 2001, BD has been working with the Planning Department and LandsD to offer incentives for developers to adopt green features in new building developments, with the aim of improving the environmental performance of buildings and promoting a quality living environment.

Targets	Performance in 2024
<ul style="list-style-type: none"> <li><b>Promulgating sustainable practices</b></li> </ul> <p>To update current/issue new Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) for promulgating building design guidelines to improve the standards of living environment.</p>	<ul style="list-style-type: none"> <li>◆ Driven by the advancements in building design and construction, the introduction of new construction materials and application of smart building technologies, BD conducted a comprehensive review of the “Guidelines on Prevention of Water Seepage in New Buildings”, which were issued via a circular letter on 7 March 2005. The enhanced design and construction guidelines for preventing water seepage in new buildings were promulgated via the revised PNAP APP-105, issued in September 2024.</li> <li>◆ In April 2024, BD implemented a pre-acceptance mechanism for innovative building materials and technologies (IBMT) through the issuance of PNAP ADV-38 to encourage the use of IBMT including materials, products, systems or construction technologies that might enhance the safety, health and environmental performance of buildings, as well as the productivity of the building industry. By 31 December 2024, three applications were received under this new mechanism.</li> </ul>
<ul style="list-style-type: none"> <li><b>Promoting sustainable building design</b></li> </ul> <p>To implement the GFA concession policy under PNAP APP-151 and the Sustainable Building Design Guidelines (SBD Guidelines) to promote building separation, building setback and site coverage (SC) of greenery of buildings as promulgated in PNAP APP-152.</p>	<ul style="list-style-type: none"> <li>◆ Under the GFA concession policy, compliance with the SBD Guidelines was one of the prerequisites for granting GFA concessions for green/amenity features and non-mandatory/non-essential plant rooms and services in building projects. A maximum concession is capped at 10% of the total GFA of the development.</li> </ul> <div style="border: 1px solid #ccc; padding: 5px; display: inline-block;">     77 proposals in compliance with SBD Guidelines   </div> <div style="border: 1px solid #ccc; padding: 5px; display: inline-block; margin-top: 10px;">     205 approved proposals in 2024   </div> <div style="border: 1px solid #ccc; padding: 5px; display: inline-block; margin-top: 10px;">     79 approved proposals granted with GFA concessions   </div> <div style="border: 1px solid #ccc; padding: 5px; display: inline-block; margin-top: 10px;">     126 approved proposals did not apply for GFA concessions   </div> <div style="border: 1px solid #ccc; padding: 5px; display: inline-block; margin-top: 10px;">     2 proposals to which SBD Guidelines were not applicable   </div>

Targets	Performance in 2024
<ul style="list-style-type: none"> <li>● <i>Participating in Building Environment Assessment</i></li> </ul> <p>(a) To support the adoption of BEAM Plus.</p> <p>(b) To review the GFA concession mechanism and consider possible measures to tighten the prerequisites for applying for a GFA concession.</p>	<ul style="list-style-type: none"> <li>◆ There were 79 building proposals registered for BEAM Plus certification in 2024, amounting to nearly 39% of the proposals approved in the year.</li> <li>◆ Following the Policy Address in January 2017, BD commissioned a consultancy study to review the GFA concession mechanism. While maintaining the 10% GFA concession for new private development projects, the Consultant recommended that new projects would have to achieve an “anticipated Gold” rating under the BEAM Plus in order to apply for GFA concession. If a project could only achieve a lower rating, it had to demonstrate compliance with one or more new specific standards that could promote a quality built environment. The new GFA concession mechanism came into effect on 30 June 2024.</li> </ul>
<ul style="list-style-type: none"> <li>● <i>Promoting green transportation</i></li> </ul> <p><u>April 2011 – December 2024</u></p> <p><b>853 building plans approved, involving</b></p> <p><b>~93 700 parking spaces equipped with EV charging-enabling facilities</b></p>	<ul style="list-style-type: none"> <li>◆ To promote the adoption of electric vehicles (EVs), GFA concessions were granted to encourage the provision of EV charging-enabling facilities. From April 2011 to December 2024, 853 building plans were approved with GFA concessions for car parks in new buildings, resulting in approximately 93 700 parking spaces equipped with EV charging-enabling facilities.</li> </ul>

Targets	Performance in 2024
<ul style="list-style-type: none"> <li>● <i>Promoting the development of renewable energy</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ To foster the development of renewable energy, facilitation measures for the erection of supporting structures for solar photovoltaic (PV) systems in open car parks situated on vacant sites, on-grade open areas of existing non-domestic developments, or the main roofs of existing non-domestic buildings, had been introduced since April 2022. Under these measures, 100% GFA concession might be granted to eligible car parking spaces covered by solar PV systems, subject to compliance with relevant requirements and criteria, including policy support from the Environment and Ecology Bureau. Additionally, fast-track processing of building plans was adopted for proposals relating to the erection of supporting structures for solar PV systems at these car parking spaces.</li> <li>◆ To encourage the adoption of building-integrated photovoltaic (BIPV) technology within the industry, the “Code of Practice for Fire Safety in Buildings 2011 (2024 Edition)” was issued in September 2024 to promulgate appropriate non-combustibility requirements and standards for BIPV systems, which were generally in line with national and other international standards.</li> </ul>
<ul style="list-style-type: none"> <li>● <i>Enhancing our built environment by promoting elderly-friendly building design</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ To encourage ageing in place and to promote elderly-friendly building design, BD had coordinated with relevant bureaux to put forward proposals in 2024 for incorporating more comprehensively the concepts of universal design and accessibility into the Design Manual: Barrier Free Access (Design Manual) and relevant guidelines and regulations.</li> <li>◆ The proposals would be implemented in two stages, first administratively by updating relevant Practice Notes and the Design Manual and launching a voluntary accreditation scheme in the first half of 2025, followed by amending the B(P)R in the first half of 2026.</li> </ul>

## 2.3. Facilitating Conservation of Built Heritage

Conservation of built heritage is of paramount importance to showcase the historical and cultural landscape of our city. With an aim to protect and revitalise them, BD actively engages with various government departments and stakeholders in the community to revitalise and conserve heritage buildings.

Target	Performance in 2024
<ul style="list-style-type: none"><li>● <i>Enhancing heritage conservation</i></li></ul> <p>(a) To support historic buildings conservation and revitalisation without compromising building safety and health requirements.</p> <p>(b) To provide professional technical advisory and pre-submission enquiry services by our Heritage Unit.</p>	<ul style="list-style-type: none"><li>◆ The 2021 Edition of the "Practice Guidebook for Adaptive Re-use of and Alteration and Addition Works to Heritage Buildings 2012" (the Practice Guidebook) was issued to provide guidance on reusing historic buildings and project highlights.</li><li>◆ Feedback on the Practice Guidebook was collected and considered by the Technical Committee on Building Safety and Health Requirements for Historic Buildings under the BO. An update on the Practice Guidebook was being prepared with completion scheduled for 2025.</li></ul>



Former Lau Fau Shan Police Station

## 2.4. Reducing Construction and Demolition Wastes

BD remains steadfast in collaborating with stakeholders to reduce construction and demolition waste by reviewing and promoting environmentally friendly construction methods. We continuously strive to improve current building designs and construction practices by encouraging more extensive application of precast concrete construction.

Target	Performance in 2024
<ul style="list-style-type: none"><li>● <b><i>Minimising construction and demolition waste</i></b></li></ul> <p>To encourage wider adoption of Modular Integrated Construction (MiC) technology in Hong Kong.</p>  <p>High West Project at the University of Hong Kong</p>  <p>Ngau Tam Mei Project</p>	<ul style="list-style-type: none"><li>◆ The pre-acceptance mechanism for granting in-principle acceptance (IPA) to individual MiC systems or components had been in place since 2017. By 31 December 2024, BD had received 235 IPA applications and granted 118 IPAs, including 69 steel and 49 concrete systems, involving 72 MiC manufacturers which had been included in BD's List of Accepted MiC Systems.</li><li>◆ With the granting of SC concession, and the increase of GFA concession to 10% of the MiC floor area in 2022, there was an increase in the adoption of MiC for private development projects. By 31 December 2024, 42 private MiC development projects had been completed with occupation permit (OP).</li><li>◆ The advantages of MiC in terms of sustainability and reduction of construction waste were demonstrated in new MiC projects that reused some modules dismantled from existing MiC projects. Two existing MiC projects were dismantled in April and November 2023. The assembly of the reused modules for two new MiC projects were completed, with OP issued in February and May 2024.</li></ul>

## 2.5. Proper Use and Timely Maintenance of Existing Buildings

Ensuring building safety and health is an important part of our services. We continue to promote the importance of environmental hygiene, reduce the risks brought about by unauthorised building works (UBWs), promote fire safety, proper maintenance of old buildings, drainage and slopes, as well as tackling problems relating to building neglect and dilapidation.

Targets	Performance in 2024
<ul style="list-style-type: none"> <li><b>Tackling UBWs and rectifying building dilapidation</b></li> </ul> <p>To continue the clearance of UBWs, including unauthorised signboards, structures on rooftops, podiums, lanes and yards and those in New Territories Exempted Houses (NTEH), in target buildings by taking enforcement actions through large scale operations (LSO); and to rectify identified building dilapidations, to improve building safety.</p>	<ul style="list-style-type: none"> <li>◆ No. of removal orders issued in 2024: <b>8 074</b></li> <li>◆ No. of UBWs removed and irregularities rectified: <b>28 504</b></li> <li>◆ No. of repair/investigation orders issued: <b>882</b></li> <li>◆ No. of buildings/premises repaired: <b>3 042</b></li> </ul>

### UBWs Clearance Operations in 2024

#### Unauthorised Signboards

- **2 154** unauthorised signboards removed/validated
- **1 928** abandoned/dangerous signboards removed/repaired
- **80** signboards validated under the Signboard Validation Scheme

#### Unauthorised Structures on Rooftops

- **90** target domestic/composite buildings selected
- **3 228** removal orders issued
- **749** removal orders complied with

#### UBWs in NTEH

- **1 291** removal orders and **13** repair/investigation orders issued
- **1 513** UBWs removed/irregularities rectified
- **11** buildings/premises repaired

#### Inspection of subdivided flats (SDF)

To take enforcement actions against building irregularities associated with SDF in domestic, composite and industrial buildings.

- ◆ **100** target buildings selected under LSO

- ◆ **1 630** SDF inspected in response to public reports and through LSO
- ◆ **329** SDF rectified of irregularities

Targets	Performance in 2024
<ul style="list-style-type: none"> <li><i>Tackling water seepage problems in buildings</i></li> </ul> <p>To continue the operation of the Joint Office (JO) with the Food and Environmental Hygiene Department in handling public reports on water seepage.</p>	<ul style="list-style-type: none"> <li>◆ The application of new testing methods including infrared thermography and microwave tomography in carrying out professional investigations for water seepage cases was extended to <b>16</b> pilot districts.</li> <li>◆ With the use of new testing methods in pilot districts, the success rate in identifying water source of cases was about 66%, which was higher than the success rate of around 40% for cases using the conventional methods.</li> <li>◆ Since mid-September 2023, the JO had implemented a new set of investigation procedures on a trial basis in <b>six</b> districts. After the completion of Stage I investigation, Stage II initial investigation and Stage III professional investigation originally to be conducted sequentially would be carried out in parallel to shorten the time for investigation.</li> </ul>
<ul style="list-style-type: none"> <li><i>Mandatory Building and Window Inspection Schemes</i></li> </ul> <p>To continue the implementation of the Mandatory Building Inspection Scheme (MBIS) and Mandatory Window Inspection Scheme (MWIS) and enhance support to the owners and stakeholders.</p>	<ul style="list-style-type: none"> <li>◆ <b>511</b> buildings were selected for both MBIS and MWIS, while <b>89</b> buildings were selected for MBIS only and <b>89</b> buildings were selected for MWIS only.</li> <li>◆ <b>506</b> buildings completed the prescribed inspection while <b>135</b> buildings completed the prescribed building repair.</li> <li>◆ <b>411</b> buildings completed the prescribed window inspection while <b>83</b> buildings completed the prescribed window repair.</li> <li>◆ <b>15</b> briefing sessions were conducted for building owners, owners' corporations and the industry.</li> <li>◆ <b>12</b> briefing sessions were conducted for the “Central Platform on Building Management” organised by the Home Affairs Department.</li> </ul>

Targets	Performance in 2024
<ul style="list-style-type: none"> <li><b><i>Building fire safety</i></b></li> </ul> <p>To improve the existing fire safety measures in prescribed commercial premises, as well as pre-1987 commercial buildings, composite buildings and industrial buildings.</p>	<ul style="list-style-type: none"> <li>◆ BD carried out inspections and took necessary enforcement actions in accordance with the Fire Safety (Commercial Premises) Ordinance (FS(CP)O) (Cap. 502), Fire Safety (Buildings) Ordinance (FS(B)O) (Cap. 572) and Fire Safety (Industrial Buildings) Ordinance (FS(IB)O) (Cap. 636).</li> <li>◆ In 2024, BD inspected <b>530</b> premises and buildings, and issued <b>4 997</b> Fire Safety Directions (FSDns) or Fire Safety Improvement Directions (FSIDns).</li> <li>◆ By the end of 2024, the number of FSDns or FSIDns discharged for industrial buildings, commercial buildings and composite buildings was <b>407, 949</b> and <b>4 988</b> respectively.</li> </ul>
<ul style="list-style-type: none"> <li><b><i>Special scheme to inspect external drainage system (the Special Inspection Scheme)</i></b></li> </ul> <p>To inspect the external drainage systems of all private residential and composite buildings exceeding three storeys in height (i.e. some 18 000 buildings) and to take enforcement actions to require repairs/rectification of the defective drainage systems in view of the heightened concern about the condition of drainage pipes during the COVID-19 epidemic.</p>	<ul style="list-style-type: none"> <li>◆ The Special Inspection Scheme involving inspection and order serving was completed in 2022.</li> <li>◆ BD issued <b>18 732</b> statutory orders against defective drainage systems in approximately <b>5 300</b> buildings in 2021 and 2022. By the end of 2024, <b>11 833</b> orders were complied with.</li> <li>◆ BD would continue to follow up on the outstanding orders to protect public health and safety.</li> </ul>
<ul style="list-style-type: none"> <li><b><i>Stepping up clearance of outstanding drainage repair orders covering misconnection of drain pipes causing hygiene and environmental pollution problems</i></b></li> </ul>	<ul style="list-style-type: none"> <li>◆ Dedicated teams were set up for the operation.</li> <li>◆ <b>135</b> orders were complied with in 2024.</li> </ul>

## PUBLIC EDUCATION AND HUMAN CAPITAL STRATEGY

It is our belief that the success of moving towards sustainability depends on the firm commitment and participation across the community.

### 3.1. Educating and Engaging the Public on Sustainability

Engaging stakeholders and the public is an indispensable part of enhancing awareness of building safety and fostering a building care culture. To this end, we are committed to raising public awareness by launching different community educational activities.

Targets	Performance in 2024
<p>(a) To promote and publicise initiatives of the department to the public and educate the general public and the stakeholders in the building/construction fields on the importance of building safety and timely maintenance of buildings.</p>	<p>◆ Building Safety Weeks</p> <p>The Building Safety Weeks 2024 was successfully held from 26 October to 17 November. It included a carnival, a series of public seminars, an open day and a symposium to help the public better understand building safety messages and promote a building care culture. The Building Safety Symposium, themed “Building for Our Future: Smart Technologies for Building Safety and Sustainability”, provided an excellent opportunity for the industry to exchange ideas and views on the application of innovative technologies to enhance the safety of buildings and construction works.</p>  <p>Building Safety Symposium</p> <p>No. of participants for:</p> <ul style="list-style-type: none"><li>• Building Safety Symposium: <b>441</b></li><li>• Opening Ceremony cum Inno Tech Open Day: <b>239</b></li><li>• Public Seminars: <b>645</b></li><li>• Building Safety Carnival: <b>4 624</b></li></ul>

# CHAPTER 3

Targets	Performance in 2024
	<p><b>Building Facade Design Competition</b></p> <ul style="list-style-type: none"><li>◆ The Building Façade Design Competition was held from September to October 2024, with the goal of increasing public awareness of the vital link between building maintenance and our everyday lives. It also aimed to encourage the public to participate in building a more livable community. The competition consisted of three categories: primary school group, secondary school group and open group. Over 200 applications were received and more than 1 200 votes were cast by the public.</li></ul>
	<p><b>Building Safety Talks/Seminars</b></p> <ul style="list-style-type: none"><li>◆ A total of <b>36</b> sessions of Building Safety Talks/Seminars were organised throughout the year for the general public, educational sector, building owners and the industry.</li></ul>
	<p><b>Building Safety Pioneer Programme and Short Video Competition</b></p> <ul style="list-style-type: none"><li>◆ Promoted building safety to <b>75</b> students from <b>16</b> secondary schools through different activities.</li><li>◆ Students participated in an anchor workshop to learn the techniques of delivering clear messages on camera. They were also invited to participate in a competition by creating short videos conveying the important message of building a livable community.</li></ul>
	<p><b>Online Video</b></p> <ul style="list-style-type: none"><li>◆ A series of videos on how to deal with water seepage issues from a legal perspective was released in April 2024 to educate the general public about the legal procedures and compensation issues in dealing with water seepage problems.</li><li>◆ A video targeting building owners and tenants was launched in November 2024 to raise public awareness on the prevention of water seepage during renovation.</li></ul>

Targets	Performance in 2024
	<p><b>Banners and posters</b></p> <ul style="list-style-type: none"> <li>◆ To enhance public awareness of the importance of regular inspection and maintenance of private buildings, we displayed banners with the theme on various digital and outdoor advertising platforms.</li> <li>◆ We continued to promote BD's enforcement actions against UBWs in NTEH through minibus banners.</li> </ul>
	<p><b>Periodic Publications</b></p> <ul style="list-style-type: none"> <li>◆ Building Safety Quarterly Newsletters covering topics on building safety, with reminders for property management companies were published.</li> <li>◆ Monthly Digest provided statistical data on BD's building control output under the BO.</li> </ul>
<p>(b) To promote and publicise building safety information to the public and younger people through electronic means to reduce the printing of pamphlets and leaflets.</p>	<p><b>Broadcasts</b></p> <ul style="list-style-type: none"> <li>◆ A new TV Announcement in the Public Interest (API) was launched in January to promote regular inspection and repair of windows, and to enhance public awareness of using the mobile application "WIN SAFE". A corresponding radio API was also broadcast on local radio channels.</li> <li>◆ Another new set of TV and radio API was launched in May to remind the public not to remove structural walls illegally.</li> <li>◆ The APIs were also played in various government buildings and venues of subvented organisations.</li> </ul>
	<p><b>E-Learning Centre</b></p> <ul style="list-style-type: none"> <li>◆ Our digital learning platform, the E-Learning Centre, continued to disseminate useful information to enhance building safety awareness among property owners, owners' corporations, representatives of property management companies and the public. In 2024, a total of <b>16</b> videos were uploaded to the E-Learning Centre.</li> </ul>

Targets	Performance in 2024
	<p><b>Social Media</b></p> <ul style="list-style-type: none"> <li>◆ BD maintained a Facebook page, an Instagram account and a YouTube channel, in order to share the latest event updates and safety tips in a more efficient way.</li> <li>◆ Annual Statistics:           <ul style="list-style-type: none"> <li>• No. of Facebook followers: <b>25 536</b></li> <li>• No. of Instagram followers: <b>6 273</b></li> <li>• No. of YouTube subscribers: <b>3 031</b></li> <li>• No. of posts on Facebook: <b>176</b></li> <li>• No. of posts on Instagram: <b>165</b></li> <li>• No. of videos on YouTube: <b>76</b></li> <li>• No. of likes on Facebook: <b>181 435</b></li> <li>• No. of likes on Instagram: <b>4 786</b></li> <li>• No. of likes on YouTube: <b>312</b></li> <li>• No. of views on YouTube: <b>99 094</b></li> </ul> </li> </ul>

## 3.2. Training our Staff

Our training and development programmes place great emphasis on equipping our staff to understand and actively play their roles in promoting and facilitating sustainable building developments.

Target	Performance in 2024
To provide trainings related to green building and sustainability to staff.	<ul style="list-style-type: none"> <li>◆ <b>65</b> courses/seminars/conferences and <b>19</b> site visits on building sustainability and BEAM Pro were arranged for <b>1 277</b> staff.</li> <li>◆ <b>13</b> BIM lessons were arranged for <b>203</b> staff to get prepared for wider use of BIM in building industry.</li> </ul>

## GREEN OFFICE

It is our continuous target to ensure the effective implementation of in-house green measures in all our offices and to increase the awareness of our staff on sustainable green office management. We take a proactive approach to resource conservation and energy efficiency to support sustainable development. In recognition of our excellence in environmental management, we clinched a Certificate of Merit under the Public and Community Services Sector in the Hong Kong Awards for Environmental Excellence (HKAAE). Additionally, since 2023, we have become one of the HKAAE Alumni, further demonstrating our commitment to sustainability. Besides, the Building Information Centre at our Headquarters was awarded a Platinum rating under BEAM Plus Interiors, showcasing our dedication to maintaining a green and sustainable workplace.

### 4.1. Improving Air Quality

In November 2006, the Government signed the Clean Air Charter launched by the Hong Kong General Chamber of Commerce and the Hong Kong Business Coalition on the Environment, to join forces with the business sector and the community to foster the improvement of air quality in Hong Kong.

Commitments	Performance in 2024
<ul style="list-style-type: none"><li><i>To actively fulfil our commitment under the “Clean Air Charter”</i></li></ul>	<ul style="list-style-type: none"><li>◆ BD had joined the Indoor Air Quality (IAQ) Certification Scheme since 2011.</li><li>◆ Our Headquarters at West Kowloon Government Offices (WKGO) was certified with “Excellent” IAQ Class.</li><li>◆ Our outstation offices in Taikoo Shing and Kwun Tong were certified with “Good” IAQ Class.</li></ul>
<ul style="list-style-type: none"><li><i>To adopt energy-efficient measures in our operations</i></li></ul>	<p><b>Electricity Consumption and Greenhouse Gas (GHG) Emissions</b></p> <ul style="list-style-type: none"><li>◆ The source of energy and fuel consumption related to our operation included the use of electricity and the vehicle fleet, which generated direct and indirect GHG emissions. The total amount of GHG emissions generated was approximately 2 258 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e), at an intensity of 1.07 tCO<sub>2</sub>e per staff.</li><li>◆ The electricity consumption of WKGO and BD outstation offices including storerooms were 3 854 444 kWh and 1 116 560 kWh respectively, or 2 342 kWh per staff (excluding electricity consumption in store rooms).</li></ul>

## Commitments



## Performance in 2024

### Use of Renewable Energy

- ◆ A solar PV system was installed on the roof of our Headquarters to generate electricity for our on-site self-consumption. This initiative enabled us to offset a portion of the building's energy consumption with clean and renewable solar power.

### Reducing Carbon Emissions

- ◆ We had been adopting a multi-faceted approach to minimise fuel consumption by encouraging online communication, better planning business trips, and replacing traditional vehicles with EVs. Our fleet included 40 vehicles, 12 of which were EVs. Additionally, 25 EV chargers were installed at the car park of our Headquarters. According to the Smart Power Quality Monitoring System, the electricity consumed by the EV chargers in 2024 was 21 565 kWh, which was 28% higher than the consumption in 2023. This growth was due to an increase in the number of EVs used in 2024.
- ◆ Light pipes of the natural light harvesting technologies were installed at our Headquarters to capture sunlight from the rooftop and distribute it into the interior spaces. This design reduced the need for artificial lighting during daylight hours and further enhanced the building's energy efficiency, which in turn reduced the carbon emissions associated with energy use.
- ◆ BD would conduct carbon audit following the requirements in the “Guide to Environmental Reporting for the Government Bureaux and Departments” issued by the Environmental Protection Department (EPD) and would upload the Carbon Performance Disclosure to BD’s website.

### Green Housekeeping

- ◆ Appointed a Green Manager to implement a programme of green housekeeping and introduce measures to increase staff consciousness and engagement in green practices and waste avoidance, fostering a culture of sustainability throughout our workplace.



Commitments	Performance in 2024
	<p><b>Increasing Energy Efficiency</b></p> <ul style="list-style-type: none"><li>◆ Maintained air-conditioning at 25.5°C</li><li>◆ Adopted multi-zone lighting control</li><li>◆ Chose electrical devices and equipment with higher rating energy saving labels</li><li>◆ Maintained installation of motion sensors if applicable</li></ul> <p><b>Minimising Energy Wastage and Loss</b></p> <ul style="list-style-type: none"><li>◆ Set time control and stand-by-mode for appliances</li><li>◆ Appointed 61 Energy Wardens to arrange for the last-man-out to switch off lighting and devices at the end of the day and conduct walk-through quarterly</li></ul> <p><b>Building Awareness</b></p> <ul style="list-style-type: none"><li>◆ Displayed “Energy Saving” stickers to remind staff to turn off unnecessary appliances when not in use</li><li>◆ Encouraged using staircases instead of elevators for inter-floor traffic within offices</li></ul>
<ul style="list-style-type: none"><li>● <i>To promote environmentally friendly practices in office relocation works</i></li></ul>	<ul style="list-style-type: none"><li>◆ In 2024, we relocated our Fire Safety Section from Pioneer Centre to our Headquarter. To optimise resource utilisation and minimise our carbon footprint, the following environmentally friendly practices were adopted:<ul style="list-style-type: none"><li>• Refurbished and repaired office furniture for redeployment and reuse, minimising carbon footprint associated with manufacturing and transporting new furniture.</li><li>• Redesigned the office layout to maximise space utilisation, creating a more efficient work environment while adhering to sustainable practices.</li><li>• Devised a relocation plan that optimised resource use, reducing the environmental impacts associated with repetitive moves.</li></ul></li></ul>

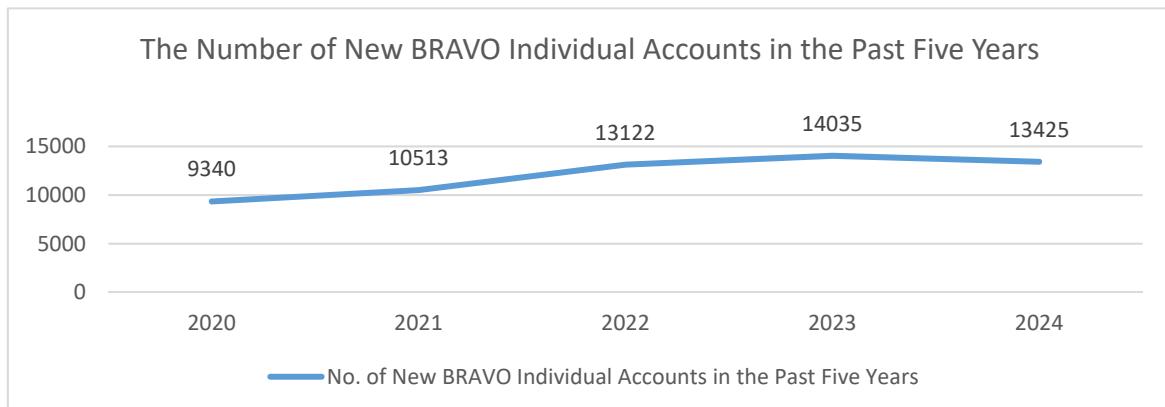
## 4.2. Moving towards a Paperless Office

We are leveraging information technology to transition towards a paperless office by implementing computerised management systems. Additionally, we are encouraging digital communication within the workplace and with our stakeholders and the public via electronic means.

Targets	Performance in 2024
<p><u>On public front</u></p> <ul style="list-style-type: none"> <li>● <i>To disseminate information to the public via the BD's website and other electronic means</i></li> </ul> <p><b>Know more about building/window inspection</b></p> 	<ul style="list-style-type: none"> <li>◆ The BD's website continued to provide up-to-date information on the functions and services of the Department.</li> <li>◆ We maintained the following functions on BD's website: <ul style="list-style-type: none"> <li>• An e-search for the public to identify the issuance and compliance status of statutory orders, notices and directions<sup>1</sup>.</li> <li>• A Corner for AP, RSE, RGE, RI and RC to facilitate them in keeping abreast of the updated requirements.</li> <li>• A thematic website "Care for Your Building" to better promote the importance of building safety and timely maintenance to the public.</li> <li>• A list of Accepted Academic Qualifications for Technically Competent Persons' (TCPs') Registration/Appointment to enhance public access to information for reference by applicants/ practitioners concerning TCPs' registration/ appointment.</li> </ul> </li> <li>◆ Legal/Validated Signboards Database was established in the Government's GeoInfo Map for identification of legal or validated signboards. BD continued to update the information of such signboards in the database regularly.</li> <li>◆ A Chatbot - "Ah Build" continued to answer general enquiries from the public about the MBIS and MWIS.</li> </ul>

<sup>1</sup> The e-search covered the searching of statutory orders under Sections 24, 25, 26, 26A, 27C and 28 of the BO and was extended to cover MBIS Notices under Section 30B and MWIS Notices under Section 30C of the BO, as well as FSDns, FSIDns, Fire Safety Compliance Orders (FSCOs) and Prohibition Orders (POs) under the FS(CP)O, the FS(B)O and the FS(IB)O. For statutory orders issued before 2021 and FSDns, FSIDns, FSCOs and POs issued under FS(CP)O and FS(B)O before 13 December 2024, only information of "Outstanding" orders/directions was available in the search results.

Targets	Performance in 2024
	<ul style="list-style-type: none"> <li>◆ We continued to send notifications to all registered building professionals and contractors as well as property management companies via email and/or Short Message Service to reduce the use of paper and enhance the effectiveness.</li> </ul>
<ul style="list-style-type: none"> <li>● <i>To develop and launch mobile applications for the general public to have a quick and easy communication platform to access information</i></li> </ul>  	<ul style="list-style-type: none"> <li>◆ In addition to the use of the mobile application, “Quick Guide for Minor Works”, which provided a quick and easy means for the public to view useful information, BD continued promoting the use of the Electronic Form Submission System (EFSS) for submission of minor works documents in electronic format.</li> <li>◆ The mobile application “WIN SAFE”, facilitated building owners in appointing suitable Qualified Persons for early compliance with the MWIS notices to ensure building safety.</li> </ul>
<ul style="list-style-type: none"> <li>● <i>To simplify the viewing and copying of building records through the implementation of Buildings Records Access and Viewing On-line (BRAVO) system over the Internet</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ In 2024, we handled 106 472 applications for viewing electronic records (included minor works records), out of which 102 779 applications were processed by the BRAVO system over the Internet.</li> <li>◆ Annual Statistics: <ul style="list-style-type: none"> <li>• No. of BRAVO Individual Accounts: <b>13 425</b></li> <li>• No. of BRAVO Company Accounts: <b>537</b></li> </ul> </li> </ul>



# CHAPTER 4

Targets	Performance in 2024
<ul style="list-style-type: none"> <li>● <i>To issue certificates of registration under the BO in electronic form (e-Certificate)</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ BD issued e-Certificates of registration under the BO to the applicants via email to replace paper certificates.</li> <li>◆ e-Certificates reduced the use of paper and ink and reduced the risk of damaging or misplacing the paper certificate by the applicant (which would be troublesome as the applicant would need to re-apply for a certified true copy of the paper certificate).</li> <li>◆ In 2024, <b>100%</b> of the total number of building professionals and <b>99.9%</b> of the total number of contractors registered under the BO had been issued with e-Certificates.</li> </ul>
<ul style="list-style-type: none"> <li>● <i>To accept submission of documents in electronic format</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ In 2024, around <b>20 488</b> forms were processed through the EFSS.</li> <li>◆ BD commissioned a consultancy study in June 2024 to support the formulation of a technical framework for the full adoption of BIM by the private sector for preparation of plans for statutory submissions and approval under the BO. The overseas study and the first round of stakeholder consultations were completed in November 2024 and December 2024 respectively. The consultant would take into account the views of the stakeholders and the findings of the overseas study to formulate recommendations and proposed strategies for mandating BIM submissions. The second round of consultation to seek stakeholders' views on the recommendations was scheduled for the second half of 2025.</li> <li>◆ BIM plug-in tools for two BIM native softwares (i.e. Revit and ArchiCAD) jointly developed by BD and LandsD were launched in March and September 2024 respectively to facilitate both departments and building professionals in checking area calculations on building plan submissions under the BO and lease conditions. In addition, other checking tools covering sanitary fitments, fire safety, building separation requirements and structural plan compatibility were also being developed. The BIM Automated Checking Tools, which also served as the design review tools, saved time and manpower in</li> </ul>

Targets	Performance in 2024
	<p>manual checking or computation and updating or rechecking after design amendments, thereby enhancing quality and certainty of the submissions.</p> <ul style="list-style-type: none"> <li>◆ Traditionally, building professionals submitted an average of ten sets of building plans for each first-time submission. This was usually followed by the submission of voluminous plans together with associated calculations and documents. ESH substantially reduced paper consumption in plan submissions, directly lowering GHG emissions since its full launch on 30 June 2024. In 2024, ESH saved over 77 000 sheets of A1-sized paper drawings and over 5.6 million pages of paper documents.</li> <li>◆ To further promote a green environment and paperless submission, result letters for approval and consent applications for structural works<sup>2</sup> were issued electronically via ESH, even for paper-based submissions. This arrangement was fully implemented on 2 October 2024.</li> <li>◆ We would continue to enhance and improve the system's capacity and user experience in light of users' feedback to pave the way for mandating e-submission of plans in 2027.</li> </ul>
<p><u><b>In our work place</b></u></p> <ul style="list-style-type: none"> <li>● <b>To disseminate information electronically and to introduce more green measures</b></li> </ul>	<ul style="list-style-type: none"> <li>◆ As part of the Government's initiative to pursue electronic records management, we commenced the phased implementation of the Central Electronic Recordkeeping System (CERKS) starting from May 2024. The CERKS was an information/computer system with the necessary record management capabilities designed to electronically collect, organise, classify and control the creation, storage, retrieval, distribution, maintenance and use, disposal and preservation of records. By implementing the CERKS, the consumption of paper and printer cartridges could be reduced and the need to print electronic records for filing could eventually be eliminated.</li> </ul>

<sup>2</sup> Structural works included excavation and lateral support works, ground investigation in the scheduled areas, foundation works and all structural works but excluded alteration and addition works and consultation submissions on structural works for railway projects.

Targets	Performance in 2024
	<ul style="list-style-type: none"> <li>◆ We utilised the Electronic Document and Knowledge Management System, a central repository for document and knowledge management facilitating information sharing and collaboration within and across different divisions or sections in BD.</li> <li>◆ Mobile devices with the add-on feature “Secure Access” app were made available for staff to access internal manuals and electronic forms and process documents for site inspection and meetings when necessary.</li> <li>◆ To facilitate file sharing and distribution in work, we were developing a “Virtual Workspace” which was a web-based file-sharing repository for sharing large-sized files with working counterparts with a view to minimising the mailing of discs or the distribution of hard copies.</li> </ul>
● <i>Green Management of Data Centre and Green IT Measures</i>	<ul style="list-style-type: none"> <li>◆ Both cloud computing and server virtualisation technology were used to optimise the number of physical servers required thereby cutting down electricity power consumption.</li> <li>◆ All new printers were equipped with EcoPrint or Energy Saving Mode with Duplex Printing feature.</li> <li>◆ All servers, printers and desktop personal computers were Energy Star and Restriction of Hazardous Substances Compliant.</li> <li>◆ Network backup had been used to gradually replace manual backup thereby reducing transportation and storage of tapes.</li> </ul>

## 4.3. Saving Resources

The best approach to manage waste is “reduction” at the source. We adhere to the principles of “Reduction, Reuse and Recycling” in the Department to minimise waste produced from our office operations. BD Administration Circular No. 1/2022 on “Green Practices and Waste Avoidance” has reminded all staff to set a green example by adopting green practices and waste avoidance measures and reducing the consumption of energy and paper.

Targets	Performance in 2024
<b>Reduction</b>	<ul style="list-style-type: none"><li>◆ Our total paper consumption in 2024 was 28 158 reams.</li><li>◆ Recycled paper in lieu of virgin paper had continuously been used in the Department. In 2024, 34.94% of the total amount of paper consumed was recycled paper. A total of 103 800 envelopes were consumed in 2024.</li><li>◆ We would continue our efforts to minimise the use of paper by:<ul style="list-style-type: none"><li>• Using emails instead of paper memos and faxes for internal and external communications.</li><li>• Minimising the production of hardcopies of documents.</li><li>• Sending e-cards.</li></ul></li></ul>
<b>Reuse</b>	<ul style="list-style-type: none"><li>◆ We continued to adopt “No bottled water” policy at our Headquarters to avoid use of plastic bottles.</li><li>◆ We promoted the reuse of resources by:<ul style="list-style-type: none"><li>• Reusing old furniture during office refurbishment or renovation.</li><li>• Encouraging our staff to use the blank side of used paper for drafting, filing and printing.</li><li>• Reusing envelopes for internal circulation.</li><li>• Using ball pens with refills.</li><li>• Placing used paper with a blank side near high paper usage equipment (e.g. photocopier) to facilitate reuse.</li><li>• Encouraging staff to use their own cups instead of paper cups.</li></ul></li></ul>
<b>Recycling</b>	<ul style="list-style-type: none"><li>◆ We collected recyclable waste materials by:<ul style="list-style-type: none"><li>• Placing collection bags near high paper usage equipment for recycling of waste paper.</li><li>• Providing waste sorting and recycling bins at breakout spaces and areas accessible to the public for the collection of used plastics, metals, glass and rechargeable batteries.</li></ul></li><li>◆ With the support of our staff, in 2024, we collected a total of 35 044 kg of waste paper for recycling which had decreased by 21.89% compared to the figure in 2023.</li></ul>

## 4.4. Procuring Green Products

We purchased green products to demonstrate our responsibility to save the Earth and support the recycling industry by sourcing environmentally friendly products for office use, making reference to the green specifications published by the EPD. Here are some examples of the green products we procured.



Pencils made of recycled materials



T5 Fluorescent tube



Recycled paper



Rechargeable batteries

## 4.5. Performance Summary

### Energy Consumption

	Unit	2024
Gasoline	GJ <sup>3</sup> (Litre)	1 785 (54 085)
Electricity	GJ <sup>3</sup> (Million kWh)	17 896 (4.97)
<b>Total energy consumption</b>	<b>GJ</b>	<b>19 681</b>

### GHG Emissions<sup>4</sup>

	Unit	2024
Gasoline combustion (Scope 1) <sup>5</sup>	tCO <sub>2</sub> e	146.68
Electricity purchased (Scope 2) <sup>6</sup>	tCO <sub>2</sub> e	2 113.65
Others (Scope 3) <sup>7</sup>	tCO <sub>2</sub> e	-1.91
<b>Total GHG consumption</b>	<b>tCO<sub>2</sub>e</b>	<b>2 258.42</b>
GHG intensity per staff	tCO <sub>2</sub> e/staff	1.07

### Material Consumption

	Unit	2024
<b>Total paper consumption</b>	<b>kg</b>	<b>68 578.89</b>
A4 paper	kg	63 138.61
A3 paper	kg	5 440.28
Paper consumed per staff	kg	32.51

### Waste Management - Recyclable Waste Collected

	Unit	2024
Waste paper	kg	35 044

<sup>3</sup> Conversion factors used to standardise the units to gigajoules (GJ): gasoline (0.033 GJ/L), electricity (0.0036 GJ/kWh).

<sup>4</sup> GHG emissions were calculated based on the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong issued by the EPD and Electrical and Mechanical Services Department in February 2010.

<sup>5</sup> Generated from mobile combustion of petrol, i.e. vehicle consumption.

<sup>6</sup> The GHG emission was calculated based on a territory-wide default value of 0.7kg/kWh.

<sup>7</sup> Other indirect emissions.

## Feedback

Thank you for reading the Buildings Department Environmental Report 2024. Your views and suggestions are most welcome. It will help sustain our policies and support our continuous improvement. Please take a few minutes to give us your views by completing the following feedback form.

**1. Which of the following best describes you?**

<input type="radio"/> Government Departments or Agencies	<input type="radio"/> Building Professionals	<input type="radio"/> NGO
<input type="radio"/> Legislators and Local District Councillors	<input type="radio"/> General Public	<input type="radio"/> Media
<input type="radio"/> Staff of Buildings Department	<input type="radio"/> Academic Sector	<input type="radio"/> Student

**2. Please rate our environmental report and performance.**

Buildings Department Environmental Report 2024

<input type="radio"/> Fair	<input type="radio"/> Good	<input type="radio"/> Very Good	<input type="radio"/> Excellent
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Buildings Department Environmental Performance

<input type="radio"/> Fair	<input type="radio"/> Good	<input type="radio"/> Very Good	<input type="radio"/> Excellent
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**3. Which aspect of the report did you find most useful?**

<input type="radio"/> Economic	<input type="radio"/> Environmental	<input type="radio"/> Social	<input type="radio"/> Governance	<input type="radio"/> Others (please specify: _____)
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**4. Which aspect of the Buildings Department would you like to have more information?**

<input type="radio"/> Economic	<input type="radio"/> Environmental	<input type="radio"/> Social	<input type="radio"/> Governance	<input type="radio"/> Others (please specify: _____)
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Please return the completed feedback form to the Buildings Department by:

Email: [enquiry@bd.gov.hk](mailto:enquiry@bd.gov.hk)

Hotline: 2626 1616 (Handled by “1823”)

Fax: 2537 4992

Post: Buildings Department Headquarters, North Tower, West Kowloon  
Government Offices, 11 Hoi Ting Road, Yau Ma Tei, Kowloon

THANK YOU FOR YOUR VALUABLE FEEDBACK!