

## Carbon Performance Disclosure of Buildings Department

1. Background Information	
Bureau / Department	Buildings Department (BD)
Reporting Period From (DD/MM/YYYY) to (DD/MM/YYYY)	From 01/04/2022 to 31/03/2023
Total No. of Major Buildings <sup>1</sup>	1
Total Floor Area <sup>2</sup> (m <sup>2</sup> )	4,980
Total No. of Employees <sup>3</sup>	313
Category of Building(s) (please tick the appropriate box(es))	<input type="checkbox"/> Health facilities <input checked="" type="checkbox"/> Office type buildings <input type="checkbox"/> Venues managed by disciplined services departments <input type="checkbox"/> Recreational or cultural buildings/venues/ facilities <input type="checkbox"/> Schools and educational buildings <input type="checkbox"/> Others, please specify: _____

2. Scope of Reporting		
Total Greenhouse Gas (GHG)Emissions <sup>4</sup>	482.82	Tonnes of CO <sub>2</sub> -e

<sup>1</sup> “Major Buildings” refer to buildings with annual electricity consumption over 500 000 kilowatt hour (kWh).

<sup>2</sup> “Total Floor Area” refers to the sum of floor areas of “Major Buildings”.

<sup>3</sup> “Total No. of Employees” refer to those working in the “Major Buildings”.

<sup>4</sup> “Total GHG Emissions” refer to the sum of Scopes 1, 2 and 3 GHG emissions.

### 3. GHG Reduction Measures<sup>5</sup> Implemented in the Reporting Period

<p><b>Energy saving</b></p>	<p>Adopting energy-efficient measures in our operations, which include:</p> <p>(i) Increasing Energy Efficiency:</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; and</li> <li>- Maintained installation of motion sensors if applicable.</li> </ul> <p>(ii) Minimising Energy Wastage and Loss:</p> <ul style="list-style-type: none"> <li>- Set time control and stand-by-mode for appliances; and</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>(iii) Building Awareness:</p> <ul style="list-style-type: none"> <li>- Displayed “Energy Saving” stickers to remind staff to turn off unnecessary appliances when not in use; and</li> <li>- Encouraged using staircases instead of elevators for inter-floor traffic within offices.</li> </ul>
<p><b>Vehicles</b></p>	<p>Adopting a multi-faceted approach to minimise fuel consumption by:</p> <ul style="list-style-type: none"> <li>- Encouraging online communication;</li> <li>- Planning business trips; and</li> <li>- Replacing the traditional vehicles with electric vehicles (EVs).</li> </ul>
<p><b>Paper saving</b></p>	<p>Taking advantage of the information technology to move towards a paperless office by introducing computerised management systems and encouraging communication within the workplace and with our stakeholders and public via electronic means, which include:</p> <p><b><u>On Public Front</u></b></p> <p>(i) To disseminate information to the public via the BD’s website and other electronic means:</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>- BD launched an e-search for the public to identify the issuance and compliance status of statutory orders and set up a Corner on BD’s website to facilitate relevant parties in keeping abreast of the updated requirements;</li> </ul>

<sup>5</sup> The categories of GHG reduction measures suggested here (e.g. energy saving, paper saving etc.) are for B&Ds’ reference.

- The thematic website “Care for Your Building” was revamped to better promote the importance of building safety and timely maintenance to the public;
  - Legal/Validated Signboards Database was established in Government’s GeoInfo Map for identification of legal or validated signboards. BD continued to update the information of such signboards in the database regularly;
  - A Chatbot - “Ah Build” continued to answer general enquiries from the public about the Mandatory Building Inspection Scheme (MBIS) and Mandatory Window Inspection Scheme (MWIS); and
  - BD continued to send notifications to all registered 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.
- (ii) To develop and launch mobile applications for the general public to have a quick and easy communication platform to access information:
- With the use of two mobile applications, “Quick Guide for Minor Works” and “Quick Guide for MBIS/MWIS”, which provided a quick and easy means for the public to view useful information, users could carry out minor works under MWCS, inspection and repair works under MBIS and MWIS easily and effectively; and
  - A mobile application “WIN SAFE”, facilitated building owners in appointing suitable Qualified Persons for early compliance with the MWIS notices to ensure building safety.
- (iii) 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.
- (iv) To issue certificates of registration under the Buildings Ordinance (BO) in electronic form (e-Certificate):
- BD issued e-Certificates of registration under the BO to the applicants via email to replace paper certificates. e-Certificates reduced the use of paper and ink and reduced the risk of damaging or misplacing of the paper certificate by the applicant.
- (v) To accept submission of documents in electronic format:
- Process forms through the Electronic Form Submission System;
  - To promote the wider and fuller adoption of Building Information Modelling (BIM) for statutory submissions in private building projects, a roadmap for the adoption of BIM for building plan preparation and submission was being formulated. Guidelines for using BIM in Statutory Plan Submissions (other than General Building Plan) being jointly developed with Construction Industry Council, were scheduled for issue in May 2023. Besides, BIM plug-

in tools for two BIM native softwares were being jointly developed with the Lands Department to facilitate both departments and building professionals in checking area calculations on building plan submissions under the BO and lease conditions. The tool for checking area calculations under the BO was planned to be launched in the first quarter of 2024. In addition, other checking tools covering sanitary fitments, fire safety, building separation requirements and structural plan compatibility were also being developed; and

- An Electronic Submission Hub (ESH) was being developed for receiving and processing electronic plans and documents, as well as other applications under the BO. Implementation of the ESH would bring many environmental benefits, including saving paper and reducing the need for printing and transporting paper documents. The ESH was being implemented in three stages. Following the successful launch of Stage 1 in June 2022, Stage 2 was launched on 31 March 2023. BD would advance Stage 3 of ESH from Q2 2025 to Q2 2024.

#### **In Our Work Place**

(i) To disseminate information electronically and to introduce more green measures:

- BD utilised the Electronic Document and Knowledge Management System (eDKMS), a central repository for document and knowledge management facilitating information sharing and collaboration within and across different divisions or sections in BD;
- The development of the Electronic Recordkeeping System was underway to further reduce paper consumption; and
- Mobile devices with the add-on feature “Pulse Secure” app were made available for staff to access internal manuals and electronic forms and process documents for site inspection and meetings when necessary.

(ii) Green Management of Data Centre and Green IT Measures

- Both cloud computing and server virtualisation technology were used to optimise the number of physical servers required thereby cutting down electricity power consumption;
- All new printers were equipped with EcoPrint or Energy Saving Mode with Duplex Printing feature;
- All servers, printers and desktop personal computers were Energy Star and Restriction of Hazardous Substances Compliant; and
- Network backup had been used to gradually replace manual backup thereby reducing transportation and storage of tapes.

<b>Water saving</b>	N/A
<b>Recycling activities</b>	BD collected recyclable waste materials by placing collection bags near high paper usage equipment for recycling of waste paper and 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.
<b>Staff engagement</b>	<p>(i) BD's training and development programmes place great emphasis on equipping BD staff to understand and actively play their roles in promoting and facilitating sustainable building developments. Internal and external training in relation to green building and sustainability were arranged for BD's employees.</p> <p>(ii) 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.</p>
<b>Housekeeping measures</b>	<p>Issuance of BD Administration Circular No. 1/2022 on "Green Practices and Waste Avoidance" to remind all staff to set a green example by adopting green practices and waste avoidance measures and reducing the consumption of energy and paper. BD adhere to the principles of "Reduction, Reuse and Recycling" in the Department to minimise waste produced from our office operation, which include:</p> <p>(i) Reduction</p> <ul style="list-style-type: none"> <li>- Using recycled paper in lieu of virgin paper in the Department;</li> <li>- Minimising the use of paper by: <ul style="list-style-type: none"> <li>(1) Using emails instead of paper memos and faxes for internal and external communications;</li> <li>(2) Minimising the production of hardcopies of documents; and</li> <li>(3) Sending e-cards; and</li> </ul> </li> <li>- Adopting "no bottled water" policy to avoid use of plastic bottles.</li> </ul> <p>(ii) Reuse</p> <ul style="list-style-type: none"> <li>- Reusing old furniture during office refurbishment or renovation;</li> <li>- Encouraging BD's 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; and</li> <li>- Encouraging staff to use their own cups instead of paper cups.</li> </ul>

<p><b>Others</b></p>	<p>To promote and publicise building safety information to the public and younger people through electronic means to reduce the printing of pamphlets and leaflets, which include:</p> <p>(i) Broadcasts A new TV Announcement in the Public Interest (API) was scheduled to be launched in November 2023 to enhance public awareness of the importance of regular inspection and maintenance of private buildings. It would be played at Mass Transit Railway stations, train compartments, and on online media platforms. A corresponding radio API would also be broadcast on local radio channels.</p> <p>(ii) E-Learning Centre BD's 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.</p> <p>(iii) Social Media 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.</p> <p>To show BD's responsibility to save the Earth and support for the recycling industry, environmentally friendly products were sourced for office use by making reference to the green specifications published by the Environmental Protection Department.</p>

<b>4. On-grid Renewable Energy (RE) System Installed in the Major Buildings<sup>6</sup></b>		
<b>Type(s) of System (e.g. Solar PV, Wind Turbine)</b>	N/A	
<b>Annual Electricity Generated by RE System</b>	N/A	<b>kWh</b>
<b>Reduction in GHG Emissions<sup>7,8</sup></b>	N/A	<b>Tonnes of CO<sub>2</sub>-e</b>

<sup>6</sup> B&Ds should complete this section if applicable.

<sup>7</sup> Reduction in GHG emissions (Tonnes CO<sub>2</sub>-e) = Annual electricity generated by RE system (kWh) x Territory-wide default value of emission factor for purchased electricity (i.e. 0.7 kg/kWh) ÷ 1000

For simplicity and consistency, a territory-wide default value of emission factor for purchased electricity is suggested to be adopted to assess the reduction in GHG emissions by RE technologies regardless of the locations of the infrastructure. The most updated territory-wide default value is available at [https://cnsd.gov.hk/wp-content/uploads/2023/05/Guidelines\\_English\\_2010.pdf](https://cnsd.gov.hk/wp-content/uploads/2023/05/Guidelines_English_2010.pdf).

<sup>8</sup> B&Ds should note that the reduction in GHG emissions resulting from the installation of on-grid RE systems will **NOT** be counted towards the overall carbon performance of the government buildings, as the electricity generated by the systems will be fed into the grids of the power companies and transferred out of the buildings at the same time.