

## 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 1/4/2019 to 31/3/2020
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>	407
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>	636.39	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>Policies and measures have been implemented to achieve energy saving by increasing energy efficiency, minimising energy wastage and loss, and building awareness, which include:</p> <p>(i) Increase Energy Efficiency:</p> <ul style="list-style-type: none"> <li>- Monitor air-conditioning systems regularly;</li> <li>- Maintain air-conditioning at 25.5°C;</li> <li>- Replace old lighting fixtures with T5 fluorescent lamps;</li> <li>- Install motion sensors where applicable;</li> <li>- Adopt multi-zone lighting control; and</li> <li>- Choose electrical devices and equipment with higher rating energy saving labels.</li> </ul> <p>(ii) Minimise Energy Wastage and Loss:</p> <ul style="list-style-type: none"> <li>- Set idling computers and applicable office equipment in sleep mode;</li> <li>- Set time control and stand-by-mode for appliances;</li> <li>- Switch off unnecessary appliances after work; and</li> <li>- Appoint 58 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) Build Awareness:</p> <ul style="list-style-type: none"> <li>- Display “Energy Saving” stickers to remind staff to turn off unnecessary lights, air-conditioners and equipment when not in use;</li> <li>- Encourage using staircases instead of elevators for inter-floor traffic within offices; and</li> <li>- Allow staff to wear business casual attire in summer to minimize the demand for air-conditioning.</li> </ul>
<p><b>Vehicles</b></p>	<p>Adopting a multi-faceted approach to minimise fuel consumption, which include:</p> <p>(i) The Choice of Commutation:</p> <ul style="list-style-type: none"> <li>- Encourage our staff to practice low-carbon commute, including walking, cycling or using public transport.</li> </ul> <p>(ii) Electric Vehicles (EV) First:</p> <ul style="list-style-type: none"> <li>- Prioritise the use of EV and hybrid electric vehicles over other departmental vehicles.</li> </ul> <p>(iii) Trip Arrangements:</p> <ul style="list-style-type: none"> <li>- Combine trips and plan for the shortest route distance to optimise the use of departmental vehicles.</li> </ul>
<p><b>Paper saving</b></p>	<p>To reducing paper consumption and transforming its operation to “paperless”, we continue to adopt the Internet of Things (IoT) and computerized management systems, which include:</p> <ul style="list-style-type: none"> <li>- Mobile devices are made available for staff to access electronic forms and process documents for site inspection and meetings when necessary;</li> <li>- An internal web-based photo library system has also been developed for sharing site inspection photos;</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.

	<ul style="list-style-type: none"> <li>- A new electronic submission system - Electronic Submission Hub (ESH) was in progress for facilitating easy submission of applications, building plans, and other documents electronically from the public, registered building professionals, and registered contractors; and</li> <li>- A new internal Electronic Document and Knowledge Management System (eDKMS) was launched in September 2019. eDKMS can provide a central repository for document and knowledge management. It also serves as a departmental platform to facilitate information sharing and collaboration within and across different divisions or sections in BD.</li> </ul>
<b>Water saving</b>	N/A
<b>Recycling activities</b>	<ul style="list-style-type: none"> <li>- Labelled bags are placed at prominent places in our offices to collect waste paper for recycling.</li> </ul>
<b>Staff engagement</b>	<ul style="list-style-type: none"> <li>- Internal and external training programmes in relation to building sustainability, heritage conservation, OSH, as well as personal capabilities, were arranged for BD's employees in 2019.</li> </ul>
<b>Housekeeping measures</b>	<ul style="list-style-type: none"> <li>- Issuance of internal administration circular on "Green Practices and Waste Avoidance" regularly to remind all levels of staff to adopt green practices and waste avoidance measures; and</li> <li>- Assignment of 58 representatives from each Section or Unit as Energy Wardens to remind staff BD's green measures.</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>- As part of our procurement strategy, BD takes green specifications and criteria into account when purchasing products whenever possible. During the quotation process, we send suppliers survey forms of desirable green requirements to encourage them to provide environmentally-friendly products for our consideration;</li> <li>- Applicable green products are sourced for our office operation with reference to green specifications published by the EPD;</li> <li>- For all the works contracts administered by BD, contractors are required to comply with environmental regulatory requirements such as the proper disposal of construction and demolition wastes;</li> <li>- Contractors' conformance to their environmental management plans and the use of environmentally-friendly products will be monitored during contract implementation and reflected in their performance review;</li> <li>- The case officer of respective Works Order is responsible for evaluating the effectiveness of environmental pollution controls by conducting quarterly assessments; and</li> <li>- By the end of 2019, BD had procured 38 green product categories with eco features.</li> </ul>

#### 4. On-grid Renewable Energy (RE) System Installed in the Major Buildings<sup>6</sup>

Type(s) of System (e.g. Solar PV, Wind Turbine)	N/A	
Annual Electricity Generated by RE System	N/A	kWh
Reduction in GHG Emissions <sup>7,8</sup>	N/A	Tonnes of CO <sub>2</sub> -e

<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://www.climate.gov.hk/education\\_centre.php?section=guideline\\_reference\\_links](https://www.climate.gov.hk/education_centre.php?section=guideline_reference_links).

<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.